

**Notice Inviting Expression of Interest (EOI)
to associate with BHEL for NLC 2X660 MW
Super Critical Lignite Fired Boiler**

MKTG: EOI: NLC:001

November, 2017

**Bharat Heavy Electricals Limited,
High Pressure Boiler Plant-Trichy**

1.0 About BHEL

BHEL is a leading Public Sector Undertaking under Ministry of Heavy Industries and Public Enterprises, Government of India. BHEL is an integrated power plant equipment manufacturer and one of the largest engineering and manufacturing organizations in India. We are engaged in the design, engineering, manufacture, construction, testing, commissioning and servicing of a wide range of products and services for the core sectors of the economy, viz. Power, Transmission, Industry, Transportation (Railway), Renewable Energy, Oil & Gas and Defense. The Power sector covers generation, transmission and distribution equipment for hydro, fossil, and gas fuels. BHEL has been in this business for more than 50 years and BHEL supplied equipment account for 61 % of the total thermal generating capacity in India. Nearly 68% of the equity is owned by the Government of India. The company has 17 manufacturing units, 4 power sector regions, 8 service centers, 4 overseas offices and 15 regional offices, besides host of project sites spread all over India and abroad. The annual turnover of BHEL for the year 2016-17 was US\$ 4.45 Billion*). BHEL's highly skilled and committed manpower of approximately 40000 employees, the best of manufacturing facilities and practices together with the latest technologies, has helped BHEL to deliver a consistent track record of performance. More details about the entire range of BHEL's products and operations can be obtained by visiting our web site www.bhel.com.

2.0 About HPBP, BHEL Trichy

High Pressure Boiler Plant (HPBP) is one of the major units of BHEL. It is one of the leading boiler manufacturers in the world providing total boiler island solutions for utility, industrial, captive power and heat recovery applications. At present, Trichy unit is designing & manufacturing sub-critical boilers, industrial boilers, CFBC (Circulating Fluidised Bed Combustion) boilers, Heat Recovery Steam Generators (HRSG), state-of-art Once-through supercritical boilers and is working on Advanced Ultra Supercritical boilers. It also designs/manufactures Advanced Technology Products like Nuclear Steam Generators, Valves for Power and Industrial applications and Seamless Steel Tubes. The Unit has been accredited with ISO 9001, ISO 14001, OHSAS 18001 and ISO 27001 standard certifications.

3.0 Background for this Expression of Interest (EOI)

NLC Limited has invited sealed Expression of interest (EOI) and documentary evidences for meeting the stipulated Qualifying Requirements from eligible bidders for Supply and installation of Steam Generator and Auxiliaries (RFQ) for Neyveli New Thermal Power Station (NNTPS) (2 X 660 MW) located near NEYVELI.

The Trichy Unit of BHEL is responsible for providing total solution for the boiler island. BHEL Trichy therefore intends to shortlist firms, through this EOI, to associate with partners who meet the Qualifying requirements stipulated by NLC and agree to furnish documentary evidences for their claim. Such of those associates will work with BHEL for design, supply, erection and commissioning etc., of 2x660 MW Super Critical Lignite fired PF Steam Generators, ESP and Auxiliaries plants in the aforesaid project.

4.0 Eligibility Criteria

The parties meeting Qualification Requirement (**Refer Annexure-I**) is eligible to respond to this EOI. The respondents, on qualifying the criteria, will be referred as the Qualified Steam Generator Manufacturer.

5.0 Terms of reference

- 5.1 BHEL would be the prime bidder for supply of 2x660 MW Lignite fired boiler. The respondent should be ready to associate with BHEL and support BHEL in the areas of design, supply, erection and commissioning.
- 5.2 The respondent should be ready to provide a "Letter of Consent" along with Project EOI bid signed by the Qualified Steam Generator Manufacturer, for successful performance of the contract (**As per Annexure-II**).

6.0 Documents to be attached along with the response:

- 6.1 Covering Letter signed by an Authorised Signatory on Company letter- head agreeing to the terms of reference of this EOI.
- 6.2 Confirmation from respondent about meeting requirements of each item mentioned in the Qualification Requirement. Deviations, if any, shall be mentioned clearly.
- 6.3 Technical Write-up describing features of Boiler being offered.
- 6.4 Company Details including address, details of contact person(s), product profile (brochures/catalogues), organisation structure and copies of audited Balance Sheet and P&L Account for the last 3 years.
- 6.5 Reference list shall be furnished as per **Annexure-IV**.

- 6.6 End customer reserves the right to ask the bidders to provide the certified copies of Experience certificates. For installations outside India, experience certificate is to be authenticated by the Indian Embassy in that country and within India experience certificate is to be attested by Notary Public.

- 6.7 Documents specified in Annexure I/2 (Route 2b), Page 33,34 & 35.

7.0 EOI Process

- 7.1 BHEL Trichy will analyse the responses received vide this EOI to shortlist the respondents.
- 7.2 Respondents may be asked to make presentation to BHEL, if required.
- 7.3 Competitiveness, technical suitability and agreement to commercial terms & conditions would be considered for shortlisting associate partners from among the respondents.
- 7.4 During Techno-Commercial bid submission to customer, DJU has to be submitted by Bidder and Associate. Format of DJU is attached as Annexure III.

8.0 Governing Laws & Jurisdiction

The EOI process shall be governed by, and construed in accordance with, the laws of India and the Courts at Trichy (India) shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with the EOI process.

9.0 Last Date for receipt of response

The last date for receipt of consolidated response to EOI at BHEL-Trichy is 22nd November 2017.

10.0 Mode of Submission of Documents

In sealed cover to the contact person / mail to the e-mail ID so as to reach on or before the date mentioned above. The cover shall be super-scribed with Reference number and the words "Expression of Interest - Associate with BHEL for NLC 2X660 MW Super Critical Lignite Fired Boiler". In case of offer by e-mail, the words "Expression of Interest - Associate with BHEL for NLC 2X660 MW Super Critical Lignite Fired Boiler" shall be in the Subject field of e-mail. The documents as above should be submitted in a sealed envelope and should bear the name, e-mail ID, address and telephone number of the respondent. The envelope should be addressed to "**Deputy General Manager, MM/BOI, High Pressure Boiler Plant, Trichy, Tamil Nadu, India, 620014**". In case of submission of EOI through e-mail, hard copy along with printout of e-mail shall be sent by post or courier so as to reach the contact persons on or before 22.11.2017

CONTACT PERSONS

Mr R Krishnasamy	Mr P S Seshadri
Deputy General Manager (MM/BOI) High Pressure Boiler Plant	Additional General Manager (Marketing/FB) High Pressure Boiler Plant
Trichy	Trichy
Tamil Nadu, India	Tamil Nadu, India
620014	620014
Phone: 0431-2577457	Phone: 0431-2575756
E-mail: rksamy@bheltry.co.in	E-mail: pss@bheltry.co.in

11.0 Disclaimer

- 11.1 The information contained in this EOI or subsequently provided to respondent(s), whether verbally or in document or in any other form, by or on behalf of BHEL or any of its employees or advisors, is provided to respondent(s) on the terms and conditions set out in this EOI and such other terms and conditions subject to which such information is provided.
- 11.2 This EOI is neither an agreement nor an offer by BHEL to the prospective respondent(s) or any other person. The purpose of this EOI is to provide interested parties with information that may be useful to them in the formulation of their response for qualification pursuant to this EOI.
- 11.3 BHEL also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any respondent upon the statements contained in this EOI.
- 11.4 The issue of this EOI does not imply that BHEL is bound to select and shortlist respondent(s) for next stage or to enter into any joint working agreements with shortlisted respondent(s).
- 11.5 BHEL at its discretion may extend the due date for submission of EOI and the decision of BHEL in this respect would be final and binding on the respondent(s).
- 11.6 Notwithstanding anything contained in this EOI, BHEL reserves the right to accept or reject any application and to annul the EOI process and reject all applications, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons thereof. In the event that BHEL rejects or annuls all the applications, it may, at its discretion, invite all eligible parties/respondents to submit fresh responses.
- 11.7 BHEL reserves the right to disqualify any respondent during or after completion of EOI process, if it is found there was a material misrepresentation by any such respondent or the respondent fails to provide, within the specified time, supplemental information sought by BHEL.
- 11.8 BHEL reserves the right to verify all statements, information and documents submitted by the respondent in response to this EOI. Any such verification or lack of such verification by BHEL shall not relieve the respondent of his obligations or liabilities hereunder nor will it affect any rights of BHEL.
- 11.9 The respondent shall bear all costs associated with the preparation, technical discussion/presentation and submission of response/quote. BHEL shall in no case be responsible or liable for these costs regardless of the conduct or outcome of the EOI process.
- 11.10 Canvassing in any form by the respondent or by any other agency on their behalf may lead to disqualification of their response/quote.

12.0 List of Annexures

Annexure- I: - Qualification Requirement – Attached

Annexure II: -Letter of Consent (format) – Attached

Annexure III: -DJU Format – Attached

Annexure IV: -Reference list Format – Attached

ANNEXURE-I :- Qualification Requirements

1.0 INTRODUCTION

NLC INDIA Ltd., a NAVRATNA GOVERNMENT OF INDIA Public Sector Enterprise is in the process of setting up (2) two numbers of Super Critical Pulverized Lignite Fired Units of capacity 660 MW each, at Neyveli in Cuddalore District of Tamil Nadu State in India.

NLCIL, invites sealed Expression of Interest (EOI) and documentary evidences for short listing the eligible Bidders on stipulated Qualifying Requirements for Supply and installation, two numbers of lignite based super critical steam Generators of capacity 660 MW each, to be located in Neyveli, Cuddalore district, Tamil Nadu as per the Scope of Work mentioned hereinafter under Clause 2.0.

Tender specification documents will be issued only to the short listed Bidders from among those who have submitted the EOI bids. Techno commercial proposals including the price cover based on Tender specification will be accepted only from the short listed Bidders among those who have submitted the EOI bids.

1.1 ABOUT NLC:

NLC India Limited, (NLCIL) is a Navratna, Government of India Enterprise registered under the Indian Companies Act 1956, engaged in mining of lignite in

Neyveli, Tamilnadu State & Barsingsar of Rajasthan State, India and in power generation. NLCIL is a Central Government Public Sector Undertaking (PSU) functioning under the administrative control of the Ministry of Coal. It has an integrated facility at Neyveli with three lignite mines with combined production capacity of about 28.5MTPA supplying lignite to three nos, pit-head thermal power stations having a total generating capacity of 2990 MW. The first thermal power station (TPS-1) was commissioned in 1962 with a capacity of 600 MW (6x50 MW + 3x100 MW). This was followed by TPS-II of 1,470 MW (7 x 210 MW) and TPS-I Expansion 420 MW (2 x 210 MW), TPS II Expansion 500 MW (2X250MW CFBC) and Lignite based Power Station at Barsingsar, Rajasthan 250MW (2x125MWCFC) with 2.1MTPA lignite. The present total power generation capacity of NLCIL thermal power stations in Neyveli is 3240 MW.

NLCIL is presently executing a new Neyveli Thermal Power Project of 2x500MW capacity, as a Green filed project at Neyveli, Cuddalore District of Tamil Nadu.

NLCIL has also formed a joint venture (JV) Company with the Tamil Nadu Electricity Board in the name of NLCIL Tamilnadu Power Limited (NTPL), and executed 2 x 500 MW coal based thermal power project at Tuticorin in the State of Tamil Nadu.

NLC India Ltd also ventured into renewable energy sector and executed 10 MW Solar power plant in Neyveli, Tamilnadu and further awarded Contract for 2x 65 MW Solar at Neyveli. NLC India Ltd installed 51 MW wind mills in south of Tamilnadu. Increasing the capacity under renewable energy sector is under progress. NLCIL has also formed a joint venture (JV) company with Uttar Pradesh Rajya Vidut Utpadan Nigam Limited (UPRVUNL) in the name of Neyveli Uttar Pradesh Power Limited (NUPPL) to set up a coal based supercritical power plant with a capacity of 1980 MW (3 x 660MW) in the state of Uttar Pradesh at Ghatampur Tehsil with 51:49 equity participation which is under execution.

To know more about NLCIL, visit NLC's website www.nlcindia.com.

1.2 APPROACH TO PROJECT SITE:

1.2.1 The project site details are:

1. Site location: Mudanai Village, Cuddalore District, Tamilnadu
2. Nearest BG Railway Station: i. Uthangal Mangalam - 1.5 km
ii. Neyveli - 4 km
3. Nearest Air port: a. Trichy -150 km
b. Chennai - 200 km
4. Nearest Seaport: Cuddalore - 45 km
5. Nearest Highway: NH – 532 : 1 km

2.0 SCOPE OF WORK:

- 2.1 The scope includes design, engineering, manufacture, inspection, shop testing, packing & forwarding to site, supply, transportation, unloading, storage, preservation and handling at site, erection, painting, all associated civil and structural works, Insurance, supervision, pre-commissioning, testing, commissioning and performance testing of Two (2) nos. of Pulverized Lignite fired Variable Pressure Super critical Steam Generator (SG) units of the type and rating specified, with Electrostatic Precipitators along with auxiliaries and supply of spares and tools. Each unit shall include but not be limited to the following.
- 2.2 Super Critical Steam generator Set complete with furnace, evaporator, separator, super heaters, re-heaters, economizer, super heater and re-heater de-superheating spray systems, soot blowing system, start up recirculation system, critical steam piping, auxiliary steam pressure reducing and de-superheating system, auxiliary steam piping, Steam generator integral pipings, fittings, flash tanks, 2x60% forced draft fans, 2x60% induced draft fans, regenerative air preheaters and steam coil air preheaters, Lignite bunkers and bunker bay structures, Lignite mill & feeders, pulverized fuel piping, ducting and dampers, Seal air Fans, Scanner air fans, PF burners, After Burning Grates, Bottom ash handling system, Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator if necessary, fuel oil system comprising of HFO and LDO system including Misc. Tanks, all structures, galleries / walkways / roofing / platforms, passenger cum goods elevators, refractory and insulation, Plant Service & Instrument Air Compressor system, Cranes and hoists, Auxiliary Boiler, Service packages viz., AC & Ventilation system; equipment cooling water system; service and potable water System; Pipe racks and cable racks which fall within the battery limits of SG package, associated civil & structural works including supply of cement and steel, associated control & instrumentation system and associated Electrical system including illumination, cables & cabling covering the entire scope of work of SG, Vibration Isolation & Spring System, fill of consumables including chemicals, oils and lubricants with topping requirement for all plant & equipments of this package till successful completion of trial operation, supply of tools & tackles, Mandatory spares, erection materials and consumables/chemicals etc. Commissioning and performance testing of equipment under bidder's scope of work.
- 2.3 Further the Steam generator shall be of single pass type (tower type) or two pass type or T type using either spiral wound (inclined) or vertical plain / rifled type water wall tubing. In addition, the above Steam Generator should have been designed with Beater wheel mills (for pulverising lignite), provided with evaporator suitable for variable pressure operation (sub-critical and super-critical pressure ranges). Bidder shall offer only one type for which he meets QR.(i.e. single pass (tower type) or two pass type or T-type using either spiral wound (inclined) or vertical plain or vertical rifled type of water wall tubing and type of lignite mill for which he is qualified.)

2.4 **TENTATIVE PARAMETERS:**

No.	Description	Unit	Tentative Values
1.	BMCR Main Steam Flow at Boiler outlet	T/Hr	2100
2.	Main Steam pressure at Super heater outlet	ksc (a)	270
3.	Main Steam temperature at Super heater outlet	° C	600±5
4.	Steam temperature at Re heater outlet	° C	600±5
5.	Feed water Temperature at Economiser Inlet	° C	295±5

3.0 **Qualifying Requirements for Bidder**

The Bidder should meet the qualifying requirements of any one of the qualifying routes stipulated under clause 3.1 or 3.2 or 3.3 or 3.4 or 3.5. In addition, the Bidder should also meet the requirements stipulated under clauses 3.6 & 3.7.

3.1 **Route 1: Qualified Steam Generator Manufacturer**

3.1.1 The Bidder should have designed, engineered, manufactured/got manufactured, erected/supervised erection, commissioned/ supervised commissioning of at least one (1) number of Pulverized Lignite fired supercritical Steam Generator having rated capacity of 1500 tonnes of steam per hour or above. Further, such Steam generator should be of the type specified, i.e. single pass (tower type) or two pass type or T-type using either spiral wound (inclined) or vertical plain or vertical rifled type water wall tubing, and should be in successful operation for a period of not less than one (1) year as on the original scheduled date of EOI bid opening. In addition, the above Steam Generator should have been designed with Beater wheel mills (for pulverising lignite), provided with evaporator suitable for variable pressure operation (sub-critical and super-critical pressure ranges). The bidder shall offer only the type of Steam Generator, i.e. single pass (tower type) or two pass type or T-type using either spiral wound (inclined) or vertical plain or vertical rifled type of water wall tubing and type of lignite mill for which he is qualified.

3.1.2 The Bidder should have registered under the Companies Act of India, either a Subsidiary Company or a Joint Venture (JV) Company for manufacturing of supercritical steam generator sets.

(a) In case the Bidder has formed a Subsidiary Company then the Subsidiary Company of the Qualified Steam Generator Manufacturer should have been registered in India under the Companies Act of India for manufacturing supercritical steam generator sets covering the type, size and rating specified as on the original scheduled date of EOI bid opening. If the Subsidiary Company is registered as a public limited Company then it should have obtained certificate for Commencement of Business in India as on the original scheduled date of EOI bid opening. The

subsidiary Company shall remain a subsidiary Company of the Qualified Steam Generator Manufacturer for a minimum period of 7 years from the date of incorporation of such Subsidiary Company or up to the end of the warranty period of the contract whichever is later.

(b) In case the Bidder has formed a JV Company then, the Joint Venture (JV) Company should have been incorporated in India under the Companies Act of India, as on the original scheduled date of EOI bid opening and promoted by (i) an Indian Company registered in India under the Companies Act of India and (ii) a Qualified Steam Generator Manufacturer, for the purpose of manufacturing supercritical steam generator sets covering the type, size and rating specified. If the JV Company is incorporated as a public limited Company then it should have obtained certificate for Commencement of Business in India as on the original scheduled date of EOI bid opening.

The Qualified Steam Generator Manufacturer shall maintain a minimum equity participation of 26% in the JV Company for a lock-in period of 7 years from the date of incorporation of JV Company or up to the end of warranty period of the contract whichever is later.

One of the promoters shall be a majority stakeholder who shall maintain a minimum equity participation of 51% in the JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the warranty period of the contract whichever is later

- 3.1.3 The Bidder shall furnish a Letter of consent (LOC) along with EOI bid signed by the bidder, the Subsidiary Company / JV Company (as the case may be) and other promoter having 25% or higher equity participation in the Subsidiary Company / JV Company (as the case may be) for the successful performance of the contract (as per the format enclosed in the EOI tender document).

The Shortlisted Bidder shall furnish a deed of joint undertaking (DJU) executed by him, the Subsidiary Company / JV Company (as the case may be) and other promoter having 25% or higher equity participation in the Subsidiary Company / JV Company (as the case may be) in which the executants of DJU shall be jointly and severally liable to the Purchaser for successful performance of the contract (as per the format enclosed in the EOI tender documents). The deed of joint undertaking shall be submitted along with Techno commercial bid, failing which the Bidder shall be disqualified and his bid shall be rejected.

In case of award, the Subsidiary Company or JV Company (as the case may be) and other promoter having 25% or higher equity participation in the Subsidiary Company / JV Company (as the case may be), shall each be required to furnish an on-demand Bank Guarantee (BG) for an amount of 0.5% of the total contract price of the Steam Generator Package in addition to the contract performance guarantee to be furnished by the Bidder.

3.2 Route 2: Indian Steam Generator Manufacturer (ISGM) with either collaboration or technology transfer agreement with QSGM or with QSGM as Associate.

3.2.1 The bidder should be an Indian Steam Generator Manufacturing company who have designed, engineered, manufactured/got manufactured, erected/ supervised erection, commissioned/ supervised commissioning at least one (1) number of coal/lignite fired steam generator having rated capacity of 1500 tonnes of steam per hour or above which is in successful operation for a period of not less than one (1) year as on the original scheduled date of EOI bid opening.

Such Indian steam Generator Manufacturing company shall meet either of the following requirements:

- a) Shall have a valid ongoing collaboration and technology transfer agreement including license to manufacture and supply lignite fired supercritical steam generator sets covering the type, size and rating specified, in India with a Qualified Steam Generator Manufacturer meeting requirements of clause 3.1.1, minimum up to the end of the warranty period of the contract.

The bidder shall offer only the type of Steam Generators i.e. single pass (tower type) or two pass type or T-type and type of water wall tubing and type of lignite mill for which his collaborator is qualified.

OR

- b) Shall associate with a Qualified Steam Generator Manufacturer meeting requirements of clause 3.1.1 above.

The bidder shall offer only the type of Steam Generators i.e. single pass (tower type) or two pass type or T-type and type of water wall tubing and type of lignite mill for which his associate is qualified.

3.2.2 The Bidder and the Qualified Steam Generator Manufacturer meeting qualifying requirements shall furnish a Letter of consent (LOC) along with EOI bid signed by the bidder and the Qualified Steam Generator Manufacturer for the successful performance of the contract (as per the format enclosed in the EOI tender documents).

The Shortlisted Bidder shall furnish a DJU executed by him and the Qualified Steam Generator Manufacturer, in which the executants of DJU shall be jointly and severally liable to the Purchaser for successful performance of contract. The deed of joint undertaking shall be submitted along with Techno commercial bid (as per format enclosed with the EOI tender documents) failing which the Bidder shall be disqualified and his bid shall be rejected.

For 3.2.1(a)

In case of award, the Qualified Steam Generator Manufacturer will be required to furnish an on-demand Bank Guarantee for an amount of 1.5% of the total contract price of the Steam Generator Package in addition to the contract performance guarantee to be furnished by the Bidder.

For 3.2.1 (b)

In case of award, the Qualified Steam Generator Manufacturer will be required to furnish an on-demand Bank Guarantee for an amount of 3 % of the total contract price of the Steam Generator Package in addition to the contract performance guarantee to be furnished by the Bidder.

3.3 Route 3: Indian Subsidiary Company of a Qualified Steam Generator Manufacturer

3.3.1 The Bidder shall be an Indian Subsidiary Company of a Qualified Steam Generator Manufacturer meeting requirements of clause 3.1.1, registered in India under the Companies Act of India, as on the original scheduled date of EOI bid opening, for manufacturing lignite fired supercritical Steam Generator sets covering the type, size and rating specified. If the Subsidiary Company is incorporated as a public limited Company then it should have obtained certificate for Commencement of Business in India as on the original scheduled date of EOI bid opening.

The subsidiary company shall remain a subsidiary company of the qualified steam generator manufacturer for a minimum period of 7 years from the date of incorporation of such Subsidiary Company or up to the end of warranty period of the contract whichever is later.

3.3.2 The Bidder shall furnish a Letter of consent (LOC) along with EOI bid signed by the bidder, Qualified Steam Generator Manufacturer and other promoter having 25% or higher equity participation in the subsidiary Company, for the successful performance of the contract (as per the format enclosed in the EOI tender documents). The Shortlisted Bidder shall furnish a DJU executed by him, the Qualified Steam Generator Manufacturer and other promoter (if any) having 25% or higher equity participation in the Subsidiary Company, in which the executants of DJU shall be jointly and severally liable to the Purchaser for successful performance of the contract. The deed of joint undertaking shall be submitted along with Techno commercial bid (as per format enclosed in EOI tender documents), failing which the Bidder shall be disqualified and his bid shall be rejected.

In case of award, each promoter of the Subsidiary Company having 25% or higher equity participation in the Subsidiary Company will be required to furnish an on-demand Bank Guarantee for an amount of 0.5% of the total contract price of the Steam Generator Package in addition to the contract performance guarantee to be furnished by the Bidder.

3.4 Route 4: Indian Joint Venture (JV) Company for manufacturing of Super Critical Steam Generator in India between an Indian Company and a Qualified Steam Generator Manufacturer.

3.4.1 The Bidder shall be a Joint Venture (JV) Company incorporated in India under the Companies Act of India, as on the original scheduled date of EOI bid opening, promoted by

(i) An Indian Company registered in India under the Companies Act of India and (ii) a Qualified Steam Generator Manufacturer meeting requirements of clause 3.1.1, created for the purpose of manufacturing in India lignite fired supercritical steam generator sets covering the type, size and rating specified. If the JV Company is incorporated as a public limited Company then it should have obtained certificate for Commencement of Business in India as on the original scheduled date of EOI bid opening.

The Qualified Steam Generator Manufacturer shall maintain a minimum equity participation of 26% in the JV Company for a lock-in period of 7 years from the date of incorporation of JV Company or up to the end of warranty period of the contract whichever is later.

One of the promoters shall be a majority stakeholder who shall maintain a minimum equity participation of 51% in the JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of warranty period of the contract whichever is later.

In the event that the majority stake holder in the JV Company is an entity other than the Qualified Steam Generator Manufacturer, it should be an Indian Company and should have executed, in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and/or any other process industry with the total value of such projects being Rs.1000 Crore or more. At least one of such projects should have a contract value of Rs.400 Crore or more. These projects shall be in successful operation for a period of not less than one year as on the original scheduled date of EOI bid opening.

- 3.4.2 The Bidder shall furnish a Letter of consent (LOC) along with EOI bid signed by the bidder, Qualified Steam Generator Manufacturer and other JV promoter having 25% or higher equity participation in the JV Company, for successful performance of contract (as per the format enclosed in the EOI tender documents).

The Shortlisted Bidder shall furnish a DJU executed by him, the Qualified Steam Generator Manufacturer and other JV promoter having 25% or higher equity participation in the JV Company, in which all the executants of DJU shall be jointly and severally liable to the Purchaser for successful performance of contract. The joint deed of undertaking shall be submitted along with Techno commercial bid (as per the format enclosed in the EOI tender documents), failing which the Bidder shall be disqualified and his bid shall be rejected.

In case of award, each promoter having 25% or higher equity participation in the JV Company will be required to furnish an on-demand Bank Guarantee for an amount of 0.5% of the total contract price of the Steam Generator Package in addition to the contract performance guarantee to be furnished by the Bidder.

- 3.5 **Route 5: Indian JV Promoter holding at least 51% equity in a Joint Venture Company for manufacturing Super Critical Steam Generator sets in India between an Indian Company and a Qualified Steam Generator Manufacturer**

- 3.5.1 The Bidder shall be Indian Promoter with majority stake holding in a Joint Venture Company incorporated in India under the Companies Act of India as on the original

scheduled date of EOI bid opening, promoted by (i) a Company registered in India under the Companies Act of India and (ii) a Qualified Steam Generator Manufacturer meeting requirements of clause 3.1.1, created for the purpose of manufacturing lignite fired supercritical steam generator sets in India, covering the type, size and rating specified. If the JV Company is incorporated as a public limited Company then it should have obtained certificate for Commencement of Business in India as on the original scheduled date of EOI bid opening.

The Qualified Steam Generator Manufacturer shall maintain a minimum equity participation of 26% in the JV Company for a lock-in period of 7 years from the date of incorporation of JV Company or up to the end of warranty period of the contract whichever is later.

The Indian majority stakeholder shall maintain a minimum equity participation of 51% in the JV Company for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of warranty period of the contract whichever is later.

The Indian majority stake holder of the JV Company should have executed in the last 10 years, large industrial projects on EPC basis (with or without civil works) in the area of power, steel, oil & gas, petro-chemical, fertilizer and / or any other process industry with the total value of such projects being Rs.1000 Crores or more. At least one of such projects should have a contract value of Rs.400 Crores or more. These projects shall be in successful operation for a period of not less than one year as on the original scheduled date of EOI bid opening.

- 3.5.2 The Bidder shall furnish a Letter of consent (LOC) along with EOI bid signed by the bidder, JV company and the Qualified Steam Generator Manufacturer, for successful performance of the contract (as per the format enclosed in the EOI tender documents).

The Shortlisted Bidder shall furnish a DJU executed by him, the JV Company and the Qualified Steam Generator Manufacturer, in which all the executants of DJU shall be jointly and severally liable to the Purchaser for successful performance of the contract The deed of joint undertaking shall be submitted along with Techno commercial bid (as per format enclosed in the EOI tender documents), failing which the Bidder shall be disqualified and his bid shall be rejected.

In case of award, the JV Company and the Qualified Steam Generator Manufacturer will each be required to furnish an on-demand Bank Guarantee for an amount of 0.5% of the total contract price of the Steam Generator Package in addition to the contract performance guarantee to be furnished by the Bidder

Notes for Clause 3.0 (3.1 to 3.5)

(1) Definitions

- (i) “Qualified Steam Generator Manufacturer” means a manufacturer meeting requirements stipulated at 3.1.1.
- (ii) Wherever “Indian Manufacturing Company” is indicated, the same shall mean a

Subsidiary Company or a Joint Venture Company or an Indian Steam Generator Manufacturing Company registered in India under the Companies Act of India or as per the prevailing laws of India.

(iii) Wherever the term “type, size, rating specified” is appearing in this document, this shall be deemed to be for pulverized lignite fired steam generators designed with beater wheel mills (for pulverizing lignite).

(iv) Wherever “*successful operation for a period of not less than one (1) year as on the original scheduled date of EOI bid opening*” is mentioned, the minimum cumulative operation for the reference unit shall not be less than 5256 hours in any one year period prior to the original scheduled date of EOI bid opening. This clarification shall be applicable only for the Steam Generators, mentioned in cl. 3.1.1 and 3.2.1.

(2) Erection/Commissioning

Where erection / supervision of erection and commissioning / supervision of commissioning has not been in the scope of the Bidder as mentioned in clause 3.1 & 3.2, he should have acted as an advisor for erection and commissioning of the Steam Generator and auxiliaries. Necessary documents / certificates from the client, in support of above shall be furnished along with the EOI bid.

(3) Direct / Indirect order

i) The Bidder/Qualified Steam Generator Manufacturer shall also be considered qualified, in case the award for the reference works (Steam generator set) has been received by the Bidder/Qualified Steam Generator Manufacturer either directly from owner of plant or any other intermediary organization. A certificate from such owner of plant or the intermediary organization shall be required to be furnished by the Bidder/Qualified Steam Generator Manufacturer along with his EOI bid in support of his claim of meeting requirement stipulated at clauses 3.1.1 and 3.2.1 above as the case may be.

ii) Certificate from owner of the plant shall also be furnished by the Bidder/Qualified Steam Generator Manufacturer for the successful operation of the steam generator set as specified at requirement stipulated at clauses 3.1.1 and 3.2.1 above as the case may be along with the EOI bid.

(4) Holding Company as a Qualified Steam Generator Manufacturer

i. A Holding Company, singularly or collectively along with its Subsidiaries (held either directly or indirectly), meeting the requirements of clause 3.1.1 above, and also owning the technology for supercritical steam generators on their own or through their subsidiaries, shall also be considered as Qualified Steam Generator Manufacturer.

However, in such a case either the Indian subsidiary company created for manufacturing of supercritical steam generator in India shall be a subsidiary of the holding company or the Holding Company shall maintain a minimum equity

of 26% in the Joint Venture Company, created for manufacturing of supercritical steam generators in India.

- ii. In such a case, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the LOC to be submitted with the EOI bid and the DJU to be submitted by the Bidder for successful performance of the contract (as per format to be enclosed in EOI tender documents).

In case of award, if the Holding Company itself is not the Bidder as a Qualified Steam Generator Manufacturer, the Holding Company and all such entities lending strength / experience to the Holding Company shall each be required to furnish separate on-demand Bank Guarantees for an amount aggregating 1.0% of the total contract price of the Steam Generator Package divided equally among them, in addition to the contract performance guarantee to be furnished by the Bidder. This bank guarantee requirement shall supersede bank guarantee requirement stipulated at clause 3.3, 3.4 & 3.5 for the Qualified Steam Generator Manufacturer.

However, in case the Holding Company itself is the Bidder as a Qualified Steam Generator Manufacturer as per clause 3.1, Bidder shall submit its Board Resolution stating that in case of any likely change of Management control of any of these subsidiaries, the bidder shall arrange for separate on-demand Bank Guarantees from all such entities lending strength / experience to the Holding Company for fulfillment of requirement of clause 3.1.1 for an amount aggregating 1.0% of the total contract price of the Steam Generator Package divided equally among them before the change in management control actually occurs.

- iii. As an alternative to the requirements of Note 4(ii) above, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU to be submitted by the Bidder in the techno commercial bid, for successful performance of the contract as per format enclosed in EOI tender documents. However, the Bidder shall submit a Board Resolution of the Holding Company stating that in case of any likely change of management control of any of these subsidiaries, the Holding Company shall arrange for signing of DJU by all such subsidiaries lending strength / experience to the Holding Company for fulfillment of requirement of clause 3.1.1, in line with the requirements of Note 4(ii) above before the change in Management Control actually occurs.

In case of award, if the Holding Company itself is not the Bidder as a Qualified Steam Generator Manufacturer, the Holding Company shall be required to furnish separate on-demand Bank Guarantee for an amount of 1.0% of the total contract price of the Steam Generator Package, in addition to the contract performance guarantee to be furnished by the Bidder. This bank guarantee requirement shall supersede bank guarantee requirement stipulated at clause 3.3, 3.4 & 3.5 for the Qualified Steam Generator Manufacturer. In case of any likely change of management control of any of its subsidiaries lending strength/

experience, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfillment of requirement of clause 3.1.1, in line with Note 4(ii) above before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company.

However, in case the Holding Company itself is the Bidder as a Qualified Steam Generator Manufacturer as per clause 3.1, and anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfillment of requirement of clause 3.1.1, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfillment of requirement of clause 3.1.1, in line with Note 4(ii) above before the change in Management Control actually occurs, in addition to the bank guarantee already furnished by the Holding Company.

(5) Steam Generator Manufacturer with Technology Tie-up for Variable Pressure Design

In case a supercritical Steam Generator manufacturer meets all the requirements as specified in clause no. 3.1.1 above except that the evaporator in the reference steam generator is not designed for variable pressure operation and is designed for constant pressure (Universal Pressure) operation only, in such case, the supercritical Steam Generator manufacturer shall be considered to be qualified, provided that, such supercritical Steam Generator manufacturer has an ongoing license agreement (which covers technology transfer), as on the original scheduled date of EOI bid opening, with the original Technology Owner (Licensor) for design, manufacture, sell, use, service of once through variable pressure supercritical steam generator technology (with evaporator suitable for variable pressure operation in sub-critical and supercritical pressure ranges).

- (i) The licensor should have experience of providing such variable pressure design steam generator technology for at least one (1) no. of lignite fired supercritical steam generator for 1500 T/hr or higher capacity using either spiral wound (inclined) or vertical plain or vertical rifled type water wall tubing with the evaporator suitable for variable pressure operation in sub-critical and super-critical pressure ranges and which should be in successful operation for a period of not less than one (1) year as on the original scheduled date of EOI bid opening.
- (ii) The bidder shall offer only the type of steam generator i.e. single pass (tower type) or two pass type or T-type, type of water wall tubing and type of lignite mill for which the Bidder is qualified and shall offer only the type of water wall tubing (either spiral wound (inclined) or vertical plain or vertical rifled type) for which his licensor is qualified.
- (iii) In such an event, the bidder shall furnish a Deed of Joint Undertaking executed between the Bidder and the supercritical steam generator manufacturer (as the case may be) and its Technology Owner (Licensor), as per the format enclosed

in the EOItender documents towards the Bidder and the licensor being jointly and severally liable to the Purchaser for successful performance of the Steam Generator along with an extended warranty of at least one (1) year over and above what is required as per tender documents.

- (iv) In case of award, Technology Owner (Licensor) will be required to furnish an on-demand Bank Guarantee for an amount of 0.1% of the total contract price of the Steam Generator Package in addition to the Contract Performance Guarantee to be furnished by the Bidder.”

(6) For Clause 3.4

In case the Indian majority stake holder of the JV company does not have requisite EPC experience as mentioned in clause 3.4.1 above, it may still be considered qualified if it is wholly owned by a parent company who fully meets the requisite EPC experience provided the parent company maintains its 100% equity in such wholly owned subsidiary for a lock in period of 7 years from the date of incorporation of JV company or up to the end of the warranty period of the contract whichever is later.

In such a case, the parent company mentioned above shall necessarily be part of DJU being submitted by the bidder.

In case of award, the parent company shall be required to furnish an on-demand Bank Guarantee for an amount of 0.5% of total contract price of the Steam Generator package in addition to the bank guarantee requirement indicated at Clause 3.4.2.

(7) For clause 3.5

Majority stake in JV Company can be held either directly by the bidder or through its wholly owned subsidiary, provided the bidder maintains its 100% equity in such wholly owned subsidiary for a lock in period of 7 years from the date of incorporation of JV Company or up to the end of the warranty period of the contract whichever is later.

In case majority stake in the JV Company is held by wholly owned subsidiary of the bidder, then such wholly owned subsidiary shall necessarily be part of DJU being submitted by the bidder.

In case of award, the wholly owned subsidiary as mentioned above shall be required to furnish an on-demand Bank Guarantee for an amount of 0.5% of total contract price of Steam Generator Package in addition to the bank guarantee requirement at clause 3.5.2.

(8) For Clause 3.1, 3.3, 3.4 and 3.5

The manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company. In such an event, the manufacturing company shall remain a subsidiary of the Indian subsidiary / JV Company with equity lock in for a minimum lock in period of 7 years from the date of incorporation of the

manufacturing company or up to the end of the warranty period of the contract, whichever is later.

In such a case the manufacturing company shall necessarily be part of DJU being submitted by the bidder.

In case of award, the manufacturing company shall be required to furnish an on-demand Bank Guarantee for an amount of 0.5% of total contract price of steam generator package in addition to the bank guarantee requirement at clause 3.1.3, 3.3.2, 3.4.2 and 3.5.2.

(9) Equity Lock in period

Wherever equity lock in period requirement or subsidiary status requirement is indicated, the Bidder would be required to furnish along with its EOI bid, a Letter of Undertaking from the promoter(s) supported by Board Resolution as per the format enclosed in the bid documents, for maintaining required minimum equity for the lock in period mentioned / maintaining the subsidiary status

(10) For clause 3.1, 3.3, 3.4 & 3.5

For the scope related to “Steam Generator and Auxiliaries” indicated at Clause no. 3.1.3, 3.3.2, 3.4.2 & 3.5.2 shall mean Steam Generator and its Auxiliaries as included in the DJU formats included in the bidding documents.

(11) For clause 3.2.1(a)

For the scope related to “Supercritical Steam Generator” indicated at Clause no. 3.2.2 shall mean Steam Generator and its Auxiliaries as included in the DJU formats included in the bidding documents.

(12) For clause 3.2.1 (b)

QSGM as Associate :

Indian Steam Generating Manufacturer (satisfying clause 3.2) can associate with a QSGM who satisfies the clause 3.1.1 above, provided that the associate is jointly and severally responsible for the performance of the contract. Additionally the associate (satisfying the requirements of QSGM) has to extend an additional warranty of one year (two years in total). Relevant DJUs (as enclosed in the EOI Tender) executed by the bidder, associate and others, as applicable shall be furnished along with the Techno commercial bid.

3.6 Financial Criteria:

- 3.6.1 The **Average Annual Turnover** of the Bidder, in the preceding three (3) financial years as on the original scheduled date of EOI bid opening, shall not be less than Rs1021 Crore (Rupees One Thousand Twenty One Crore) or in equivalent foreign currency.
- 3.6.2 Net Worth of the bidder as on the last day of the preceding financial year (with reference to the original scheduled date of EOI bid opening), shall be positive.

- 3.6.3 In case the Bidder is not able to furnish its audited financial statements on standalone entity basis, the un-audited unconsolidated financial statements of the Bidder can be considered acceptable provided the Bidder furnishes the following further documents on substantiation of its qualification:
- (i) Copies of the un-audited unconsolidated financial statements of the Bidder along with copies of the audited consolidated financial statements of its Holding Company.
 - (ii) A Certificate from the CEO/CFO of the Holding Company, as proof, stating that the un-audited unconsolidated financial statements form part of the Consolidated Annual Report of the company.
- In cases where audited results for the last preceding financial year as on the original scheduled date of EOI bid opening are not available, certification of financial statements from a practicing Chartered Accountant shall also be considered acceptable.
- 3.6.4 In case any “Bidder” does not satisfy the financial criteria, stipulated at clauses 3.6.1 above on its own, the Holding Company would be required to meet the stipulated turnover requirements at clause 3.6.1, provided that the **Net Worth** of such Holding Company on the basis of consolidated financial statements as on the last day of the preceding financial year is at least equal to or more than 25 % (twenty five percent) of the paid-up share capital of the Holding Company. In such an event, the Bidder would be required to furnish along with its bid, a **Letter of Undertaking** from the Holding Company, supported by Board Resolution, as proof of pledging unconditional and irrevocable financial support for the execution of the Contract by the Bidder in case of award, and would also be required to submit an additional bank guarantee of 1% of the contract value in case of award.
- 3.6.5 The unutilized line of credit for fund based and non-fund based limits with cash and bank balances including fixed deposits of the Bidder as on a date not earlier than 15 days prior to the original scheduled date of EOI bid opening, duly certified by the Bankers shall not be less than Rs 872 Crore (Rupees Eight Hundred Seventy Two Crore only) or in equivalent foreign currency. In case certificates from more than one bank are submitted, the certified unutilized limits shall be of the same date from all such banks.
- 3.6.6 Where another Company of the group acting as the Treasury Centre is responsible for Treasury Management of the Bidder having combined credit/guarantee limit for the whole group, the Bidder would be required to provide a Banker’s certificate regarding the unutilized line of credit for fund based and non-fund based limits together with cash and bank balances including fixed deposits available to such Treasury Centre. Further, Treasury Centre shall certify that out of the aforesaid limits certified by the bankers’, the Bidder shall have access to the line of credit of a level not less than the specified amount at clause 3.6.5 above. In proof of this, the Bidder

would be required to furnish along with its EOI bid, a Letter of Undertaking from the Treasury Centre, supported by a Resolution passed by the Board of Directors of the holding company, as proof of pledging unconditional and irrevocable financial support for the execution of the Contract by the Bidder in case of award.

3.6.7 In case the Bidder's unutilized line of credit for fund based and non-fund based limits specified at clause 3.6.5 above is not sufficient, a comfort letter from one of the bankers specified in the bid documents unequivocally stating that in case the Bidder is awarded the contract, the Bank would enhance line of credit for fund based and non-fund based limits to a level not less than the specified amount to the Bidder or to the Treasury Management Centre as the case may be, shall be acceptable.

3.6.8. Financial Criteria for the Collaborator(s) / Associate(s)

3.6.8.1 The Average Annual Turnover of each collaborator/ Associate, in the preceding three (3) financial years as on the original scheduled date of EOI bid opening, should not be less than the following for different Collaborators(s)/ Associate(s) as applicable:

Collaborator(s) /Associate(s)	Applicable clauses	Required annual turnover in million INR or equivalent foreign currency
Qualified Steam Generator Manufacturer (QSGM)	3.2.1 (a) 3.2.1 (b)	Rs 102 Crore Rs 684 Crore
Qualified Steam Generator Manufacturer (QSGM)	3.3.1, 3.4.1, 3.5.1	Rs 684 Crore
Holding Company as QSGM	Notes for clause 3.0 (4)	Rs 684 Crore
Technology owner (Licensor to QSGM)	Notes for clause 3.0 (5)	Rs 102 crore

3.6.8.2 The Net Worth of each Collaborator/Associate, as on the last day of the preceding financial year (with reference to the original scheduled date of EOI bid opening), shall be positive.

3.6.8.3 In case the Collaborator(s) / Associate(s) is not able to furnish its audited financial statements on standalone entity basis, the unaudited unconsolidated financial statements of the Collaborator(s) / Associate(s) can be considered acceptable provided the Collaborator(s) / Associate(s) furnishes the following further documents on substantiation of its qualification:

- (i) Copies of the unaudited unconsolidated financial statements of the Collaborator(s) /Associate(s) along with copies of the audited consolidated financial statements of the Holding Company of Collaborator(s) / Associate(s).
- (ii) A Certificate from the CEO/CFO of the Holding Company, as per the format enclosed in the bid documents, stating that the unaudited unconsolidated financial statements form part of the Consolidated Annual Report of the Company.

In cases where audited results for the last preceding financial year are not available, certification of financial statements from a practicing Chartered Accountant shall also be considered acceptable.

3.6.8.4 In case a Collaborator(s) / Associate(s) does not satisfy the financial criteria, stipulated at Cl.3.6.8.1 above on its own, its Holding Company would be required to meet the stipulated turnover requirements at Cl 3.6.8.1 above, provided that the Net Worth of such Holding Company, as on the last day of the preceding financial year is at least equal to 25% of the paid-up share capital of the Holding Company. In such an event, the Collaborator(s) / Associate(s) would be required to furnish along with its EOI bid, a Letter of Undertaking from the Holding Company, supported by Board Resolution (as per the format enclosed in the bidding documents) pledging unconditional and irrevocable financial support to the Collaborator(s) / Associate(s) to honour the terms and conditions of the Deed of Joint Undertaking, in case of award.

3.6.8.5 The unutilized line of credit for fund based and non-fund based limits with cash and bank balances including fixed deposits of the Collaborator(s) / Associate(s) as on a date not earlier than 15 days prior to the original scheduled date of EOI bid opening, duly certified by the Bankers should not be less than the following for different Collaborator(s) / Associate(s) in terms of Deed of Joint Undertaking:

Collaborator(s) / Associate(s)	Applicable clauses	Required unutilized line of credit in Rs / Crore or in equivalent foreign currency
Qualified Steam Generator Manufacturer (QSGM)	3.2.1(a) 3.2.1(b)	Rs 61 Crore Rs 293 Crore
Qualified Steam Generator Manufacturer (QSGM)	3.3.1, 3.4.1, 3.5.1	Rs 191 Crore
Holding Company as QSGM	Notes for clause 3.0 (4)	Rs 212 Crore
Technology owner (Licensor to QSGM)	Notes for clause 3.0(5)	Rs 4 Crore

In case certificates from more than one bank are submitted, the certified unutilized limits shall be of the same date from all such banks.

3.6.8.6 Where another Company of the group acting as the Treasury Centre is responsible for Treasury Management of the Collaborator(s) / Associate(s) having combined credit/guarantee limit for the whole group, the Collaborator(s) / Associate(s) would

be required to provide a Banker's certificate regarding the unutilized line of credit for fund based and non-fund based limits together with cash and bank balances including fixed deposits available to such Treasury Centre. Further, Treasury Centre shall certify that out of the aforesaid limits certified by its bankers', the Collaborator(s) / Associate(s) shall have access to the line of credit of a level not less than the amount specified at Cl. 3.6.8.5 above.

In proof of this, the Bidder would be required to furnish along with its EOI bid, a Letter of Undertaking from the Treasury Centre, supported by a Resolution passed by the Board of Directors of the Collaborator / Associate's holding Company, as per the format enclosed in the bidding documents, pledging unconditional and irrevocable financial support to the Collaborator(s) / Associate(s) to honour the terms and conditions of the Deed of Joint undertaking, in case of award of the contract to the Bidder with whom Collaborator(s) / Associate(s) is associated.

- 3.6.8.7 In case the Collaborator / Associate's unutilized line of credit for fund based and non-fund based limits specified at Cl. 3.6.8.5 above is not sufficient, a comfort letter from one of the bankers specified in the bidding documents unequivocally stating that in case of award of the contract to the Bidder with whom Collaborator(s) / Associate(s) is associated, the Bank would enhance line of credit for fund based and non-fund based limits to a level not less than the specified amounts to the Collaborator(s) / Associate(s) or to the Treasury Management Centre as the case may be, shall be acceptable.

- 3.6.9 The liability of each Collaborator /Associate to the purchaser, in case of award shall not exceed as % of total contract price for the Steam Generator & Auxiliaries Package for TPSII Second Expansion, for various routes is as given below:

Liability of Collaborator(s) /Associate(s)	Applicable Clause	Liability as % of contract price
Route 1 - Liability of Indian manufacturing company (established as a subsidiary / JV company by QSGM) and other promoters	3.1.3	65%
Route 2 (a) - Liability of QSGM (as Collaborator) and other promoters.	3.2.2	26%
Route 2 (b) - Liability of QSGM (as Associate) and other promoters.	3.2.2	100%
Route 3 - Liability of QSGM and other promoters	3.3.2	65%
Route 4 - Liability of QSGM and other promoters	3.4.2	65%
Route 5 - Liability of QSGM, Indian Joint Venture Co.	3.5.2	65%

The bidders shortlisted in the EOI bids, shall furnish relevant Deed of Joint Undertaking (DJU) along with techno commercial bid as per formats enclosed in the EOI bid documents.

As a confirmation of the same, a letter of consent (LOC) as per the format enclosed in the EOI documents shall be furnished along with the EOI bid.

3.6.10 NOTES for Clause 3.6

- (i) Net Worth means the sum total of the paid-up share capital and free reserves. Free reserve means all reserves credited out of the profits and share premium account but does not include reserves credited out of the revaluation of the assets, write back of depreciation provision and amalgamation. Further any debit balance of Profit and Loss account and miscellaneous expenses to the extent not adjusted or written off, if any, shall be reduced from reserves and surplus.
- (ii) Other income shall not be considered for arriving at annual turnover.
- (iii) For unutilized line of credit for fund based and non-fund based limits and Turnover indicated in foreign currency, the B.C Selling exchange rate as on 7 days prior to the original schedule date of EOI bid opening shall be used.
- (iv) “Holding Company” and “Subsidiary Company” shall have the meaning ascribed to them as per Companies Act of India.
- (v) In case the bidder / collaborator(s) / associate(s) participating under Clause 3.3.0 or 3.4.0, do not meet the turnover requirement and Unutilized Line of Credit (ULC), then the Turnover and ULC of any of the Promoters individually or all the promoters (in a combined manner) (each having Equity Stake more than 25%) of the Subsidiary Company / JV Company would be considered. Each such promoter of the Subsidiary Company / JV Company shall have to meet the Net Worth criteria as per clause 3.6.2 and/or 3.6.8.2. In such an event the Bidder would be required to furnish along with its EOI bid, a Letter of Undertaking from such promoter(s), supported by Board Resolution, pledging unconditional and irrevocable financial support for execution of the Contract by the Bidder in case of award.

3.7 Phased Manufacturing Program and Transfer of Technology

- 3.7.1 The bidder shall give firm commitment in the form of an undertaking supported by Board Resolution to set up manufacturing facility for supercritical Steam Generators in India either by himself or through its subsidiaries or through Joint Venture(JV) in India in a phased manner as per Phased Manufacturing Program elaborated below.

3.7.2 It is mandatory for the contractor to set up manufacturing facility in India for manufacture of supercritical steam generators in India either by himself or through its subsidiaries or through joint venture company in a phased manner as per the manufacturing programme as indicated below:

SI. No.	Equipment	Indicative Facilities Requirement	To be established latest by (Months from Date of Award)	Weightage factor (% age) for LD
1.	Pressure Parts (straight water wall & spiral water wall)	• Straight tube butt welding facility • Automatic welding facility for panel processing • NDT facilities • Hydro testing • Continuous heat treatment furnace • Gang/panel bending facility (for straight water wall & spiral water wall tube panels)	36	35
2	Pressure Parts (Economiser, Superheater and Reheater coils and Panels)	• System bend facility • Welding facility for coils • NDT facilities • Hydro testing • Continuous heat treatment furnace • Jigs & fixtures for assembly and layout checking facility • Portable equipment for material/grade identification	42	30
3.	Pressure Parts (Headers)	• Welding • Machining & drilling • Heat treatment • Hydraulic testing • NDT facilities • Pressing facility for end caps & tees • Material identification facility • Facility for high alloy (P5 and above) continuous welding	42	20
4.	Separator (Shell and Dished ends)	• Roiling facility / pressing Facility • Machining & drilling, • Welding Heat Treatment • Hydraulic testing • NDT facilities • Pressing arrangement for Dished ends	48	15

- 3.7.3 Liquidated damages for delay in phased manufacturing programme:
The amount of liquidated damages for the delay to meet various milestones of phased manufacturing will be subject to maximum 5% of the total contract price. LD for each milestone shall be proportionate to weightage factor assigned to various manufacturing process. Total LD for a milestone shall be recovered within ten weeks' delay from respective milestone target dates. The Liquidated Damages in delay in phased manufacturing programme shall be independent of the LD for the delay in completion of other milestones. The schedule for the PMP with weightage factor (%) for LD is indicated in the above table.
- 3.7.4 On-demand Bank Guarantee for PMP:
Within twenty-eight (28) days after receipt of the notification of award, the successful Bidder shall furnish the on-demand Bank Guarantee for PMP, in favour of NLC INDIA Ltd. for an amount INR 900,000,000/- in the form provided in the EOI documents.
- 3.7.5 The manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing supercritical Steam Generators in India of the above Indian subsidiary / JV Company. In such an event, the manufacturing company shall remain a subsidiary of the Indian subsidiary / JV company with equity lock in for a minimum lock in period of 7 years from the date of incorporation of the manufacturing company or up to the end of the warranty period of the contract, whichever is later.
- 3.7.6 A valid technology transfer agreement including license to manufacture and supply in India between the Qualified Steam Generator Manufacturer, or his technology provider (if any) and the Indian Manufacturing Company should be in place on the original scheduled date of EOI bid opening, covering the type, size and rating of the Steam Generators specified, valid minimum up to the end of the warranty period of the contract. The technology transfer agreement shall necessarily cover transfer of technological know-how for lignite fired super critical Steam Generator (with beater wheel mills for pulverizing lignite) in the form of complete transfer of design dossier, design softwares, drawings and documentation, quality system manuals and imparting relevant personnel training to the Indian Manufacturing Company. Such technology transfer agreement must have provision that the transfer of technology to the Indian Manufacturing Company shall be complete by the time last 660 MW supercritical unit is supplied by the Bidder under this tender.
- 3.7.7 Major part (minimum 75%) of the land required for setting up manufacturing facility in India should be in possession with clear title either in the name of the "Indian Manufacturing Company" or its Indian promoter (but pledged / leased to the Subsidiary / JV company) prior to submission of EOI bid. In case, the Bidder has existing manufacturing facility in India, he should have in possession major part

(minimum 75%) of the additional land required with clear title for augmenting his already existing manufacturing facility. "Clear title" shall be deemed to also include land required on long term lease basis for minimum 30 years with a provision for further extension.

- 3.7.8 Promoters of the Subsidiary (ies) / JV Company (ies) will be required to either employ a minimum subscribed and paid-up share capital or have Net Worth of INR 50 Crore in the respective Subsidiary / JV Company prior to the submission of EOI bid. In case the Bidder is selected for award of the contract, either a minimum subscribed and paid-up share capital or Net Worth of INR 100 Crore in the respective Subsidiary / JV Company will have to be ensured by the promoters prior to the date of award. In the event the Bidder fails to meet this requirement, the Purchaser shall disqualify such Bidder.

The certificates from a practicing Chartered Accountant shall be submitted by the Bidder certifying the amount of subscribed and paid-up share capital, or Net Worth as the case may be as on a date not earlier than 15 days from the original scheduled date of EOI bid opening / award date as applicable.

- 3.7.9 The Bidder shall be required to furnish an undertaking with regard to the above.

3.7.10 Notes to clause 3.7.0

1. Bidders who have already given commitments for PMP and submitted bank guarantees for security for default against specified PMP for Steam Generators to any central/ State sector power generating Company for supercritical projects shall not be required to furnish further bank guarantees for security for default against specified PMP.
2. For Bidders intending to participate through Clause 3.2.1 (b) :
The Indian steam generating manufacturers (ISGMs) seeking qualification through Clause 3.2.1 (b) and have complied with the PMP requirements (for coal fired supercritical steam generators) as on the original scheduled date of EOI bid opening, can submit their bid along with an associate who complies with requirements under clause 3.1.1 above. Further such bidders would not be required to meet any further PMP requirements (as indicated in 3.7.6 above) with respect to lignite fired steam generators.
3. For Bidders intending to participate through other than Clause 3.2.1 (b):
In case the Bidders who have already set up manufacturing facility in India for manufacturing coal fired supercritical steam generator sets with a suitable licence agreement and have complied with the PMP requirements, in addition, shall have obtained an amendment or otherwise a fresh licence agreement as on the original scheduled date of EOI bid opening, which permits them to manufacture lignite fired supercritical steam generators provided with beater wheel mills for pulverising lignite, in India.

- 4.0 **Documentary Evidence to be Submitted along with EOI Bid:**
- 4.1 Documentary evidence to satisfy the Qualifying Requirements mentioned in Cl. 3.0 as applicable and as called for in the **ANNEXURES -I/1 to I/5** shall be furnished with relevant details shall be furnished with details in the bidding documents.
- 4.2 The bidder, the promoters in case of Subsidiary / JV Company, as the case may be and the Subsidiary / JV Company shall furnish their audited profit and loss account and balance sheet for the preceding three consecutive financial years as required.
- 4.3 Bidder qualifying under Clause 3.5 shall furnish the details of equity share holding for meeting the requirement in Clause 3.5 and copy of the License to manufacture Steam Generator sets in India.
- 4.4 Copy of License to manufacture the Steam Generator sets in India wherever applicable.
- 5.0 **OTHER REQUIREMENTS**
BIDDER TO NOTE THE FOLLOWING CLAUSES AND FURNISH POINT WISE CONFIRMATION FOR ACCEPTANCE OF THESE CLAUSES IN THE EOI BID.
- 5.1 The successful bidder meeting the Qualifying Requirement condition mentioned in the Q.R. clause 3.1 to 3.5, on award of the LOA, shall furnish a Contract performance guarantee for a value of 10% of the total contract price in the form of an on-demand Bank Guarantee for the faithful performance of the contract after the LOA in addition to the Bank Guarantees stipulated in the various clauses of the QR as applicable.
- 5.2 The Scope of work of the Bidder shall be on the basis of single bidder responsibility. The contract will be entered into only with the successful bidder. Thus the bidder shall be solely responsible and liable for all the technical, management and all other services required for completing the entire scope of work detailed in the tender specification.
- 5.3 Sourcing of equipments/systems should be with the approval of Purchaser and should be only from the reputed manufacturers / suppliers / sub vendors as stipulated in the tender specification.
- 5.4 The bidder shall furnish the following details also along with his EOI documents.
 - Contracts in hand/pending jobs and their status along with value
 - Major legal cases
 - Recent power projects executed and their value
- 5.5 In case the certificate(s) submitted by the bidders is found to be a forged one/bogus one, the bidder will not only be disqualified for the tender but also would be blacklisted / debarred by the Purchaser.
- 5.6 The Contractor shall not sub-contract the work on back to back basis. Any subcontracting for Civil, Electrical, C&I systems and balance mechanical works shall be after due approval by the Purchaser.

- 5.7 The bidder cannot be an associate for other bidder(s) who are bidding for the Steam Generator package (SE-1) in this tender for Expression of Interest. In case of non-compliance, the offer of such bidder will be rejected.
- 5.8 The bidder to note the following clauses also while submitting the EOI documents
- (i) For calculating the Average Annual Turnover, given in Foreign Currency, the B.C-Selling exchange rate prevailing as on 7 days before the original scheduled date of EOI bid opening will be considered.
 - (ii) Notwithstanding anything stated above, the Purchaser reserves the right to verify all statements / information submitted to confirm the bidder's claim on experience and to assess the capabilities and capacity of the Bidder/his collaborators/ associates/Promoters/Parent company/ Subsidiary Companies/ holding company to perform the contract, should the circumstances warrant such verification / assessment in the overall interest of the Purchaser.
 - (iii) The Purchaser reserves the right to ask the bidders to provide the certified copies of experience certificates. For installations outside India, experience certificate is to be authenticated by the Indian Embassy in that country/ Apostille in lieu of Embassy Authentication and within India experience certificate is to be attested by a Notary Public.
 - (iv) The Purchaser also reserves the right to consider any foreign installations as experience, only if the bidder facilitates necessary inspection of such installation by the Purchaser or its authorized agency. However, cost pertaining to the Purchaser's or its authorized agency's personnel shall be borne by the Purchaser or its authorized agency.
 - (v) The Purchaser reserves the right to reject any or all EOIs or cancel/withdraw the Invitation for EOI without assigning any reason whatsoever and in such case no bidder/intending bidder shall have any claim arising out of such action.
- 5.9 The Bidder shall take note of the following as per Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, Govt. of India, order dated 15.06.2017. The Bidder shall confirm compliance to the requirements indicated below:

DEFINITIONS:

- (i) '*Local content*' means the amount of value added in India which shall, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.
- (ii) '*Local supplier*' means a supplier or service provider whose product or service offered for procurement meets the minimum local content as prescribed.
- (iii) '*L 1*' means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender.

(iv) '*margin of purchase preference*' means the maximum extent to which the price quoted by a local supplier may be above the L1 for the purpose of purchase preference.

5.9.1 **Minimum local content:** The minimum local content shall ordinarily be 50%.

5.9.2 **Margin of Purchase Preference:** The margin of purchase preference shall be 20%.

5.9.3 **Verification of local content:**

- (i) The local supplier at the time of tender, bidding or solicitation shall be required to provide self-certification that the item offered meets the minimum local content and shall give details of the location(s) at which the local value addition is made.
- (ii) The local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
- (iii) False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.
- (iv) A supplier who has been debarred by any procuring entity for violation of this Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities”.

5.9.4 The bidders are requested to note that the techno commercial bids of those bidders successful in this EOI tender will be evaluated taking into consideration of the GOI Order dated 15.06.2017 from DIPP, Ministry of Commerce and Industry, regarding the Public Procurement (Preference to Make in India)

6.0 **TIME SCHEDULE**

Unit 1 shall achieve successful completion of Trial operation within Fifty (50) months and Completion of PG tests within Fifty three (53) months from the date of Letter of Award with subsequent phase shift of 6 months for unit 2.

7.0 **INTEGRITY PACT PROGRAMME:**

- a) NLCIL is committed to have most ethical business dealing with the Vendors, Bidders and Contractors of goods and services and deal with them in a transparent manner with Equity and Fairness.
- b) NLCIL being a signatory in implementing the Integrity Pact Programme with Transparency International India, all the Bidders / contractors required to sign

the "Integrity Pact" during the submission of the Techno Commercial bids / offers.

8.0 **THE BIDDER SHALL FURNISH THE FOLLOWING DETAILS ALSO
ALONG WITH THE EOI DOCUMENTS:**

- a. Contracts in Hand / Pending jobs and their status along with Value.
- b. Major Legal cases and their statutory liabilities.
- c. Details of recent Coal / Lignite fired Power Projects / EPC Projects executed and their value.

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	ANNEXURE – I /1 (For Route 1)
	Documents to be submitted by the bidder for QR Clause 3.1
	Route 1 : Qualified Steam Generator Manufacturer
1.0	Performance Certificate of QSGM for the reference plant
1.1	Performance certificate should be in the letter head of the issuing firm and should be dated.
1.2	Name and designation of the signing person should be clearly discernible.
1.3	For meeting the qualifying requirements in clause 3.1 the aspects to be considered are (i) Design, engineering, manufacture, supply, erection / supervision of erection, and commissioning / supervision of commissioning of at least one (1) no. of Pulverized Lignite Fired Super critical Steam Generator with beater wheel mills, having a rated capacity of 1500 T/Hr of steam or above in operation for one year, (ii) Parameters of the Steam Output from SG: (iii) The type of Steam Generator : Single pass (tower type) / two pass/T-Type, (iv) Type of water wall tubing: Spiral wound (inclined) / vertical plain/vertical rifled, (v) Evaporator suitable for variable pressure in subcritical and supercritical ranges, (vi) Nature of execution of order: direct/indirect (Refer Notes (3) for Clause 3.0) (vii) Cumulative operating hours (Not less than 5256 Hours) achieved for the above Unit in any one year period from(date) to.....(date)
1.4	The Registered Name and Address of the QSGM who is meeting the requirements mentioned in (1.3) above.
1.5	Location of the reference Power station
1.6	Contact address of the reference Power Station , Fax No., e-mail ID, Phone No. of the contact person etc.
2.0	a) Copy (of Technology Transfer) Agreement to manufacture supercritical steam generators components, between QSGM or technology provider (if any), and the company established in India for meeting the QR. b) Licence agreement from a technology owner(Licensor) for variable pressure design of evaporator in case QSGM has designed only for constant pressure evaporator
3.0	Letter of undertaking from the concerned for maintaining reqd. equity for the specified lock in period (please refer Notes 3.5.3 (9) of QR) supported by board resolution.
4.0	Registration certificate under Companies Act for Indian subsidiary /JV Company, Articles of Association, Memorandum Of Association. If subsidiary/JV company is a Public Limited co, Certificate for commencement of business.
5.0	The purchaser may ask for additional documents such as copies of purchase order / work order/ LOA if required in support of the claim by the bidder to satisfy the Qualifying Requirements
6.0	Applicable LOC shall be furnished (as per Annexure II).

7.0	Documents to be submitted with respect to Clauses 3.6 & 3.7, but not limited to, are as follows:(as applicable) 1. Audited Financial statements showing: a. Average Annual Turnover of the bidder in the preceding 3 financial years b. Net Worth of the bidder, its Subsidiaries, and/ or holding companies, and/or subsidiaries of the holding company, JV partners, as applicable. 2. Unaudited unconsolidated financial statements of the bidder along with copies of the audited consolidated financial statements of its holding company 3. Certificates from the CEO/CFO of the holding company. 4. Letter of Undertaking from the Holding Company supported by the Board Resolution, as proof of pledging unconditional and irrevocable financial support for the execution of the contract, in case of award (For Cl 3.6.4). 5. Unutilized line of credit for fund based and non-fund based limits with cash and bank balances including fixed deposits of the bidder. 6. Copy (of Transfer) of Licence Agreement to manufacture lignite fired supercritical steam generators components, to such company established in India as per QR. 7. Certificate from a practicing Chartered Accountant for proof of paid up share capital/Net worth of the promoters/subsidiary(ies)/JV company(ies) (for clause 3.7.8) 8. Any other documents as applicable and relevant for meeting the Qualifying Requirements.
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	ANNEXURE – I/2 (Route 2a)
	<u>Route 2 : Indian Steam Generator Manufacturer (with QSGM as collaborator)</u>
	Documents to be submitted by the bidder for QR clause 3.2.1 (a)
1.0	Performance certificates of QSGM and ISGM (for their reference plants respectively)
1.1	Performance certificates should be in the letter head of the issuing firm and should be dated.
1.2	Name and designation of the signing person should be clearly discernible.
1.3	For meeting the qualifying requirements in clause 3.2 the aspects to be considered are a) For the Bidder: i. Design, engineering, manufacture/got manufactured, supply, erection/ supervision of erection and commissioning / supervision of commissioning of at least one (1) no. of coal/lignite fired Steam Generator having a rated capacity 1500 T/hr of steam or above in operation for one year, ii. Cumulative operating hours (Not less than 5256 Hours) achieved for the above Unit in any one year period from(date) to.....(date) b) For the QSGM (as collaborator): i. Design, engineering, manufacture, supply, erection / supervision of erection and commissioning / supervision of commissioning of at least one (1) no. of Pulverized Lignite Fired Super critical Steam Generator using beater wheel mills having a rated capacity of 1500 T/hr of steam or above. ii. Parameters of the Steam Output from SG..... iii. The type of steam generator : Single pass (tower type) / two pass/ T-Type, iv. Type of water wall tubing: Spiral wound (inclined) / vertical plain/vertical rifled, v. Evaporator suitable for variable pressure in subcritical and supercritical ranges vi. Nature of execution of order: direct/indirect (Refer Notes (3) for Clause 3.0) vii. Cumulative operating hours (Not less than 5256 Hours) achieved for the above Unit in any one year period from(date)to.....(date)
1.4	(i) The Registered Name and Address of the Indian Steam Generator Manufacturer who is meeting the requirements mentioned (1.3 a) above. (ii) The Registered Name and Address of the QSGM who is meeting the requirements mentioned in (1.3 b) above
1.5	(i) Location of the reference Power station in which coal/lignite fired Steam Generator mentioned above (1.3 a) is in operation. (ii) Location of the reference (lignite fired supercritical) Power station mentioned above in (1.3 b) is in operation.

1.6	Contact addresses of the reference power stations as in 1.5 above, Fax No., e-mail ID, Phone Nos. of the Contact Persons
2.0	Licence agreement from a technology owner (Licensor) for variable pressure design of evaporator in case QSGM has design only for constant pressure evaporator.
3.0	Letter of undertaking from the concerned for maintaining reqd. equity for the specified period (please refer Notes to Clause 3.0, 3.5.3 (9) of QR) supported by board resolution.
4.0	Ongoing collaboration and technology transfer agreement between QSGM and ISGM including Licence to manufacture & supply supercritical steam generator sets covering the type, size & rating, provided with beater wheel mills for pulverizing lignite, with validity up to the end of Warranty period.
5.0	Registration certificate under companies act, Articles Of Association, Memorandum Of Association. If subsidiary/JV company is a Public Limited co, Certificate for commencement of business
	The purchaser may ask for additional documents such as copies of purchase order / work order/ LOA if required in support of the claim by the bidder to satisfy the Qualifying Requirements.
	Applicable LOC shall be furnished (as per annexure II).
	Documents to be submitted with respect to Clauses 3.6 & 3.7, but not limited to, are as follows:(as applicable) - Audited Financial statements showing: - Average Annual Turnover of the bidder in the preceding 3 financial years - Net Worth of the bidder, its Subsidiaries, and/ or holding companies, subsidiaries of the holding company, JV partners. - Unaudited unconsolidated financial statements of the bidder along with copies of the audited consolidated financial statements of its holding company, as applicable - Certificates from the CEO/CFO of the holding company. - Letter of Undertaking from the Holding Company supported by the Board Resolution, as proof of pledging unconditional and irrevocable financial support for the execution of the contract, in case of award. - Unutilized line of credit for fund based and non-fund based limits with cash and bank balances including fixed deposits of the bidder. - Copy (of Transfer) of Licence Agreement to manufacture lignite fired supercritical steam generators components, to such company established in India as per QR. - Certificate from a practicing Chartered Accountant for proof of paid up share capital/Net worth of the promoters/subsidiary(ies)/JV company(ies) (for clause 3.7.8) - Any other documents as applicable and relevant for meeting the Qualifying Requirements.

	ANNEXURE – I/2 (Route 2b)
	<u>Route 2 : Indian Steam Generator Manufacturer (with QSGM as associate)</u>
	Documents to be submitted by the bidder for QR clause 3.2.1 (b)
1.0	Performance certificates of QSGM & ISGM (for their reference plants respectively)
1.1	Performance certificates should be in the letter head of the issuing firm and should be dated.
1.2	Name and designation of the signing person should be clearly discernible.
1.3	For meeting the qualifying requirements in clause 3.2 the aspects to be considered are a) For the Bidder: i. Design, engineering, manufacture/got manufactured, supply, erection/supervision of erection and commissioning / supervision of commissioning of at least one (1) no. of coal/lignite fired Steam Generator having a rated capacity 1500 T/hr of steam or above in operation for one year, ii. Cumulative operating hours (Not less than 5256 Hours) achieved for the above Unit in any one year period from (date) to.....(date) b) For the QSGM (as associate): i. Design, engineering, manufacture, supply, erection / supervision of erection and commissioning / supervision of commissioning of at least one (1) no. of pulverized lignite fired Supercritical Steam Generator with beater wheel mills having a rated capacity of 1500 T/hr of steam or above. ii. Parameters of the Steam Output from SG, iii. The type of steam generator : Single pass (tower type) / two pass/ T-Type, iv. Type of water wall tubing: Spiral wound (inclined) / vertical plain/vertical rifled, v. Evaporator suitable for variable pressure in subcritical and supercritical ranges vi. Nature of execution of order: direct/indirect (Refer Notes (3) for Clause 3.0) vii. Cumulative operating hours (Not less than 5256 Hours) achieved for the above Unit in any one year period from (date) to.....(date)

1.4	(i) The Registered Name and Address of the Indian Steam Generator Manufacturer who is meeting the requirements mentioned (1.3 a) above. (ii) The Registered Name and Address of the QSGM who is meeting the requirements mentioned in (1.3 b) above
1.5	(i) Location of the reference Power station in which coal/lignite based Steam Generator mentioned above (1.3 a) is in operation. (ii) Location of the reference (lignite fired supercritical) Power station mentioned above in (1.3 b) is in operation.
1.6	Contact addresses of the reference power stations as in 1.5 above, Fax No., e-mail ID, Phone Nos. of the Contact Persons
2.0	Licence agreement from a technology owner (Licensor) for variable pressure design of evaporator in case QSGM has design only for constant pressure evaporator
3.0	Letter of undertaking from the concerned for maintaining reqd. equity for the specified period (please refer Notes to Clause 3.0, 3.5.3 (9) of QR) supported by board resolution.
4.0	Compliance of PMP requirements by ISGM (as indicated in the advisory CEA/TE&TD-TT/2010/D-12 dated 02.02.2010) for having augmented its manufacturing facility for the coal fired supercritical steam generator sets in India. Collaboration and technology transfer agreement including License to manufacture & supply supercritical coal fired steam generator sets in India (employed by the bidder) for compliance of the above.
5.0	Registration certificate under companies act, Articles Of Association, Memorandum Of Association. If subsidiary/JV company is a Public Limited co, Certificate for commencement of business
6.0	The purchaser may ask for additional documents such as copies of purchase order / work order/ LOA if required in support of the claim by the bidder to satisfy the Qualifying Requirements
7.0	Applicable LOC shall be furnished (as per annexure II).
8.0	Documents to be submitted with respect to Clauses 3.6 & 3.7, but not limited to, are as follows:(as applicable) a) Audited Financial statements showing: I. Average Annual Turnover of the bidder in the preceding 3 financial years II. Net Worth of the bidder, its Subsidiaries, and/ or holding companies, subsidiaries of the holding company, JV partners. b) Unaudited unconsolidated financial statements of the bidder along with copies of the audited consolidated financial statements of its holding company, as applicable c) Certificates from the CEO/CFO of the holding company. d) Letter of Undertaking from the Holding Company supported by the Board Resolution, as proof of pledging unconditional and irrevocable financial support for the execution of the contract, in case of award (For Cl 3.6.4).

	e) Unutilized line of credit for fund based and non-fund based limits with cash and bank balances including fixed deposits of the bidder f) Compliance Report for PMP Requirements as in Sl No 4.0 above. Copy (of Transfer) of Licence Agreement to manufacture supercritical steam generators components, to such company established in India as per QR. g) Certificate from a practicing Chartered Accountant for proof of paid up share capital/Net worth of the promoters/subsidiary(ies)/JV company(ies) (for clause 3.7.8) h) Any other documents as applicable and relevant for meeting the Qualifying Requirements..
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	ANNEXURE –I/3 (For route 3)
	<u>Route 3: Indian Subsidiary Company of the Qualified Steam Generator Manufacturer</u>
	<u>Documents to be submitted by the bidder for QR clause 3.3:</u>
1.0	Performance certificate of QSGM for the reference plant
1.1	Performance certificate should be in the letterhead of the issuing firm and should be dated.
1.2	Name and designation of the signing person should be clearly discernible.
1.3	For meeting the qualifying requirements in clause 3.3. the aspects to be considered are For the QSGM: i. Design, engineering, manufactured/ got manufactured, supply, erection / supervision of erection and commissioning / supervision of commissioning of at least one (1) no. of Pulverized Lignite Fired Super critical Steam Generator with beater wheel mills having a rated capacity of 1500 T/Hr of steam or above in operation for one year. ii. Parameters of the Steam Output from SG: iii. The type of steam generator : Single pass (tower type) / two pass/ T-Type, iv. Type of water wall tubing: Spiral wound (inclined) / vertical plain/vertical rifled. v. Evaporator suitable for variable pressure in subcritical and supercritical ranges. vi. Nature of execution of order: direct/indirect (Refer Notes (3) for Clause 3.0) vii. Cumulative operating hours(Not less than 5256 Hours) for the above Unit in any one year period from(date)to.....(date)
1.4	The Registered Name and Address of the Indian Subsidiary company of the QSGM. The Registered Name and Address of the QSGM who is meeting the requirements mentioned (1.3) above.
1.5	Location of the reference Power station in which lignite fired supercritical Steam Generator mentioned above (1.3) is in operation.
1.6	Contact address of the reference power station, Fax No., e-mail ID, Phone No. of the contact person
2.0	Licence agreement from a technology owner(Licensor) for variable pressure design of evaporator in case QSGM has design only for constant pressure evaporator.
3.0	Letter of undertaking from the concerned for maintaining reqd. equity for the specified period (please refer Notes 3.5.3 (9) of QR) supported by board resolution

4.0	Ongoing collaboration and technology transfer agreement (between Indian subsidiary of QSGM) with QSGM including Licence to manufacture & supply lignite fired supercritical steam generator sets covering the type, size & rating, provided with beater wheel mills for pulverizing lignite, with validity up to the end of Warranty period.
5.0	Registration certificate under companies act for Indian subsidiary, Articles Of Association, Memorandum Of Association. If subsidiary company is a Public Limited co, Certificate for commencement of business.
6.0	The purchaser may ask for additional documents such as copies of purchase order / work order/ LOA if required in support of the claim by the bidder to satisfy the Qualifying Requirements.
7.0	Applicable LOC shall be furnished (as per annexure II).
8.0	Documents to be submitted with respect to Clauses 3.6 & 3.7, but not limited to, are as follows:(as applicable) a) Audited Financial statements showing: a. Average Annual Turnover of the bidder in the preceding 3 financial years b. Net Worth of the bidder, its Subsidiaries, and/ or holding companies, subsidiaries of the holding company, JV partners. b) Unaudited unconsolidated financial statements of the bidder along with copies of the audited consolidated financial statements of its holding company, as applicable c) Certificates from the CEO/CFO of the holding company. d) Letter of Undertaking from the Holding Company supported by the Board Resolution, as proof of pledging unconditional and irrevocable financial support for the execution of the contract, in case of award (For Cl 3.6.4). e) Unutilized line of credit for fund based and non-fund based limits with cash and bank balances including fixed deposits of the bidder. f) Copy (of Transfer) of Licence Agreement to manufacture lignite fired supercritical steam generators components, to such company established in India as per QR. g) Certificate from a practicing Chartered Accountant for proof of paid up share capital/Net worth of the promoters/subsidiary(ies)/JV company(ies) (for clause 3.7.8) h) Any other documents as applicable

ANNEXURE – I /4 (For Route 4)	
	<u>Route 4: Indian JV Company for manufacture of supercritical steam generator in India between an Indian company and a Qualified Steam Generator Manufacturer</u> <u>Documents to be submitted by the bidder for QR clause 3.4:</u>
1.0	Performance certificate of QSGM for the reference plant.
1.1	Performance certificate should be in the letterhead of the issuing firm and should be dated.
1.2	Name and designation of the signing person should be clearly discernible.
1.3	For meeting the qualifying requirements in clause 3.3. the aspects to be considered are For the QSGM: i. Design, engineering, manufactured/ got manufactured, supply, erection / supervision of erection and commissioning / supervision of commissioning of at least one (1) no. of pulverized lignite fired Super critical Steam Generator with beater wheel mills having a rated capacity of 1500 T/Hr of steam or above in operation for one year. ii. Parameters of the Steam Output from SG..... iii. The type of steam generator : Single pass (tower type) / two pass/ T-Type, iv. Type of water wall tubing: Spiral wound (inclined) / vertical plain/vertical rifled. v. Evaporator suitable for variable pressure in subcritical and supercritical ranges. vi. Nature of execution of order: direct/indirect (Refer Notes (3) for Clause 3.0 vii. Cumulative operating hours (Not less than 5256 Hours) achieved for the above Unit in any one year period from(date) to.....(date)
1.4	The Registered Name and Address of the Indian JV company. The Registered Name and Address of the QSGM who is meeting the requirements mentioned (1.3) above.
1.5	Location of the Power station in which the lignite fired supercritical Steam Generator mentioned above (1.3) is in operation.
1.6	Contact address of the user, Fax No., e-mail ID, Phone No. of the contact person etc. for clarifying any of the details (1.3).
2.0	Licence agreement from a technology owner(Licensor) for variable pressure design of evaporator in case QSGM has design only for constant pressure evaporator
3.0	Letter of undertaking from the concerned for maintaining reqd. equity for the specified period (please refer Notes 3.5.3 (9) of QR) supported by board resolution
4.0	Ongoing collaboration and technology transfer agreement between Indian JV company and QSGM (who is a JV Partner) including Licence to manufacture & supply lignite fired supercritical steam generator sets covering the type, size & rating, provided with

	beater wheel mills for pulverizing lignite, with validity up to the end of Warranty period
5.0	If major stake holder of the JV company is other than QSGM :
5.1	Proof of major stake holder having executed in the last 10 years large EPC projects on EPC basis (with or without civil works) with a total value of Rs.1000 Crores of which one of the projects of value Rs.400 Crores or more, and in successful operation for a period of not less than one year as on the original scheduled date of EOI bid opening - Certificates from all the end users (clients)
5.2	Location of the EPC Projects mentioned above in (5.1)
5.3	Contact addresses of the end users, Fax No., e-mail ID, Phone Nos. of the contact persons for (5.1) above.
6.0	Registration certificate under companies act for Indian JV company, Articles Of Association, Memorandum Of Association. If JV company is a Public Limited co, Certificate for commencement of business.
7.0	The purchaser may ask for additional documents such as copies of purchase order / work order/ LOA if required in support of the claim by the bidder to satisfy the Qualifying Requirements
8.0	Applicable LOC shall be furnished (as per annexure II).
9.0	Documents to be submitted with respect to Clauses 3.6 & 3.7, but not limited to, are as follows:(as applicable) a) Audited Financial statements showing: a. Average Annual Turnover of the bidder in the preceding 3 financial years b. Net Worth of the bidder, its Subsidiaries, and/ or holding companies, subsidiaries of the holding company, JV partners. b) Unaudited unconsolidated financial statements of the bidder along with copies of the audited consolidated financial statements of its holding company, as applicable c) Certificates from the CEO/CFO of the holding company. d) Letter of Undertaking from the Holding Company supported by the Board Resolution, as proof of pledging unconditional and irrevocable financial support for the execution of the contract, in case of award (For Cl 3.6.4). e) Unutilized line of credit for fund based and non-fund based limits with cash and bank balances including fixed deposits of the bidder. f) Copy (of Transfer) of Licence Agreement to manufacture lignite fired supercritical steam generators components, to such company established in India as per QR. g) Certificate from a practicing Chartered Accountant for proof of paid up share capital/Net worth of the promoters/subsidiary(ies)/JV company(ies) (for clause 3.7.8) h) Any other documents as applicable and relevant for meeting the Qualifying Requirements.

	ANNEXURE – I/5 (For Route 5)
	Route 5: Indian JV PROMOTER holding at 51 % equity in a JV company for manufacture of supercritical steam generator in India between an Indian company and a Qualified Steam Generator Manufacturer <u>Documentary evidences to be submitted by the bidder for QR clause 3.5:</u>
1.0	Performance certificate of QSGM for the reference plant
1.1	Performance certificate should be in the letter head of the issuing firm and should be dated.
1.2	Name and designation of the signing person should be clearly discernible.
1.3	For meeting the qualifying requirements in clause 3.3. the aspects to be considered are For the QSGM: i. Design, engineering, manufactured/ got manufactured, supply, erection / supervision of erection and commissioning / supervision of commissioning of at least one (1) no. of pulverized lignite fired Super critical Steam Generator having a rated capacity of 1500 T/Hr of steam or above in operation for one year. ii. Parameters of the Steam Output from SG: iii. The type of steam generator : Single pass (tower type) / two pass/ T-Type, iv. Type of water wall tubing: Spiral wound (inclined) / vertical plain/vertical rifled. v. Evaporator suitable for variable pressure in subcritical and supercritical range. vi. Nature of execution of order: direct/indirect (Refer Notes (3) for Clause 3.0) vii. Cumulative operating hours (Not less than 5256 Hours) achieved for the above Unit in any one year period from(date)to.....(date)
1.4	The Registered Name and Address of the Indian JV company. The Registered Name and Address of the QSGM who is meeting the requirements mentioned (1.3) above.
1.5	Location of the reference Power station in which lignite fired supercritical Steam Generator mentioned above (1.3) is in operation
1.6	Contact address of the user, Fax No., e-mail ID, Phone No. of the contact person etc. for clarifying any of the details (1.3) above.
2.0	Licence agreement from a technology owner (Licensor) for variable pressure design of evaporator in case QSGM has design only for constant pressure evaporator
3.0	Letter of undertaking from the concerned for maintaining reqd. equity for the specified period (please refer Notes 3.5.3 (9) of QR) supported by board resolution
4.0	Ongoing collaboration and technology transfer agreement between Indian JV company and QSGM (who is a JV Partner) including Licence to manufacture & supply supercritical steam generator sets covering the type, size & rating, with validity up to the end of warranty period

5.0	For Indian majority stake holder of the JV co:
5.1	Proof of JV partner having executed in the last 10 years large EPC projects on EPC basis (with or without civil works) with a total value of 1000 Crores of which one of the projects of value 400 Crores or more, and in successful operation for a period of not less than one year as on the original schedule date of EOI opening-Certificates from all the end users
5.2	Location of the EPC Projects as mentioned above in (5.1)
5.3	Contact addresses of the end users, Fax No., e-mail ID, Phone Nos.of the contact persons for (5.1) above.
6.0	Registration certificate under companies act for Indian JV company for manufacturing supercritical steam generators in India covering the type, size and rating specified, Articles Of Association, Memorandum Of Association. If JV company is a Public Limited co, Certificate for commencement of business.
7.0	The purchaser may ask for additional documents such as copies of purchase order / work order/ LOA if required in support of the claim by the bidder to satisfy the Qualifying Requirements
8.0	Applicable LOC shall be furnished (as per annexure II)
9.0	Documents to be submitted with respect to Clauses 3.6 & 3.7, but not limited to, are as follows:(as applicable) a) Audited Financial statements showing: a. Average Annual Turnover of the bidder in the preceding 3 financial years b. Net Worth of the bidder, its Subsidiaries, and/ or holding companies, subsidiaries of the holding company, JV partners. b) Unaudited unconsolidated financial statements of the bidder along with copies of the audited consolidated financial statements of its holding company, as applicable c) Certificates from the CEO/CFO of the holding company. d) Letter of Undertaking from the Holding Company supported by the Board Resolution, as proof of pledging unconditional and irrevocable financial support for the execution of the contract, in case of award. e) Unutilized line of credit for fund based and non-fund based limits with cash and bank balances including fixed deposits of the bidder. f) Copy (of Transfer) of Licence Agreement to manufacture lignite fired supercritical steam generators components, to such company established in India as per QR. g) Certificate from a practicing Chartered Accountant for proof of paid up share capital/Net worth of the promoters/subsidiary(ies)/JV company(ies) (for clause 3.7.8) h) Any other documents as applicable and relevant for meeting the Qualifying Requirements.

ANNEXURE - II

LETTER OF CONSENT (LOC) (SAMPLE FORMAT)

Dt:

We hereby declare that the under signed firms

- 1) (Name and Complete address of the Bidder.....)
- 2) (Name and Complete address of the QSGM/Licensor/Holding company/Subsidiary Company / JV Company /JV Promoters/Holding Company/Other promoter having 25% or higher equity participation in the Subsidiary company/JV Company (as the case may be).....) shall perform the Project activities for the successful completion of the entire scope of work of Steam Generator & Auxiliaries (SE 1) Package (2x660 MW) for TPS II Second Expansion Project of NLC India Ltd, Neyveli. We also hereby jointly undertake for the design and quality of manufacture, timely delivery and the successful performance of the Steam Generator & Auxiliaries equipment / system, fully meeting the guarantee and also depute the technical experts from time to time for advice on procedures and guidance during erection, testing and commissioning to the contractor's work / Owner's Project site.

We have gone through the complete Qualifying Requirements and the corresponding DJUs and confirm the following:

We shall furnish a deed of joint undertaking along with the Techno-commercial bid as per the relevant format enclosed in the EOI bid documents and confirm our compliance with the same.

We hereby confirm that, on award of LOA, We, the parties concerned shall furnish a back-up guarantee as stipulated in the respective QR clauses in the form of an on-demand Bank Guarantee (for the requisite amount), for the faithful performance of the contract.

WITNESS

For Bidder

Signature

(Signature of the Authorized Signatory)

Name

Name

Designation:
Office Address

Designation:
Seal of the Company

WITNESS

For the Subsidiary Company /JV
Company/Holding
Company/Promoter having 25% or
higher equity participation in the
Subsidiary Company /JV Company
(as the case may be) /Qualified
Steam Generator Manufacturer

Signature:

(Signature of the Authorized Signatory)

Name

Name

Designation:

Designation:

Office Address

Seal of the Company

WITNESS

For the Subsidiary Company /JV
Company/Holding
Company/Promoter having 25% or
higher equity participation in the
Subsidiary Company /JV Company
(as the case may be) /Qualified
Steam Generator Manufacturer
(Signature of the Authorized Signatory)

Signature:

Name

Name

Designation:

Designation:

Office Address

Seal of the Company

**FORM OF DEED OF JOINT UNDERTAKING
AS PER CLAUSE 3.1.3, ITEM 3.0 OF EXPRESSION OF INTEREST**

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (QUALIFIED STEAM GENERATOR MANUFACTURER) THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR SETS IN INDIA AND *OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s a Company incorporated under having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered in India under the Companies Act of India having its Registered Office at created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company*/ Indian Manufacturing Company* (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, , having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600 031 INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**(hereinafter referred to as "Plant") vide its Bidding Document No.: XXXXXX

*AND WHEREAS Clause 3.1.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulates that the bidder who meets the requirements stipulated in clause 3.1.1, ITEM 3.0 of EOI should have formed an Indian Subsidiary Company/Joint Venture Company for manufacturing of supercritical Steam Generator sets meeting the requirements specified in Clause 3.1.2, ITEM 3.0 of EOI and furnish a Deed of Joint Undertaking.

* AND WHEREAS clause 3.1.3 ITEM 3.0 of (EOI) bidding Documents, stipulate that the bidder, as Qualified Steam Generator Manufacturer who meets the requirement of Clause 3.1.1 of ITEM 3.0 of EOI shall furnish a deed of joint undertaking executed by the bidder/contractor, the *Subsidiary Company/*Joint Venture Company meeting the requirements specified in Clause 3.1.2, ITEM 3.0 of EOI and *OTHER PROMOTER having a 25% or higher equity participation in the *Subsidiary company/ *Joint Venture company.

WHEREAS M/s(Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, against the Purchaser's Bidding Documents No. **XXXXXX**.

AND WHEREAS the Bidder, the Indian Manufacturing Company and *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, the Indian Manufacturing Company and *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, Indian Manufacturing Company and *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to steam generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. We the Contractor Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).

3. We, the Contractor, Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).

4. We, the Contractor, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

5. In case of any breach of the Contract(s) committed by the Contractor, we the Indian Manufacturing Company and *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to steam generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities

stipulated in the Contract. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Indian Manufacturing Company and *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser in its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

5.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of the Indian Manufacturing Company and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

6. We, the Contractor the Indian Manufacturing Company and *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract.

We, the Contractor, the Indian Manufacturing Company and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

7. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on-demand **Bank Guarantees** in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EOI shall also be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

8. Any dispute that may arise between the Purchaser and the Contractor or Indian Subsidiary/Joint Venture Company or *OTHER PROMOTER in connection with this Deed of Joint

Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

9. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, *the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and the *OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s
(BIDDER/ CONTRACTOR)

WITNESS :

1.
(Signature of the Authorised
Representative)
..... Name.....
(Official Address) Designation.....
Common Seal of the
Company

For M/s.....
(Indian Manufacturing Company)

WITNESS :

1.
(Signature of the Authorised
Representative)
..... Name

(Official Address) Designation.....
Common Seal of the
Company.....

For M/s.....
(*OTHER PROMOTER)

WITNESS :

1.
(Signature of the Authorised
Representative)
..... Name

(Official Address) Designation.....
Common Seal of the
Company.....

Notes:

- i) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.
- ii) *Bidder to strike out, whichever is not applicable.

Annexure 1-
Scope for “Steam Generator & Auxiliaries” package

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO,LDO),Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

FORM OF DEED OF JOINT UNDERTAKING AS PER CLAUSE 3.1.3 AND NOTE 4 TO CLAUSE 3.0.0, ITEM 3.0 of EXPRESSION OF INTEREST

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES), THE INDIAN SUBSIDIARY/JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA AND *OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having its Registered Office at.....(hereinafter called the "Bidder/Contractor"/ Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered in India under the Companies Act of India having its Registered Office at created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company*/ Indian Manufacturing Company* (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600 031 INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI** (hereinafter referred to as "Plant") vide its Bidding Document No.: xxxxxx

*AND WHEREAS Clause 3.1.2 and note 4 iii) of clause 3.0.0, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulates that the bidder, who is a holding company collectively (along with its subsidiaries) meeting the requirements stipulated in clause 3.1.1, ITEM 3.0 of EOI should have set up an Indian Subsidiary Company/Joint Venture Company for manufacturing of supercritical Steam Generator sets meeting the requirements specified in Clause 3.1.2, ITEM 3.0 of EOI and furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 3.0, ITEM 3.0 of EOI, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

AND WHEREAS clause 3.1.3 ITEM 3.0 of (EOI) bidding Documents, stipulate that the bidder, as Qualified Steam Turbine Generator Manufacturer along with its subsidiaries (i.e. M/s , M/s and M/s) who meets the requirement of Clause 3.1.1 of ITEM 3.0 of EOI shall furnish a deed of joint undertaking executed by the bidder/contractor, the *Subsidiary Company*/Joint Venture Company meeting the requirements specified in Clause 3.1.2, Item 4.0

ofEOI and *OTHER PROMOTER having a 25% or higher equity participation in the
*Subsidiarycompany/ *Joint Venture company.

WHEREAS M/s(Bidder) is submitting its proposal in response to the aforesaid Invitation
forBid by the Purchaser**Steam Generator & Auxiliaries Package for TPS II Second Expansion
(2X660 MW), NEYVELI**, against the Purchaser's Bidding Documents No. xxxxxx.

AND WHEREAS the Bidder, the Indian Manufacturing Company and *OTHER PROMOTER
arerequired to jointly execute and furnish along with the bid an irrevocable Deed of Joint
Undertakingand be jointly and severally liable and bound unto the Purchaser for the successful
performance of thecontract for the scope related to steam generator and auxiliaries for **TPS II
Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated
technical requirements, andGuaranteed parameters and characteristics as per bidding documents,
in the event, the Bid isaccepted by the Purchaser resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, , the Indian Manufacturing Company and *OTHER PROMOTER
arerequired to jointly execute and furnish along with the bid an irrevocable Deed of Joint
Undertakingand be jointly and severally liable and bound unto the Purchaser for the successful
implementation ofthe Phased Manufacturing Program and transfer of technology for supercritical
Steam Generator setsin accordance with the bidding documents, in the event, the Bid is accepted
by the Purchaser resultinginto a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the
Contractor, Indian Manufacturing Company and *OTHER PROMOTER do hereby declareand
undertake that we shall be jointly and severally responsible to the Purchaser for theexecution and
successful performance of the contract for the scope related to steamgenerator and auxiliaries
including satisfactory thermal performance of Steam Generatorand its auxiliaries and achievement
of all guaranteed parameters of all the units, as specifiedunder the said Contract(s) to the
satisfaction of the Purchaser.

2. We the Contractor, Indian Manufacturing Company and the *OTHER PROMOTER do
herebydeclare and undertake that we shall be jointly and severally responsible to the Purchaserfor
the successful implementation of the Phased Manufacturing Program as specified in the
saidContract(s).

3. We, the Contractor, Indian Manufacturing Company and *OTHER PROMOTER do jointlyhereby
undertake, declare and confirm that we shall be fully responsible for ensuring thattransfer of the
technological know-how for lignite fired super critical Steam Generator sets (of the type,size and
rating specified in the Contract(s)) in the form of complete transfer of design dossier,design
software's, drawings and documentation and quality system manuals is transferred tothe Indian
Manufacturing Company as per the Contract(s).

4.We, the Contractor, *the Qualified Steam Generator Manufacturer do further undertake,declare
and confirm that we shall be fully responsible for imparting relevant training to thepersonnel of the
Indian Manufacturing Company as part of the technology transfer agreement.

5. In case of any breach of the Contract(s) committed by the Contractor, we the
IndianManufacturing Company and *OTHER PROMOTER do hereby undertake, declare
andconfirm that we shall be fully responsible for the successful performance of the contract forthe
scope related to steam generator and auxiliaries, including its satisfactory thermalperformance and
achievement of all guaranteed parameters as specified in the Contract, for

all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Indian Manufacturing Company and *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

5.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of the Indian Manufacturing Company and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

6. We, the Contractor, the Indian Manufacturing Company and *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract.

We, the Contractor, the Indian Manufacturing Company and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

7. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall also be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

8. Any dispute that may arise between the Purchaser and the Contractor or Indian Subsidiary/Joint Venture Company or *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

9. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, *the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company and the *OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s
(BIDDER/ CONTRACTOR i.e. HOLDING COMPANY)

WITNESS :

1.
(Signature of the Authorised Representative)
..... Name.....
(Official Address) Designation.....
Common Seal of the
Company
For M/s.....
(Indian Manufacturing Company)

WITNESS :

1.
(Signature of the Authorised Representative)
..... Name
(Official Address) Designation.....
Common Seal of the
Company.....
For M/s.....
(*OTHER PROMOTER)

WITNESS :

1.
(Signature of the Authorised Representative)

..... Name
(Official Address) Designation.....
Common Seal of the
Company.....

Note:

(i) The Bidder shall submit its board resolution along with the Deed of Joint Undertaking stating that in case of any likely change of management control of any of its subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, *the Bidder shall arrange for signing of DJU and bank guarantees by all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, before the change in management control actually occurs. Such bank guarantees to be furnished by the Holding Company and entities lending support for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, shall be equally divided among them and shall aggregate to 1.0% of the total contract price.

(ii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

(iii) *Bidder to strike out, whichever is not applicable.

Annexure 1-
Scope for “Steam Generator & Auxiliaries” package

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO,LDO),Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING AS PER
CLAUSE 3.1.3 AND NOTE 4 TO CLAUSE 3.0, ITEM 3.0 of EOI
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR(*HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 of EOI), SUBSIDIARIES OF THE HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY FOR MEETING THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 of EOI, THE INDIAN SUBSIDIARY/JOINT VENTURE COMPANY AND *OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 3.1.2, ITEM 3.0 of EOI

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having its Registered Office at.....(hereinafter called the "Bidder/Contractor"/ Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered under having its Registered Office at, M/s a Company registered under..... having its Registered Office at and M/s..... a Company registered under having its Registered Office at (the Subsidiary(ies) of the bidder/*the Qualified Steam Generator Manufacturer who are lending strength/ experience to the bidder/*the Qualified Steam Generator Manufacturer for meeting the requirements stipulated in clause 3.1.1 (A) and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered in India under the Companies Act of India having its Registered Office at created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company*/ Indian Manufacturing Company* (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600 031 INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**(hereinafter referred to as "Plant") vide its Bidding Document No.: XXXXXX

*AND WHEREAS Clause 3.1.2 and note 4 ii) of clause 3.0, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulates that the bidder, who is a holding company collectively (along with its subsidiaries) meeting the requirements stipulated in clause 3.1.1, ITEM 3.0 of EOI should

have set up an Indian Subsidiary Company/Joint Venture Company for manufacturing of supercritical Steam Generator sets meeting the requirements specified in Clause 3.1.2, ITEM 3.0 of EOI and furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 3.0, ITEM 3.0 of EOI, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

AND WHEREAS clause 3.1.3 ITEM 3.0 of (EOI) bidding Documents, stipulate that the bidder, as Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 3.1.1 of ITEM 3.0 of EOI along with its subsidiary(ies) shall furnish a deed of joint undertaking executed by the bidder/contractor, subsidiary (ies), the *Subsidiary Company/*Joint Venture Company meeting the requirements specified in Clause 3.1.2, ITEM 3.0 of EOI and *OTHER PROMOTER having a 25% or higher equity participation in the *Subsidiary company/ *Joint Venture company.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, against the Purchaser's Bidding Documents No. XXXXXX.

AND WHEREAS the Bidder, Subsidiary(ies), the Indian Manufacturing Company and *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to steam generator and auxiliaries for **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, Subsidiary(ies), the Indian Manufacturing Company and *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, Subsidiary(ies), Indian Manufacturing Company and *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance the contract for the scope related to steam generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. We the Contractor, Subsidiary(ies), Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).

3. We, the Contractor, Subsidiary(ies), Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and

quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).

4. We, the Contractor, *the Qualified Steam Generator Manufacturer, Subsidiary(ies) do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

5. In case of any breach of the Contract(s) committed by the Contractor, we Subsidiary(ies), Indian Manufacturing Company and *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to steam generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we Subsidiary(ies), Indian Manufacturing Company and *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be inline with provisions on Limitation of Liability of the said Contract(s).

5.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of Subsidiary(ies), the Indian Manufacturing Company and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

6. We, the Contractor, Subsidiary(ies), the Indian Manufacturing Company and *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract.

We, the Contractor, Subsidiary(ies), the Indian Manufacturing Company and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

7. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall also be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

8. Any dispute that may arise between the Purchaser and the Contractor or Indian Subsidiary/Joint Venture Company or *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents. This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

10. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, *the Qualified Steam Generator Manufacturer, Subsidiary(ies) the Indian Manufacturing Company and the *OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s
(BIDDER/ CONTRACTOR i.e. HOLDING COMPANY)
WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s
(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....
 (Official Address) Designation.....
 Common Seal of the
 Company
 For M/s
 (SUBSIDIARY 2 OF HOLDING
 COMPANY)
 WITNESS :
 1.
 (Signature of the Authorised
 Representative)
 Name.....
 (Official Address)
 Designation.....
 Common Seal of the
 Company
 For M/s
 (SUBSIDIARY 3 OF HOLDING COMPANY)
 WITNESS :
 1.
 (Signature of the Authorised
 Representative)
 Name.....
 (Official Address)
 Designation.....
 Common Seal of the
 Company
 For M/s.....
 (Indian Joint Venture/ Indian Subsidiary
 Company)
 WITNESS :
 1.
 (Signature of the Authorised
 Representative)
 Name
 (Official Address) Designation.....
 Common Seal of the
 Company.....
 For M/s.....
 (*OTHER PROMOTER)
 WITNESS :
 1.
 (Signature of the Authorised

Representative)
..... Name
(Official Address) Designation.....
Common Seal of the
Company.....

Note:

(i) The Holding Company shall submit its board resolution along with the Deed of Joint Undertaking stating that in case of any likely change of management control of any of its subsidiary(ies) lending strength / experience to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, the bidder shall arrange for separate on demand bank guarantees from all such Subsidiary(ies) for an amount aggregating 1.0% of the total contract price divided equally among them before the change in management control actually occurs.

(ii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

(iii) *Bidder to strike out, whichever is not applicable.

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO,LDO),Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING FOR AS PER
CLAUSE 3.1.3 AND NOTE *8 OF CLAUSE 3.0, ITEM 3.0 of EOI**

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE INDIAN *SUBSIDIARY/*JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 3.1.2, ITEM 3.0 of EOI, *SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ *JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 3.0 AND *OTHER PROMOTER OF THE INDIAN *SUBSIDIARY/ *JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 3.1.2, ITEM 3.0 of EOI

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered in India under the Companies Act of India having its Registered Office at created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company*/ Indian Manufacturing Company* (hereinafter jointly called the "**OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s....., a Company incorporated under registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns),
in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660MW), Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: xxxxxx

*AND WHEREAS Clause 3.1.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulate that the bidder who meets the requirements stipulated in clause 3.1.1, ITEM 3.0 of EOI have set up an Indian Subsidiary Company/Joint Venture Company meeting the requirements specified in Clause 3.1.2, ITEM 3.0 of EOI and furnish a Deed of Joint Undertaking. Further as per note 8 of clause 3.0, ITEM 3.0 of EOI, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

AND WHEREAS clause 3.1.3 ITEM 3.0 of (EOI) bidding Documents, stipulate that the bidder, as Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 3.1.1 of ITEM 3.0 of EOI shall furnish a deed of joint undertaking executed by the bidder/contractor, the *Subsidiary Company/*Joint Venture Company meeting the requirements specified in Clause 3.1.2, ITEM 3.0 of EOI, subsidiary company of Indian Manufacturing company as per note 7 of clause 3.0, ITEM 3.0 of EOI and *OTHER PROMOTER having a 25% or higher equity participation in the *Subsidiary company/ *Joint Venture company.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, against the Purchaser's Bidding Documents No. XXXXXX.

AND WHEREAS the Bidder, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to steam generator and auxiliaries for **TPS II Second Expansion (2X660 MW), NEYVELI (as per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, the Indian Manufacturing Company, *Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER are required to jointly execute and furnish long with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract with regard to implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, Indian Manufacturing Company, *Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance the Contract for the scope related to steam generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.
2. We the Contractor, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).
3. We, the Contractor, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired supercritical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).

4. We, the Contractor, *the Qualified Steam Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

5. In case of any breach of the Contract(s) committed by the Contractor, we the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to steam generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be inline with provisions on Limitation of Liability of the said Contract(s).

5.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (Of relevant clauses of GCC and SCC).

The liability of Subsidiary(ies), the Indian Manufacturing Company and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

6. We, the Contractor, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract.

We, the Contractor, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantee as well as other obligations of the Contractor in terms of the Contract(s).

7. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety(90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

8. Any dispute that may arise between the Purchaser and the Contractor or Indian Subsidiary/Joint Venture Company or Subsidiary of Indian Manufacturing Company or *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

9. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, *the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and the *OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s
(BIDDER/ CONTRACTOR)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address) Designation.....

Common Seal of the

Company

For M/s.....

(Indian Manufacturing Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....
For M/s.....
(Subsidiary Company of
Indian Manufacturing Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

For M/s.....

(PROMOTER)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

Note:

1. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

2. * Bidder to strike out, whichever is not applicable.

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO,LDO),Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

FORM OF DEED OF JOINT UNDERTAKING AS PER CLAUSE
3.1.3 AND NOTE 4 & *8 OF CLAUSE 3.0, ITEM 3.0 of EOI

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR(HOLDING COMPANY ALONG WITH ITS SUBSIDIARIES), THE INDIAN *SUBSIDIARY/*JOINT VENTURE COMPANY, MEETING THE REQUIREMENT OF CLAUSE 3.1.2, ITEM 3.0 of BID DATA SHEETS SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 3.0 AND *OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 3.1.2, ITEM 3.0 of EOI

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having its Registered Office at.....(hereinafter called the "Bidder/Contractor/Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered in India under the Companies Act of India having its Registered Office at created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company*/ Indian Manufacturing Company* (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns), and

*M/s....., a Company incorporated under registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company, which expression shall include its successors, administrators, executors, and permitted assigns)

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or " Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli**(hereinafter referred to as "Plant") vide its Bidding Document No.: xxxxxx

*AND WHEREAS Clause 3.1.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulate that the bidder, who is a holding company collectively (along with its subsidiaries) meeting the requirements stipulated in clause 3.1.1, ITEM 3.0 of EOI should have set up an Indian Subsidiary Company/Joint Venture Company for manufacturing of supercritical Steam Generator sets meeting the requirements specified in Clause 3.1.2, ITEM 3.0 of EOI and furnish a Deed of Joint Undertaking. Further as per note 4 iii) of clause 3.0, ITEM 3.0 of EOI, the Holding Company, as a

Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 3.0, ITEM 3.0 of EOI, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

AND WHEREAS clause 3.1.3 and note 7 of clause 3.0, ITEM 3.0 of (EOI) bidding Documents, stipulate that the bidder, as Qualified Steam Generator Manufacturer who meets the requirement of Clause 3.1.1 of ITEM 3.0 of EOI along with its subsidiary (ies) (i.e. M/s, M/s and M/s) shall furnish a deed of joint undertaking executed by the bidder/contractor, the *Subsidiary Company/*Joint Venture Company meeting the requirements specified in Clause 3.1.2, ITEM 3.0 of EOI, subsidiary company of Indian Manufacturing Company as per note 7 of clause 3.0 ITEM 3.0 of EOI and *OTHER PROMOTER having a 25% or higher equity participation in the *Subsidiary company/ *Joint Venture company.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, against the Purchaser's Bidding Documents No. XXXXXX

AND WHEREAS the Bidder, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to steam generator and auxiliaries for **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance the Contract for the scope related to steam generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. We the Contractor, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).

3. We, the Contractor, Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super

critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).

4. We, the Contractor, do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company as part of the technology transfer agreement.

5. In case of any breach of the Contract(s) committed by the Contractor, we the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to steam generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we *the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

5.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

6. We, the Contractor, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) for EPC Package awarded to the Bidder/ Contractor or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract. We, the Contractor, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be

revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

7. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety(90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

8. Any dispute that may arise between the Purchaser and the Contractor or Indian Subsidiary/Joint Venture Company or Subsidiary of Indian Manufacturing Company or *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

9. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, *the Qualified Steam Generator Manufacturer, the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and the *OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s
(BIDDER/ CONTRACTOR i.e. HOLDING COMPANY)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address) Designation.....

Common Seal of the

Company

For M/s.....

(Indian Manufacturing Company)

WITNESS :

1.
 (Signature of the Authorised
 Representative)

..... Name
 (Official Address) Designation.....

Common Seal of the
 Company.....

For M/s.....
 (Subsidiary Company of Indian
 Manufacturing Company)

WITNESS :

1.
 (Signature of the Authorised
 Representative)

..... Name
 (Official Address) Designation.....

Common Seal of the
 Company.....

For M/s.....
 (*OTHER PROMOTER)

WITNESS :

1.
 (Signature of the Authorised
 Representative)

..... Name
 (Official Address) Designation.....

Common Seal of the
 Company.....

Note:

1. The Bidder shall submit its board resolution along with the Deed of Joint Undertaking stating that in case of any likely change of management control of any of its subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, the bidder shall arrange for signing of DJU and bank guarantees by all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 3.1.1, item 4.0 of EOI , before the change in management control actually occurs. Such bank guarantees to be furnished by the Holding Company and entities lending support for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, shall be equally divided among them and shall aggregate to 1.0% of the total contract price.

2. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

3.* Bidder to strike out, whichever is not applicable.

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO,LDO),Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc.
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING FOR AS PER CLAUSE 3.1.3 AND NOTE 4 & 8
OF CLAUSE 3.0, ITEM 3.0 of EOI**

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR(*HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 of EOI), SUBSIDIARIES OF THE HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY FOR MEETING THE REQUIREMENT OF CLAUSE 3.1.1 ITEM 3.0 of EOI, THE INDIAN *SUBSIDIARY/*JOINT VENTURE COMPANY, SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 3.0 AND *OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 3.1.2, ITEM 3.0 of EOI

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having its Registered Office at.....(hereinafter called the "Bidder/Contractor"/ Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered under having its Registered Office at M/s a Company registered under..... having its Registered Office at and M/s..... a Company registered under having its Registered Office at (the Subsidiary(ies) of the bidder/*the Qualified Steam Generator Manufacturer who are lending strength/ experience to the bidder/*the Qualified Steam Generator Manufacturer for meeting the requirements stipulated in clause 3.1.1 and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered in India under the Companies Act of India having its Registered Office at created for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company*/ Indian Manufacturing Company* (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s....., a Company incorporated under registered or manufacturing of Supercritical Steam Generator in India, having its Registered Office at..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns), in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: xxxxxx

*AND WHEREAS Clause 3.1.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulate that the bidder, who is a holding company collectively (along with its subsidiaries) meeting the requirements stipulated in clause 3.1.1, ITEM 3.0 of EOI should have set up an Indian Subsidiary Company/Joint Venture Company for manufacturing of supercritical Steam Generator sets meeting the requirements specified in Clause 3.1.2, ITEM 3.0 of EOI and furnish a Deed of Joint Undertaking. Further as per note 4 ii) of clause 3.0, ITEM 3.0 of EOI, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 3.0, ITEM 3.0 of EOI, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

AND WHEREAS clause 3.1.3 and note 7 of clause 3.0, ITEM 3.0 of (EOI) bidding Documents, stipulate that the bidder, as Qualified Steam Turbine Generator Manufacturer who meets the requirement of Clause 3.1.1 of ITEM 3.0 of EOI along with subsidiaries shall furnish a deed of joint undertaking executed by the bidder/contractor, subsidiaries, the *Subsidiary Company/*Joint Venture Company meeting the requirements specified in Clause 3.1.2, ITEM 3.0 of EOI, subsidiary company of Indian Manufacturing company as per note 7 of clause 3.0, ITEM 3.0 of EOI and *OTHER PROMOTER having a 25% or higher equity participation in the *Subsidiary company/ *Joint Venture company.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli**, against the Purchaser's Bidding Documents No. XXXXXX .

AND WHEREAS the Bidder, , Subsidiary(ies), the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to steam generator and auxiliaries for **TPS II Second Expansion (2X660 MW), Neyveli (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/Contracts.

AND WHEREAS the Bidder, Subsidiary(ies), the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology for supercritical Steam Generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, Subsidiary(ies), Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. We the Contractor, Subsidiary(ies), Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).

3. We, the Contractor, Subsidiary(ies), Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological knowhow for lignite fired super critical Steam Generator sets (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).

4. We, the Contractor, Subsidiary(ies) do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company, *Subsidiary of Indian Manufacturing Company as part of the technology transfer agreement.

5. In case of any breach of the Contract(s) committed by the Contractor, we *the Subsidiary(ies), Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to steam generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we *the Subsidiary(ies), Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

5.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of Subsidiary(ies), the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

6. We, the Contractor, Subsidiary(ies), the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of all the equipment/ component covered under

the Contract(s) for EPC Package awarded to the Bidder/ Contractor or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract. We, the Contractor, Subsidiary(ies), the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

7. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on-demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall also be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety(90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

8. Any dispute that may arise between the Purchaser and the Contractor or *the Qualified Steam Generator Manufacturer, Subsidiary(ies) or Indian Subsidiary/ Joint Venture Company or Subsidiary of Indian Manufacturing Company or *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

9. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Contractor, *the Qualified Steam Generator Manufacturer, Subsidiary(ies) the Indian Manufacturing Company, Subsidiary of Indian Manufacturing Company and the *OTHER PROMOTER through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s

(BIDDER/ CONTRACTOR i.e. HOLDING COMPANY)

WITNESS :

1.

(Signature of the Authorised Representative)

..... Name.....
(Official Address) Designation.....
Common Seal of the
Company
For M/s
(SUBSIDIARY 1 OF HOLDING COMPANY)
WITNESS :
1.
(Signature of the Authorised
Representative)
..... Name.....
(Official Address)
Designation.....
Common Seal of the
Company
For M/s
(SUBSIDIARY 2 OF HOLDING COMPANY)
WITNESS :
1.
(Signature of the Authorised
Representative)
..... Name.....
(Official Address)
Designation.....
Common Seal of the
Company
For M/s
(SUBSIDIARY 3 OF HOLDING COMPANY)
WITNESS :
1.
(Signature of the Authorised
Representative)
..... Name.....
(Official Address)
Designation.....
Common Seal of the
Company
For M/s.....
(Indian Manufacturing Company)
WITNESS :
1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

For M/s.....

(*Subsidiary Company of
Indian Manufacturing Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

For M/s.....

(*OTHER PROMOTER)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

Note:

1. The Holding Company shall submit its board resolution along with the Deed of JointUndertaking stating that in case of any likely change of management control of anyof its subsidiary(ies) lending strength / experience to the Holding Company forfulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI , the bidder shallarrange for separate on demand bank guarantees from all such Subsidiary(ies) for anamount aggregating 1.0% of the total contract price divided equally among thembefore the change in management control actually occurs.

2. Power of Attorney of the persons signing on behalf of each of the executants is to befurnished by the bidder and attached along with the signed Deed of JointUndertaking.

3. * Bidder to strike out, whichever is not applicable.

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO,LDO),Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

FORM OF DEED OF JOINT UNDERTAKING AS PER CLAUSE 3.2.2, ITEM 3.0 of EOI

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR(INDIAN STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF 3.2.1 OF ITEM 3.0 of EOI) AND THE QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 of EOI

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s a Company incorporated under having its Registered Office at.....(hereinafter called the Qualified Steam Generator Manufacturer, which expression shall include its successors, administrators, executors and permitted assigns) and M/s a Company registered under the..... having its Registered Office at(hereinafter called the "Bidder/Contractor/ Indian Steam Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, of India having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600 031 INDIA (hereinafter called "NLC INDIA" or " Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**(hereinafter referred to as "Plant") vide its Bidding Document No. XXXXXX.

AND WHEREAS Clause 3.2.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulates that the bidder (Indian Steam Generator Manufacturing Company) who meets the requirements stipulated in clause 3.2.1, ITEM 3.0 of EOI shall associate with the Qualified Steam Generator Manufacturer who satisfies the qualification requirements specified in Clause 3.1.1, ITEM 3.0 of EOI and furnish a Deed of Joint Undertaking.

WHEREAS M/s (Bidder) is submitting its proposal in response to the Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli**, against the Purchaser's Bidding Document No. XXXXXX .

AND WHEREAS M/s (Bidder)..... meets the requirement of clause 3.2.1, item no. 3.0 of EOI , and desires to associate with M/s..... who is a manufacturer of Steam Generator (hereinafter referred to as Qualified Steam Generator Manufacturer) and satisfies the qualification requirements as specified in Clause 3.1.1(A), Item 3.0 of EOI .

WHEREAS M/s (Bidder)..... has a valid ongoing collaboration and technology transfer agreement including licence to manufacture and supply supercritical steam generator sets covering the type, size and rating specified in India with the Qualified Steam Generator Manufacturer who meets the requirements of Clause 3.1.1 of ITEM 3.0 of EOI valid minimum up to the end of the warranty period of the contract and desires to augment its

existing manufacturing facility for manufacturing of supercritical steam generator sets meeting the requirements of Clause 3.2.1 and 3.0.0, ITEM 3.0 of EOI.

AND WHEREAS the Bidder and the Qualified Steam Generator Manufacturer are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the Supercritical Steam Generator covered under **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder and the Qualified Steam Generator Manufacturer are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract with regard to implementation of the Phased Manufacturing Program and transfer of technology for supercritical steam generator sets in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Qualified Steam Generator Manufacturer and the Contractor do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance including satisfactory thermal performance of Supercritical Steam Generator and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of complete Supercritical Steam Generator including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Supercritical Steam Generators, we the Qualified Steam Generator Manufacturer and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer, and OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **26 % of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor.

This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees. Without prejudice to the joint and several obligations of the Contractor and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system including mill and bunker building, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Associate/Collaborator shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor and the Qualified Steam Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the successful implementation of the Phased Manufacturing Program as specified in the said Contract(s).

5. We, the Contractor and the Qualified Steam Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor and the Qualified Steam Generator Manufacturer do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Indian Manufacturing Company as per the Contract(s).

7. We, the Contractor and the Qualified Steam Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement between us and the Indian Manufacturing Company.

8. We, the Contractor and the Qualified Steam Generator Manufacturer do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety(90) days beyond scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI** awarded to the Bidder/Contractor or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract. We, the Contractor and the Qualified Steam Generator Manufacturer do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the Contractor, the Qualified Steam Generator Manufacturer shall furnish as security on demand Performance Bank Guarantee(s) in favour of the Purchaser as per provisions of the bidding documents for. The value of such Bank Guarantee shall be equal to **One and Half percent (1.5%)** of the total Contract Price and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this bank guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Qualified Steam Generator Manufacturer or the Contractor in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer and the Contractor through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s

(Qualified Steam Generator Manufacturer)

WITNESS :

1.

(Signature of the Authorised

Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s.....

(Bidder / Contractor)

WITNESS :

1.

(Signature of the Authorised

Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

Note: Power of Attorney of the persons signing on behalf of Qualified Steam Generator Manufacturer & Bidder is to be furnished by bidder as part of his bid and to be attached along with the signed Deed of Joint Undertaking.

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO,LDO),Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

FORM OF DEED OF JOINT UNDERTAKING AS PER CLAUSE 3.2.2, ITEM 3.0 of EOI

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (INDIAN STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF 3.2.1 (b) OF ITEM 3.0 of EOI) AND THE QUALIFIED STEAM GENERATOR MANUFACTURER (AS ASSOCIATE OF THE BIDDER) MEETING THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 of EOI

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s a Company incorporated under having its Registered Office at.....(herein after called the Qualified Steam Generator Manufacturer (associate of the bidder), which expression shall include its successors, administrators, executors and permitted assigns) and M/s a Company registered under the..... having its Registered Office at(hereinafter called the "Bidder/Contractor/ Indian Steam Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act of India having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600 031 INDIA (hereinafter called "NLC INDIA" or " Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI** (hereinafter referred to as "Plant") vide its Bidding Document No. XXXXXX.

AND WHEREAS Clause 3.2.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulates that the bidder (Indian Steam Generator Manufacturing Company) who meets the requirements stipulated in clause 3.2.1, ITEM 3.0 of EOI shall, in terms of clause 3.2.1(b), associate with the Qualified Steam Generator Manufacturer who satisfies the qualification requirements specified in Clause 3.1.1, ITEM 3.0 of EOI and furnish a Deed of Joint Undertaking.

WHEREAS M/s (Bidder) is submitting its proposal in response to the Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli**, against the Purchaser's Bidding Document No. XXXXXX.

AND WHEREAS M/s(Bidder)..... meets the requirement of clause 3.2.1, item no. 3.0 of EOI , and desires to associate with M/s..... who is a manufacturer of Steam Generator (hereinafter referred to as Qualified Steam Generator Manufacturer) and satisfies the qualification requirements as specified in Clause 3.1.1, Item 3.0 of EOI .

WHEREAS M/s (Bidder)..... has augmented its manufacturing facility through a collaboration and technology transfer agreement including licence to manufacture and supply (coal fired) supercritical steam generator sets in India and complied with the requirements of Phased Manufacturing Programme as indicated in the advisory CEA/TE&TD-TT/2010/D-12 dated 02.02.2010 for sourcing of supercritical units from indigenous manufacturers, and satisfy Clause 3.7.10 (3) of EOI and associates with a QSGM (who satisfies Clause 3.1.1 of EOI) for the supply of lignite fired supercritical steam generator sets covering the type, size and rating specified

AND WHEREAS the Bidder and the Qualified Steam Generator Manufacturer (as the associate of the bidder) are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the lignite fired Supercritical Steam Generator (provided with beater wheel mills for pulverising lignite) and the total scope of contract covered under **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Qualified Steam Generator Manufacturer (as associate of the bidder) and the Contractor do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution of complete contract and successful performance including satisfactory thermal performance of lignite fired Supercritical Steam Generator provided with beater wheel mills for pulverising lignite and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer do hereby undertake, declare and confirm that we shall be fully responsible for the successful execution of contract & performance of complete lignite fired Supercritical Steam Generator provided with beater wheel mills for pulverising lignite including its satisfactory thermal performance and achievement of all guaranteed parameters as specified in the Contract, for all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking including the technical guarantees for the complete Steam Generator and auxiliary equipment in order to discharge the Contractor's obligations and responsibilities stipulated in the Contract. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Supercritical Steam Generators and the balance scope of supply and services under the contract, we the Qualified Steam Generator Manufacturer and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer (as Associate of the bidder), and OTHER PROMOTER hereunder shall, however, be limited to the total contract value for the complete steam generator & auxiliaries package to be supplied by the Bidder/ Contractor.

This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees. Without prejudice to the joint and several obligations of the Contractor and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (vi) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/ supporting system including mill and bunker building, buck-stay system etc.
- (vii) Selection of auxiliaries for all Steam Generators
- (viii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipment's of the Main Plant
- (ix) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (x) Selection and complete design of drying, milling and firing system for the lignite using beater wheel mills including the design of beater wheel mills itself.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer (as associate of the bidder) will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipment's / main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carryout the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipment's/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Associate/ Collaborator shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We, the Contractor and the Qualified Steam Generator Manufacturer do further undertake, declare and confirm that we shall be fully responsible for imparting relevant training to the personnel of the Indian Manufacturing Company.

5. We, the Contractor and the Qualified Steam Generator Manufacturer (as Associate of the Bidder) do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond scheduled date of completion of the Warranty period of the all the equipment/ component covered under the Contract(s) for **Steam Generator & Auxiliaries**

Package for TPS II Second Expansion (2X660 MW), NEYVELI awarded to the Bidder/ Contractor, which shall start after the successful completion of the warranty period of two years. In case of delay in completion of the warranty period under the Contract(s), the validity of this Deed of Joint Undertaking shall be extended by such period of delay. We, the Contractor and the Qualified Steam Generator Manufacturer (as Associate of the Bidder) do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantee as well as other obligations of the Contractor and the associate in terms of the Contract(s).

6. In case of award, in addition to the Contract Performance Guarantees to be furnished by the Contractor, the Qualified Steam Generator Manufacturer (as Associate of the Bidder) shall furnish as security on demand Performance Bank Guarantee(s) in favour of the Purchaser as per provisions of the bidding documents. The value of such Bank Guarantee shall be equal to **three percentage (3%)** of the total Contract Price and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till ninety (90) days beyond scheduled date of completion of the Warranty period of the all the equipment/ component covered under the Contract. In case of delay in completion of the **Warranty period** under the Contract(s), the validity of this bank guarantee shall be extended by such period of delay. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

7. Any dispute that may arise between the Purchaser and the Qualified Steam Generator Manufacturer (as Associate of the Bidder) or the Contractor in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

8. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer (as Associate of the Bidder) and the Contractor through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s

(Qualified Steam Generator Manufacturer (as Associate of the Bidder))

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s.....

(Bidder / Contractor)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

Note: Power of Attorney of the persons signing on behalf of Qualified Steam Generator Manufacturer (as Associate of the Bidder) & Bidder is to be furnished by bidder as part of his bid and to be attached along with the signed Deed of Joint Undertaking.

Annexure 1-
Scope for “Steam Generator & Auxiliaries” package

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU): (However the final scope shall be as given in the finalized contract for this package)

17. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
18. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
19. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc., including Flue Gas Desulphurisation (FGD) system,
20. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
21. Fuel oil unloading system (for HFO,LDO),Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
22. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
23. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
24. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
25. Auxiliary Boiler
26. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
27. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
28. Refractory, Thermal Insulation and Cladding
29. Vibration Isolation & Spring System
30. Complete civil & structural works for steam generator & auxiliaries
31. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc.
32. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

FORM OF DEED OF JOINT UNDERTAKING AS PER
CLAUSE 3.3.2, ITEM 3.0 of EXPRESSION OF INTEREST

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 3.1.1, AND THE *OTHER PROMOTER OF THE INDIAN *SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN *SUBSIDIARY/JOINT VENTURE COMPANY

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having its Registered Office at.....(hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under the having its Registered Office at (hereinafter called the Qualified Steam Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: xxxxxx

*AND WHEREAS Clause 3.3.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulate that the bidder who meets the requirements stipulated in clause 3.3.1, ITEM 3.0 of EOI as Indian Subsidiary Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer and *OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli**, against the Purchaser's Bidding Documents No. XXXXXX.

*WHEREAS M/s (Qualified Steam Generator Manufacturer), as a promoter, has set up an Indian Subsidiary (M/s..... Bidder/Contractor) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 3.3.1 and 3.0.0, ITEM 3.0 of EOI whose *other Promoter having a stake of 25% or more in the Bidder/Contractor is M/s (hereinafter called " *OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer and the *OTHERPROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for **TPS II Second Expansion (2X660 MW), Neyveli (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to steam generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, and the *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to steam generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, the *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever.

Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer, and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the *OTHER PROMOTER and the Qualified Steam Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor may

initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, and the *OTHER PROMOTER, nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, the *OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and/or their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of

equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the Contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer and *OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be

initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract. We, the Contractor, the Qualified Steam Generator Manufacturer and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity.

We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished and it shall be a guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or Qualified Steam Generator Manufacturer or the *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, the *OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....
(Bidder / Contractor)

WITNESS :

1.
(Signature of the Authorised Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

For M/s

(Qualified Steam Generator Manufacturer)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address) Designation.....

Common Seal of the

Company

For M/s

(*OTHER PROMOTER)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

Note:

i) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

ii) *Bidder to strike out, whichever is not applicable.

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO,LDO),Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING AS PER
CLAUSE 3.3.2 AND NOTE 4 TO CLAUSE 3.0, ITEM 3.0 of EOI
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 of EOI), AND THE *OTHER PROMOTER OF THE INDIAN *SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN *SUBSIDIARY/ JOINT VENTURE COMPANY

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having its Registered Office at.....(hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under the having its Registered Office at (hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No. : **XXXXXX**

*AND WHEREAS Clause 3.3.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulate that the bidder who meets the requirements stipulated in clause 3.3.1, ITEM 3.0 of EOI as Indian Subsidiary Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 to Clause 3.0} and *OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 4 iii) of clause 3.0, ITEM 3.0 of EOI, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli**, against the Purchaser's Bidding Documents No. **XXXXXX** .

*WHEREAS M/s (Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause

3.3.1 and 3.0.0, ITEM 3.0 of EOI whose other *OTHER PROMOTER having a stake of 25% or more in the Bidder/ Contractor is M/s (hereinafter called "OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for **TPS II Second Expansion (2X660 MW), Neyveli (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, the *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever.
Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the *OTHERPROMOTER and the Qualified Steam Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, the *OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam

Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the Contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer and *OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract. We, the Contractor, the Qualified Steam Generator Manufacturer and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished and it shall be a guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or Qualified Steam Generator Manufacturer or the *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, the *OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....
(Bidder / Contractor)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

For M/s

(Qualified Steam Generator Manufacturer

/ Holding Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s

(*OTHER PROMOTER)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

Note:

(i) However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 3.1.1, before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, shall be equally divided among them and shall aggregate to 1.0% of the total contract price.

(ii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

(iii) *Bidder to strike out, whichever is not applicable.

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO,LDO),Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING
AS PER CLAUSE 3.3.2 AND NOTE 4 TO CLAUSE 3.0, ITEM 3.0 of EOI
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 of EOI), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY AND THE *OTHER PROMOTER OF THE INDIAN *SUBSIDIARY/JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN *SUBSIDIARY/ JOINT VENTURE COMPANY

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having its Registered Office at.....(hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under the having its Registered Office at (hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under having its Registered Office at, M/s a Company registered under having its Registered Office at and M/s..... a Company registered under having its Registered Office at (Subsidiary(ies) of the Holding company who are lending strength/experience to the holding company for meeting the requirements stipulated in clause 3.1.1 and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian

Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or " Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No. : **XXXXXX** .

*AND WHEREAS Clause 3.3.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulate that the bidder who meets the requirements stipulated in clause 3.3.1, ITEM 3.0 of EOI as Indian Subsidiary Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 to Clause 3.0}, Subsidiary(ies) and *OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 4 ii) of clause 3.0, ITEM 3.0 of EOI, the

Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli**, against the Purchaser's Bidding Documents No. XXXXXX.

*WHEREAS M/s (Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 3.3.1 and 3.0.0, ITEM 3.0 of EOI whose *Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies) and the OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies) and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies) and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Subsidiary(ies) and the *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the Contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Subsidiary(ies) the *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator**

Package for TPS II Second Expansion (2X660 MW), NEYVELI, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer, Subsidiary(ies) and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the *OTHER PROMOTER, Subsidiary(ies) and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, Subsidiary(ies) and the *OTHER PROMOTER, nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, Subsidiary(ies), the *OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators.
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant.
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's

project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the Contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies) and the OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies) and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies) and *OTHERPROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical SteamGenerator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies) and *OTHERPROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies) and the *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies) and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantee as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished and it shall be a guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or Qualified Steam Generator Manufacturer or the *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the*OTHERPROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....

(Bidder / Contractor)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the
Company.....

For M/s

(Qualified Steam Generator Manufacturer
/ Holding Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the
Company

For M/s

(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the
Company

For M/s.....

(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.

(Signature of the Authorised

Representative)
..... Name.....
(Official Address)
Designation.....
Common Seal of the
Company
For M/s
(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.
(Signature of the Authorised
Representative)

..... Name.....
(Official Address)
Designation.....
Common Seal of the
Company
For M/s
(*OTHER PROMOTER)

WITNESS :

1.
(Signature of the Authorised
Representative)

..... Name.....
(Official Address)
Designation.....
Common Seal of the
Company

Note:

(i) However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, shall be equally divided among them and shall aggregate to 1.0% of the total contract price.

(ii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

(iii) *Bidder to strike out, whichever is not applicable.

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING
AS PER CLAUSE 3.3.2 AND NOTE *8 OF CLAUSE 3.0 OF ITEM 3.0 of EOI
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 3.1.1, SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY / JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 3.0 ITEM 3.0 of EXPRESSION OF INTEREST AND THE *OTHER PROMOTER OF THE INDIAN *SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN *SUBSIDIARY/ JOINT VENTURE COMPANY

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having its Registered Office at.....(hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under the having its Registered Office at (hereinafter called the Qualified Steam Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s....., a Company incorporated under registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: xxxxxx.

*AND WHEREAS Clause 3.3.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulate that the bidder who meets the requirements stipulated in clause 3.3.1, ITEM 3.0 of EOI as Indian Subsidiary Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer and *OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 8 of clause 3.0, ITEM 3.0 of EOI, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli**, against the Purchaser's Bidding Documents No. XXXXXX.

*WHEREAS M/s (Qualified Steam Generator Manufacturer)....., as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 3.3.1 and 3.0.0, ITEM 3.0 of EOI, directly or through (*M/s. Subsidiary Company of Indian Manufacturing Company) as per note 8 of clause 3.0 of ITEM 3.0 of EOI, whose *Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the *OTHER PROMOTER, the Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the Contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and

undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and ratings specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of all the equipment/component covered under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit of 660 MW under the Contract.

We, the Contractor, the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished and it shall be a guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit of 660 MW

under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or Qualified Steam Generator Manufacturer or the Subsidiary Company of Indian Manufacturing Company or the *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....

(Bidder / Contractor)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

1. WITNESS : For M/s.....

(Qualified Steam Generator Manufacturer)

.....

..... (Signature of the Authorised

(Signature, Name & Representative)

Address)

Name.....

Designation.....

Common Seal of the Company

.....

For M/s

(*OTHER PROMOTER)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s
(Subsidiary Company of Indian Manufacturing Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

Note:

1. *Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.*

2. ** Bidder to strike out, whichever is not applicable.*

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc.,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING AS PER
CLAUSE 3.3.2 AND NOTE *4 & *8 OF CLAUSE 3.0 OF ITEM 3.0 of
EXPRESSION OF INTEREST
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 of EOI), SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 3.0 AND THE *OTHER PROMOTER OF THE INDIAN *SUBSIDIARY/JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN *SUBSIDIARY/ JOINT VENTURE COMPANY

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having its Registered Office at.....(hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under the having its Registered Office at (hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s....., a Company incorporated under registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600 031 INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli**, (hereinafter referred to as "Plant") vide its Bidding Document No. : **XXXXXX**

*AND WHEREAS Clause 3.3.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulate that the bidder who meets the requirements stipulated in clause 3.3.1, ITEM 3.0 of EOI as Indian Subsidiary Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 to Clause 3.0} and *OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 4 iii) of clause 3.0, ITEM 3.0 of EOI, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 3.0, ITEM 3.0 of EOI, the manufacturing

may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, against the Purchaser's Bidding Documents No. XXXXXX .

*WHEREAS M/s (Qualified Steam Generator Manufacturer), as a promoter, has set up an Indian Subsidiary (M/s.....Bidder/Contractor) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a) and 3.0.0, ITEM 3.0 of EOI, directly or through (*M/s. Subsidiary Company of Indian Manufacturing Company) as per note 8 of clause 3.0 of ITEM 3.0 of EOI, whose other Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, the *Subsidiary Company of Indian Manufacturing Company and the OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, the *Subsidiary Company of Indian Manufacturing Company and the OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused

to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the *OTHER PROMOTER, the Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER, nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buckstay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and

undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and ratings specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/component covered under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit of 660 MW under the Contract. We, the Contractor, the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished and it shall be a guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit of 660 MW

under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or Qualified Steam Generator Manufacturer or the Subsidiary Company of Indian Manufacturing Company or the *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract. IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, the Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....

(Bidder / Contractor)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

For M/s

(Qualified Steam Generator Manufacturer/Holding Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s

(*OTHER PROMOTER)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....
(Official Address)
Designation.....
Common Seal of the
Company
For M/s
(Subsidiary Company of Indian Manufacturing Company)
WITNESS :

1.
(Signature of the Authorised
Representative)

..... Name.....
(Official Address)
Designation.....
Common Seal of the
Company

Note:

1. However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength /experience to the Holding Company for fulfilment of requirement of clause 3.1.1, before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 3.1.1), ITEM 3.0 of EOI , shall be equally divided among them and shall aggregate to 1.0% of the total contract price.

2. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

3.* Bidder to strike out, whichever is not applicable.

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc.,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING AS PER
CLAUSE 3.3.2 AND NOTE *4 & *8 OF CLAUSE 3.0 OF ITEM 3.0
of EXPRESSION OF INTEREST
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 OF EOI), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 3.0 AND THE *OTHER PROMOTER OF THE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN *SUBSIDIARY/ JOINT VENTURE COMPANY

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having its Registered Office at.....(hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under the having its Registered Office at (hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under having its Registered Office at M/s a Company registered under having its Registered Office at and M/s a Company registered under having its Registered Office at (Subsidiary(ies) of the Holding company who are lending strength/experience to the holding company for meeting the requirements stipulated in clause 3.1.1 and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s....., a Company incorporated under registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at..... (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian

Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600 031 INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli**(hereinafter referred to as "Plant") vide its Bidding Document No. XXXXXX

*AND WHEREAS Clause 3.3.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulate that the bidder who meets the requirements stipulated in clause 3.3.1, ITEM 3.0 of EOI as Indian Subsidiary Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 to Clause 3.0} and *OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 4 ii) of clause 3.0, ITEM 3.0 of EOI, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 3.0, ITEM 3.0 of EOI, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, against the Purchaser's Bidding Documents No. XXXXXX .

*WHEREAS M/s (Qualified Steam Generator Manufacturer), as a promoter, has set up an Indian Subsidiary (M/s..... Bidder/Contractor) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 1.3.1(a) and 3.0.0, ITEM 3.0 of EOI, directly or through (*M/s. Subsidiary Company of Indian Manufacturing Company) as per note 8 of clause 3.0 of ITEM 3.0 of EOI, whose other Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer, Subsidiary(ies), Subsidiary of Indian Manufacturing Company and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, Subsidiary(ies), the *Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER, nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buckstay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance

of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), the Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), the Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and ratings specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Subsidiary/Joint Venture Company, the Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit of 660 MW under the Contract. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity.

We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the

Contractor including Contract Performance Guarantees as well as other obligations of the contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EOI shall be furnished and it shall be a guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit of 660 MW under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or Qualified Steam Generator Manufacturer or the Subsidiary Company of Indian Manufacturing Company or the *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....

(Bidder / Contractor)

WITNESS :

1.

(Signature of the Authorised

Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

For M/s

(Qualified Steam Generator Manufacturer/Holding Company)

WITNESS :

1.
(Signature of the Authorised
Representative)

..... Name.....
(Official Address) Designation.....

Common Seal of the
Company

For M/s

(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.
(Signature of the Authorised
Representative)

..... Name.....
(Official Address)

Designation.....

Common Seal of the
Company

For M/s

(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.
(Signature of the Authorised
Representative)

..... Name.....
(Official Address)

Designation.....

Common Seal of the
Company

For M/s

(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.
(Signature of the Authorised
Representative)

..... Name.....
(Official Address) Designation.....

Common Seal of the
Company

For M/s

(OTHER PROMOTER)

WITNESS :

1.
(Signature of the Authorised
Representative)
..... Name.....
(Official Address)
Designation.....
Common Seal of the
Company
*For M/s
(Subsidiary Company of Indian Manufacturing Company)
WITNESS :

1.
(Signature of the Authorised
Representative)
..... Name.....
(Official Address)
Designation.....
Common Seal of the
Company

Note:

1. However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI , the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength /experience to the Holding Company for fulfilment of requirement of clause 3.1.1, before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, shall be equally divided among them and shall aggregate to 1.0% of the total contract price.

2. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

3.* Bidder to strike out, whichever is not applicable.

Annexure 1-
Scope for “Steam Generator & Auxiliaries” package

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc.,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING
AS PER CLAUSE 3.4.2, ITEM 3.0 of EXPRESSION OF INTEREST
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 3.1.1, AND THE *OTHER PROMOTER HAVING A STAKE OF 25% OR MORE IN THE INDIAN JOINT VENTURE COMPANY

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having its Registered Office at.....(hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under the having its Registered Office at (hereinafter called the Qualified Steam Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns) and

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600 031 INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: **XXXXXX**.

*AND WHEREAS Clause 3.4.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulate that the bidder who meets the requirements stipulated in clause 3.4.1, ITEM 3.0 of EOI as Indian Joint Venture Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer and *OTHER PROMOTER (if any) having 25% or higher equity participation in the Indian Manufacturing Company.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, against the Purchaser's Bidding Documents No. **XXXXXX**.

*WHEREAS M/s (Qualified Steam Generator Manufacturer), as a promoter, has set up an Indian Joint Venture Company (M/s.....Bidder/Contractor) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 3.4.1 and 3.0.0, ITEM 3.0 of EOI whose *Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s (hereinafter called "OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer and the *OTHERPROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, the *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHERPROMOTER and the Qualified Steam Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor may

initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER, nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, the *OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information

in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer and *OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract. We, the Contractor, the Qualified Steam Generator Manufacturer and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished. The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or Qualified Steam Generator Manufacturer or the *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, the *OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....

(Bidder / Contractor)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the
Company.....
For M/s
(Qualified Steam Generator Manufacturer)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s

(*OTHER PROMOTER)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

Note:

- i) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- ii) ***Bidder to strike out, whichever is not applicable.**

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc.,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING
AS PER CLAUSE 3.4.2 AND NOTE 4 TO CLAUSE 3.0, ITEM 3.0 of EOI
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONGWITHITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 of EOI)AND THE *OTHER PROMOTER HAVING A STAKE OF 25% OR MORE IN THE INDIANJOINT VENTURE COMPANY

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having itsRegistered Office at.....(hereinafter called the "Bidder/ Contractor", whichexpression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under the having its Registered Office at (hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators,executors and permitted assigns) AND

*M/s a Company, other than the Qualified Steam Generator Manufacturer,registered under having its Registered Office at and having an equityof 25% or more in the Indian Manufacturing Company (hereinafter jointly called the "OTHER

PROMOTER", which expression shall include its successors, administrators, executors and permittedassigns), in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or " Purchaser " which expression shall include ittssuccessors, administrators, executors and assigns).

WHEREAS, the Purchaserinvited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: XXXXX

*AND WHEREAS Clause 3.4.2, ITEM 3.0 ofEXPRESSION OF INTEREST(EOI) bidding documents stipulatesthat the bidder who meets the requirements stipulated in clause 3.4.1, ITEM 3.0 of EOIASIndian Joint Venture Company of Qualified Steam Generator Manufacturer shall furnish a Deed ofJoint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holdingcompany, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 toClause 3.0} and *OTHER PROMOTER having 25% or higher equity participation in the Indian JVCompany. Further as per note 4 iii) of clause 3.0, ITEM 3.0 of EOI, the Holding Company, as aQualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by theBidder.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation forBid by the Purchaserfor **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli**, against the Purchaser's Bidding Documents No. XXXXXX.

*WHEREAS M/s(Qualified Steam Generator Manufacturer)....., as a promoter, has set up anIndian Joint Venture Company (M/s.....Bidder/Contractor) incorporated under theCompanies Act, of India for manufacturing of supercritical Steam Generator sets meeting therequirements of Clause 3.4.1 and 3.0.0, ITEM 3.0 of EOI whose other Other Promoter having a stakeof 25% or more in the Bidder/ Contractor is M/s (hereinafter called " OTHERPROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful

performance of the contract for the scope related to Steam Generator and auxiliaries for **TPS II Second Expansion (2X660 MW), Neyveli (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract with regard to implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, the *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever.

Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER and the Qualified Steam Generator Manufacturer hereunder, the analysis/

investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, and the *OTHER PROMOTER, nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, the *OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information

in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer and *OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer and the *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be

initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract. We, the Contractor, the Qualified Steam Generator Manufacturer and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished and it shall be a guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or Qualified Steam Generator Manufacturer or the *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract. IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, the *OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....
(Bidder / Contractor)

WITNESS :

1.
(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the
Company.....

For M/s

(Qualified Steam Generator Manufacturer
/ Holding Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the
Company

For M/s

(*OTHER PROMOTER)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the
Company

Note:

- (i) ***However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 3.1.1, before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, shall be equally divided among them and shall aggregate to 1.0% of the total contract price.***
- (ii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- (iii) ***Bidder to strike out, whichever is not applicable.**

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc.,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING
AS PER CLAUSE 3.4.2 AND NOTE 4 TO CLAUSE 3.0, ITEM 3.0 of EOI
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 OF EOI), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, AND THE *OTHER PROMOTER OF THE INDIAN JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN JOINT VENTURE COMPANY

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having its Registered Office at.....(hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under the having its Registered Office at (hereinafter called the Qualified Steam Generator

Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under having its Registered Office at, M/s a Company registered under having its Registered Office at and M/s..... a Company registered under having its Registered Office at (Subsidiary(ies) of the Holding company who are lending strength/experience to the holding company for meeting the requirements stipulated in clause 3.1.1 and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian

Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600 031]INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW) Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: XXXXXX.

*AND WHEREAS Clause 3.4.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulate that the bidder who meets the requirements stipulated in clause 3.4.1, ITEM 3.0 of EOI as Indian Joint Venture Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 to Clause 3.0}, Subsidiary(ies) and *OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 4 ii) of clause 3.0, ITEM 3.0 of EOI, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), Neyveli**, against the Purchaser's Bidding Documents No. XXXXXX.

*WHEREAS M/s (Qualified Steam Generator Manufacturer), as a promoter, has set up an Indian Joint Venture (M/s Bidder/Contractor) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 3.4.1 and 3.0.0, ITEM 3.0 of EO whose Other Promoter having a stake of 25% or more in the Bidder/Contractor is M/s (hereinafter called "OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), and the *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking.

Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), the *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be inline with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator**

Package for TPS II Second Expansion (2X660 MW), NEYVELI, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer, Subsidiary(ies), and *OTHERPROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHERPROMOTER, Subsidiary(ies) and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Subsidiary/Joint Venture Company and the *OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, and the *OTHERPROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, Subsidiary(ies), , the *OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural /supporting system, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality Surveillance/supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for

successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible

for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired supercritical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), and *OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), and the *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of all the equipment/ component covered under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantee as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or the Qualified Steam Generator Manufacturer or Subsidiary(ies) or the *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.
11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, Subsidiary(ies), the OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....

(Bidder / Contractor)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

For M/s

(Qualified Steam Generator Manufacturer /
Holding Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s

(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s

(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s

(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.

(Signature of the Authorised

Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s

(*OTHER PROMOTER)

WITNESS :

1.

(Signature of the Authorised

Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

Note:

- (i) ***However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, shall be equally divided among them and shall aggregate to 1.0% of the total contract price.***
- (ii) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**

(iii) *Bidder to strike out, whichever is not applicable.

Annexure 1-
Scope for “Steam Generator & Auxiliaries” package

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc.,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING
AS PER CLAUSE 3.4.2 AND NOTE *6 & *8 OF CLAUSE 3.0 OF ITEM 3.0 of EOI
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 3.1.1, *PARENT COMPANY OF INDIAN MAJORITY STAKE HOLDER OF THE JV COMPANY, SUBSIDIARY COMPANY OF ABOVE INDIAN JOINT VENTURE COMPANY FORMANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 3.0 ITEM 3.0 of EXPRESSION OF INTEREST AND THE *OTHER PROMOTER OF THE INDIAN* JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN JOINT VENTURE COMPANY

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s a Company incorporated under having its Registered Office at (hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under the having its Registered Office at (hereinafter called the Qualified Steam Generator Manufacturer which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/s....., a Company incorporated under having its Registered Office at (hereinafter called the "Parent Company of Indian

Majority Stake Holder of the JV Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s....., a Company incorporated under registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

*M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having 25% or higher equity participation in the Indian Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600 031 INDIA (hereinafter called "NLC INDIA" or " Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPSII Second Expansion(2X660 MW) Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: XXXXXX.

*AND WHEREAS Clause 3.4.2 and note *6 of clause 3.0, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulates that the bidder who meets the requirements stipulated in clause 3.4.1, ITEM 3.0 of EOI as Indian Joint Venture Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company and

*OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company.

Further as per note 8 of clause 3.0, ITEM 3.0 of EOI, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion 2X660 MW) Neyveli**, against the Purchaser's Bidding Documents No. XXXXXX.

*WHEREAS M/s (Qualified Steam Generator Manufacturer), as a promoter, has set up an Indian Joint Venture Company (M/s..... Bidder/Contractor) incorporated under the Companies Act of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 3.4.1 and 3.0.0, ITEM 3.0 of EOI, directly or through (*M/s. Subsidiary Company of Indian Manufacturing Company) as per note 8 of clause 3.0 of ITEM 3.0 of EOI, whose other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s..... (hereinafter called " OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing

Company and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Purchaser sustains any loss or damage on

account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever.

Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company, and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, the *Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation.

It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, *The Indian Subsidiary/Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v)

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and

suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, the *Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, the *Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and ratings specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, the *Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract.

We, the Contractor, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety(90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or the Qualified Steam Generator Manufacturer or *Parent Company of Indian Majority Stake Holder of the JV Company or the *Subsidiary Company of Indian Manufacturing Company or the *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.
This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....

(Bidder / Contractor)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the
Company.....

1. WITNESS : For M/s.....

(Qualified Steam Generator Manufacturer)

.....

..... (Signature of the Authorised
(Signature, Name & Representative)

Address)

Name.....

Designation.....

Common Seal of the Company

.....
 *For M/s.....
 (Parent Company of Indian Majority Stake
 Holder of the JV Company)
 WITNESS :
 1.
 (Signature of the Authorised
 Representative)
 Name
 (Official Address) Designation.....
 Common Seal of the
 Company.....
 For M/s
 (OTHER PROMOTER)
 WITNESS :
 1.
 (Signature of the Authorised
 Representative)
 Name.....
 (Official Address)
 Designation.....
 Common Seal of the
 Company
 For M/s
 (Subsidiary Company of Indian Manufacturing Company)
 WITNESS :
 1.
 (Signature of the Authorised
 Representative)
 Name.....
 (Official Address)
 Designation.....
 Common Seal of the
 Company

Note:

1. ***Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.***
2. **** Bidder to strike out, whichever is not applicable.***

Annexure 1-
Scope for “Steam Generator & Auxiliaries” package

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc.,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING
AS PER CLAUSE 3.4.2 AND NOTE *4, *6 & *8 OF CLAUSE 3.0 OF ITEM 3.0 OF EOI**

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 OF EOI), *PARENT COMPANY OF INDIAN MAJORITY STAKE HOLDER OF THE JV COMPANY, SUBSIDIARY COMPANY OF ABOVE INDIAN JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 3.0 AND THE *OTHER PROMOTER OF THE INDIAN JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN JOINT VENTURE COMPANY

The DEED OF JOINT UNDERTAKING executed on this day of Two thousand by M/s a Company incorporated under having its Registered Office at (hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under the having its Registered Office at (hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/s a Company incorporated under having its Registered Office at (hereinafter called the "Parent Company of Indian

Majority Stake Holder of the JV Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company incorporated under registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at (hereinafter called the "Subsidiary Company of Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian

Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns),

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or "Purchaser" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW) Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: XXXXXX

*AND WHEREAS Clause 3.4.2 and note *6 of clause 3.0, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulates that the bidder who meets the requirements stipulated in clause 3.4.1, ITEM 3.0 of EOI as Indian Joint Venture Company of Qualified Steam Generator

Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 to Clause 3.0}, *Parent Company of Indian Majority Stake Holder of the JV Company and *OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 4 iii) of clause 3.0, ITEM 3.0 of EOI, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 3.0, ITEM 3.0 of EOI, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing

Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660MW) Neyveli**, against the Purchaser's Bidding Documents No. XXXXXX .

*WHEREAS M/s (Qualified Steam Generator Manufacturer), as a promoter, has set up an Indian Joint Venture Company (M/s.....Bidder/Contractor) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 3.4.1(a) and 3.0.0, ITEM 3.0 of EOI, directly or through (*M/s. Subsidiary Company of Indian Manufacturing Company) as per note 8 of clause 3.0 of ITEM 3.0 of EOI, whose Other Promoter having a stake of 25% or more in the Bidder/ Contractor is M/s (hereinafter called "OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and Auxiliaries Package of **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER

PROMOTER do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever.

Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company, and *OTHER PROMOTER hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHER PROMOTER, the *Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation.

It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, *The Indian Subsidiary/Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER (with respect to obligations and responsibilities of the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure

satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests

that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, the *Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, the *Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and ratings specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, the *Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract.

We, the Contractor, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that

this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or the Qualified Steam Generator Manufacturer or *Parent Company of Indian Majority Stake Holder of the JV Company or the *Subsidiary Company of Indian Manufacturing Company or the *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, the *Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....

(Bidder / Contractor)

WITNESS :

1.

(Signature of the Authorised

Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

For M/s

(Qualified Steam Generator Manufacturer/Holding Company)

WITNESS :

1.

(Signature of the Authorised

Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

*For M/s.....

(Parent Company of Indian Majority Stake

Holder of the JV Company)

WITNESS :

1.

(Signature of the Authorised

Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

For M/s

(*OTHER PROMOTER)

WITNESS :

1.

(Signature of the Authorised

Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s

(Subsidiary Company of Indian Manufacturing Company)

WITNESS :

1.

(Signature of the Authorised

Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

Note:

1. However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength /experience to the Holding Company for fulfilment of requirement of clause 3.1.1, before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be

furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, shall be equally divided among them and shall aggregate to 1.0% of the total contract price of the EPC Package.

2. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

3. Bidder to strike out, whichever is not applicable.*

Annexure 1-
Scope for “Steam Generator & Auxiliaries” package

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc.,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

FORM OF DEED OF JOINT UNDERTAKING
AS PER CLAUSE 3.4.2 AND NOTE *4, *6 & *8 OF CLAUSE 3.0 OF ITEM 3.0 OF EOI
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 OF EOI), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, *PARENT COMPANY OF INDIAN MAJORITY STAKE HOLDER OF THE JV COMPANY, *SUBSIDIARY COMPANY OF ABOVE INDIAN JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 OF CLAUSE 3.0 AND THE *OTHER PROMOTER OF THE INDIAN JOINT VENTURE COMPANY HAVING A STAKE OF 25% OR MORE IN THE INDIAN JOINT VENTURE COMPANY

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having its Registered Office at.....(hereinafter called the "Bidder/ Contractor", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under the having its Registered Office at (hereinafter called the Qualified Steam Generator Manufacturer / Holding Company, which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s a Company registered under having its Registered Office at M/s a Company registered under having its Registered Office at and M/s..... a Company registered under having its Registered Office at (Subsidiary(ies) of the Holding company who are lending strength/experience to the holding company for meeting the requirements stipulated in clause 3.1.1 and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/s....., a Company incorporated under having its Registered Office at (hereinafter called the "Parent Company of Indian

Majority Stake Holder of the JV Company", which expression shall include its successors, administrators, executors and permitted assigns) and

*M/s....., a Company incorporated under registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at..... (hereinafter called the "Subsidiary Company of Indian Subsidiary Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

*M/s a Company, other than the Qualified Steam Generator Manufacturer, registered under having its Registered Office at and having an equity of 25% or more in the Indian Joint Venture Company/ Indian Subsidiary Company/ Indian

Manufacturing Company (hereinafter jointly called the "OTHER PROMOTER", which expression shall include its successors, administrators, executors and permitted assigns), in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPSII Second Expansion (2X660 MW) Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: XXXXXX

*AND WHEREAS Clause 3.4.2 and note *6 of clause 3.0, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulates that the bidder who meets the requirements stipulated in clause 3.4.1, ITEM 3.0 of EOI as Indian Joint Venture Company of Qualified Steam Generator Manufacturer shall furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements of Note 4 to Clause 3.0}, *Parent Company of Indian Majority Stake Holder of the JV Company and *OTHER PROMOTER (if any) having 25% or higher equity participation in the Subsidiary Company. Further as per note 4 ii) of clause 3.0, ITEM 3.0 of EOI, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 3.0, ITEM 3.0 of EOI, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary/ JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPSII Second Expansion STPP Phase – I (2X800MW)**, against the Purchaser's Bidding Documents No. XXXXXX.

*WHEREAS M/s (Qualified Steam Generator Manufacturer), as a promoter, has set up an Indian Joint Venture Company (M/s Bidder/Contractor) incorporated under the Companies Act, of India for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 3.4.1(a) and 3.0.0, ITEM 3.0 of EOI, directly or through (*M/s. Subsidiary Company of Indian Manufacturing Company) as per note 8 of clause 3.0 of

ITEM 3.0 of EOI, whose other Promoter having a stake of 25% or more in the Bidder/Contractor is M/s (hereinafter called "OTHER PROMOTER").

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), the *Subsidiary Company of Indian

Manufacturing Company and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority

Stake Holder of the JV Company, Subsidiary(ies), the *Subsidiary Company of IndianManufacturing Company and the *OTHER PROMOTER do hereby declare and undertake thatwe shall be jointly and severally responsible to the Purchaser for the execution and successfulperformance of the contract for the scope related to Steam Generator and auxiliariesincluding satisfactory thermal performance of Steam Generator and its auxiliaries andachievement of all guaranteed parameters of all the units, as specified under the saidContract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified SteamGenerator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JVCompany, Subsidiary(ies), the *Subsidiary Company of Indian Manufacturing Company andthe *OTHER PROMOTER do hereby undertake, declare and confirm that we shall be fullyresponsible for the successful performance of the contract for the scope related to SteamGenerator and auxiliaries, including its satisfactory thermal performance and achievement ofall guaranteed parameters, of all the units and undertake to carry out all obligations andresponsibilities under this Deed of Joint Undertaking. Further, if the Purchasersustains anyloss or damage on account of any breach of the Contract(s) related to any or all of the SteamGenerators and its auxiliaries, we the Qualified Steam Generator Manufacturer, *ParentCompany of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), the *SubsidiaryCompany of Indian Manufacturing Company, the *OTHER PROMOTER and the Contractorjointly and severally undertake to promptly indemnify and pay such losses/ damages causedto the Purchaser on its written demand without any demur, reservation, contest or protest inany manner whatsoever. Determination of losses/ damages shall be in line with provisions onLimitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract,in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall notapply to any obligation of the Contractor to indemnify the Purchaserwith respect to patentinfringement as per provisions of bidding documents (relevant clauses of GCC and SCC). The liability of *the Qualified Steam Generator Manufacturer, *Parent Company of IndianMajority Stake Holder of the JV Company, Subsidiary(ies), the *Subsidiary Company of IndianManufacturing Company, and *OTHER PROMOTER hereunder shall, however, be limited toan amount calculated @ **65% of contract priceof Steam Generators & Auxiliaries package** to be supplied by theBidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractorunder the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, the OTHERPROMOTER, the *Subsidiary Company of Indian Manufacturing Company and the QualifiedSteam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JVCompany, Subsidiary(ies) hereunder, the analysis/ investigations of the non-performance ofthe equipment manufactured by the Contractor may initially be carried out by the Contractorwithin a period of 15 days from the date of reference of the problem by the Purchaser, beforethe Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/investigation. It shall not be necessary or obligatory for the Purchaser to first proceed againstthe Contractor before proceeding against the Qualified Steam Generator Manufacturer, the*Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER (withrespect to obligations and responsibilities of the Qualified Steam Generator Manufacturer,*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), *TheIndian Subsidiary/Joint Venture Company, the *Subsidiary Company of Indian ManufacturingCompany and the *OTHER PROMOTER covered under this Deed of Joint Undertaking), norany extension of time or any relaxation given by the Purchaser to the contractor shall prejudiceany right of Purchaser under this Deed of Joint Undertaking to proceed against the QualifiedSteam GeneratorManufacturer,

*Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), the
*Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedule.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator

Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, the *Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, the *Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and ratings specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, the *Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), the *Subsidiary Company of Indian Manufacturing Company and the *OTHER PROMOTER do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled

date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay.

However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract.

We, the Contractor, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies), the *Subsidiary Company of Indian Manufacturing Company and *OTHER PROMOTER do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EOI shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or the Qualified Steam Generator Manufacturer or *Parent Company of Indian Majority Stake Holder of the JV Company or Subsidiary(ies) or the *Subsidiary Company of Indian Manufacturing Company or the *OTHER PROMOTER in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, *Parent Company of Indian Majority Stake Holder of the JV Company, Subsidiary(ies) the *Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s.....

(Bidder / Contractor)

WITNESS :

1.

(Signature of the Authorised

Representative)

..... Name

(Official Address) Designation.....

Common Seal of the
Company.....
For M/s
(Qualified Steam Generator Manufacturer/Holding Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the
Company

*For M/s.....

(Parent Company of Indian Majority Stake
Holder of the JV Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the
Company.....

For M/s

(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the
Company

For M/s

(SUBSIDIARY 2 OF HOLDING COMPANY)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s

(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s

(*OTHER PROMOTER)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s

(Subsidiary Company of Indian Subsidiary Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

Note:

1. However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, the Holding Company shall arrange for

signing of DJU and bank guarantees from all such subsidiaries lending strength /experience to the Holding Company for fulfilment of requirement of clause 3.1.1, before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, shall be equally divided among them and shall aggregate to 1.0% of the total contract price.

2. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

3. Bidder to strike out, whichever is not applicable.*

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc.,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING
AS PER CLAUSE 3.5.2, ITEM 3.0 of EOI
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (INDIAN COMPANY WHO HOLDS ATLEAST 51% EQUITY IN JOINT VENTURE COMPANY), THE INDIAN JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 3.5.1, ITEM 3.0 OF EXPRESSION OF INTEREST AND QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 3.1.1 ITEM 3.0 of EOI,

The DEED OF JOINT UNDERTAKING executed on this..... day ofTwo thousand by M/s..... a Company incorporated under the Companies Act having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and M/s a Company registered under having its Registered Office at (hereinafter called the "Qualified Steam Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns) and

*M/s a Company registered in India under the Companies Act of India having its Registered Office at for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company / Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPSII Second Expansion(2X660 MW) Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: XXXXXX

*AND WHEREAS Clause 3.5.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulate that the bidder who meets the requirements stipulated in clause 3.5.1, ITEM 3.0 of EOI as an *Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India shall associate with the Qualified Steam Generator Manufacturer meeting the requirements specified in Clause 3.1.1, and furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer meeting the requirements specified in Clause 3.1.1 ITEM 3.0 of EOI and *the Indian Joint Venture Company who meets the requirements stipulated in clause 3.5.1 , ITEM 3.0 of EOI.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPSII Second Expansion(2X660 MW) Neyveli**, against the Purchaser's Bidding Documents No. XXXXXX .

*WHEREAS M/s (Bidder) and the M/s (Qualified Steam Generator Manufacturer)..... as the promoters, have set up a Joint Venture Company (M/s.....Name of the JV Company.....) (hereinafter called the "Joint Venture Company/ Indian Manufacturing Company") incorporated in India under the Companies act, for manufacturing of supercritical Steam

Generator sets meeting the requirements of Clause 3.5.1 of the Qualifying Requirements, ITEM 3.0 of EOI.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *The Indian Joint Venture

Company are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for **TPS II Second Expansion (2X660 MW) Neyveli (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, *The Indian Joint Venture Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of

equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Programs specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty

period of the all the equipment/ component covered under the Contract(s) for **SteamGenerator & Auxiliaries Package for TPS II Second Expansion (2X660 MW)**, NEYVELI awarded to the Bidder/ Contractor or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract.

We, the Contractor, the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EOI shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety(90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or the Indian Manufacturing Company or the Qualified Steam Generator Manufacturer in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract. IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s

(BIDDER/ CONTRACTOR)

WITNESS :

1.

(Signature of the Authorised Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company

For M/s

(Qualified Steam Generator Manufacturer)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address) Designation.....

Common Seal of the

Company

*For M/s.....

(Indian Joint Venture Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

Note:

- i) **Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.**
- ii) ***Bidder to strike out, whichever is not applicable.**

Annexure 1-
Scope for “Steam Generator & Auxiliaries” package

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc.,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING
AS PER CLAUSE 3.5.2 AND NOTE 4 TO CLAUSE 3.0, ITEM 3.0 of EOI**

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (INDIAN COMPANY WHO HOLDS ATLEAST 51% EQUITY IN THE JOINT VENTURE COMPANY), THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 of EOI), THE INDIAN JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA

The DEED OF JOINT UNDERTAKING executed on this..... day ofTwo thousand by M/s..... a Company incorporated under the Companies Act having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered under having its Registered Office at (hereinafter called the "Qualified Steam Generator Manufacturer/ Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered in India under the Companies Act of India having its Registered Office at for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company/Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPSII Second Expansion(2X660 MW) Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: XXXXXX

*AND WHEREAS Clause 3.5.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulate that the bidder who meets the requirements stipulated in clause 3.5.1, ITEM 3.0 of EOI as an *Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India shall associate with the Qualified Steam Generator Manufacturer meeting the requirements specified in Clause 3.1.1, and furnish a Deed of Joint Undertaking executed by him, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements specified in Clause 3.1.1 ITEM 3.0 of EOI and the Indian Joint Venture Company who meets the requirements stipulated in clause 3.5.1, ITEM 3.0 of EOI. Further as per note 4 iii) of clause 3.0, ITEM 3.0 of EOI, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPSII Second Expansion(2X660 MW), Neyveli**, against the Purchaser's Bidding Documents No. XXXXXX.

*WHEREAS M/s(Bidder) and the M/s(Qualified SteamGenerator Manufacturer)..... as the promoters, have set up a Joint Venture Company (M/s.....Name of the JV Company.....) (hereinafter called the "Joint Venture Company/ Indian ManufacturingCompany") incorporated in India under the Companies act, for manufacturing of supercritical SteamGenerator sets meeting the requirements of Clause 3.5.1 (a) of the Qualifying Requirements, Item 4.0of EOI .

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *The Indian Joint VentureCompany are required to jointly execute and furnish along with the bid an irrevocable Deed of JointUndertaking and be jointly and severally liable and bound unto the Purchaserfor the successfulperformance of the contract for the scope related to Steam Generator and auxiliaries for **TPSII Second Expansion(2X660 MW) Neyveli (As per Annexure-I)**, fully meeting the stipulated technicalrequirements, and Guaranteed parameters and characteristics as per bidding documents, in theevent, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *The IndianJoint Venture Company are required to jointly execute and furnish along with the bid an irrevocableDeed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaserfor thesuccessful performance of the contract with regard to implementation of the Phased ManufacturingProgram and transfer of technology in accordance with the bidding documents, in the event, the Bid isaccepted by the Purchaserresulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaserto the Contractor, wethe Contractor, the Qualified Steam Generator Manufacturer, *The Indian Joint VentureCompany do hereby declare and undertake that we shall be jointly and severally responsibleto the Purchaser for the execution and successful performance of the contract for the scoperelated to Steam Generator and auxiliaries including satisfactory thermal performance ofSteam Generator and its auxiliaries and achievement of all guaranteed parameters of all theunits, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified SteamGenerator Manufacturer, *The Indian Joint Venture Company do hereby undertake, declareand confirm that we shall be fully responsible for the successful performance of the contractfor the scope related to Steam Generator and auxiliaries, including its satisfactory thermalperformance and achievement of all guaranteed parameters, of all the units and undertake tocarry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, ifthe Purchasersustains any loss or damage on account of any breach of the Contract(s) relatedto any or all of the Steam Generators and its auxiliaries, we the Qualified Steam GeneratorManufacturer, *The Indian Joint Venture Company, and the Contractor jointly and severallyundertake to promptly indemnify and pay such losses/ damages caused to the Purchaseron itswritten demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract,in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall notapply to any obligation of the Contractor to indemnify the Purchaserwith respect to patentinfringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, *The Indian Joint Venture Company and the Qualified Steam Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Programs specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company do jointly hereby undertake, declare and confirm that we shall be fully responsible

for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI** awarded to the Bidder/ Contractor or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract.

We, the Contractor, the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or the Indian Manufacturing Company or the Qualified Steam Generator Manufacturer in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, and the Contractor through their authorised representatives have executed

these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s

(BIDDER/ CONTRACTOR)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address) Designation.....

Common Seal of the

Company

For M/s

(Qualified Steam Generator Manufacturer/
Holding Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address) Designation.....

Common Seal of the

Company

For M/s.....

(Indian Subsidiary/Joint Venture
Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

*For M/s

(OTHER PROMOTER)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address) Designation.....

Common Seal of the

Company

Note:

(i) However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI , the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 3.1.1, before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, shall be equally divided among them and shall aggregate to 1.0% of the total contract price.

(ii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

(iii) *Bidder to strike out, whichever is not applicable.

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc.,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING
AS PER CLAUSE 3.5.2 AND NOTE 4 TO CLAUSE 3.0, ITEM 3.0 of EOI
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (INDIAN COMPANY WHO HOLDS ATLEAST 51% EQUITY IN THE JOINT VENTURE COMPANY), THE QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHOALONGWITHITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 of EOI) AND SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/ EXPERIENCE TO THE HOLDING COMPANY, *THE INDIAN JOINT VENTURE COMPANY CREATED FORMANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA

The DEED OF JOINT UNDERTAKING executed on this..... day ofTwo thousand by M/s..... a Company incorporated under the Companies Act having itsRegistered Office at.....(hereinafter called the "Bidder/Contractor", whichexpression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered under having itsRegistered Office at (hereinafter called the "Qualified Steam GeneratorManufacturer/ Holding Company", which expression shall include its successors, administrators,executors and permitted assigns) and

M/s a Company registered under having its RegisteredOffice at, M/s a Company registered under..... having its Registered Office at and M/s..... a Company registered under having its RegisteredOffice at (Subsidiary(ies) of the Holding company who are lending strength/experience to the holding company for meeting the requirements stipulated in clause 3.1.1(A) andhereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors,administrators, executors and permitted assigns) and

*M/s a Company registered in India under the Companies Act of Indiahaving its Registered Office at for manufacturing of supercritical SteamGenerator in India (hereinafter called the "Indian Joint Venture Company / Indian ManufacturingCompany", which expression shall include its successors, administrators, executors and permittedassigns) andin favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600 031 INDIA (hereinafter called "NLC INDIA" or " Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPSII Second Expansion(2X660 MW) Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No. : **XXXXXX**

*AND WHEREAS Clause 3.5.2, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) biddingdocuments stipulatesthat the bidder who meets the requirements stipulated in clause 3.5.1, ITEM 3.0 of EOIsan Indian Company who holds atleast 51% equity in Joint Venture Company for manufacturingsupercritical steam Generator in India shall associate with the Qualified Steam Generator Manufacturermeeting the requirements specified in Clause 3.1.1, and furnish a Deed of Joint Undertaking executed byhim, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or

collectively (along with its subsidiaries) meeting the requirements specified in Clause 3.1.1, Item 3.0 of EOI, Subsidiary(ies) and the Indian Joint Venture Company who meets the requirements stipulated in clause 3.5.1, ITEM 3.0 of EOI. Further as per note 4 ii) of clause 3.0, Item 3.0 of EOI, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW) Neyveli**, against the Purchaser's Bidding Documents No. **XXXXXX**.

*WHEREAS M/s (Bidder) and the M/s (Qualified Steam Generator Manufacturer) as the promoters, have set up a Joint Venture Company (M/s Name of the JV Company) (hereinafter called the "Joint Venture Company/ Indian Manufacturing Company") incorporated in India under the Companies act, for manufacturing of supercritical Steam Generator sets meeting the requirements of Clause 3.5.1 of the Qualifying Requirements, ITEM 3.0 of EOI .

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Joint Venture Company are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Joint Venture Company are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Joint Venture Company do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Joint Venture Company do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Joint Venture Company, and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever.

Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Joint Venture Company hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, The Indian Joint Venture Company, Subsidiary(ies) and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation.

It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Joint Venture Company, nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Joint Venture Company, and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Joint Venture Company do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Joint Venture Company do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Joint Venture Company do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired supercritical Steam Generator (of the type, size and rating specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Joint Venture Company do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Joint Venture Company do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of all the equipment/ component covered under the Contract(s) for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI** awarded to the Bidder/ Contractor or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract.

We, the Contractor, the Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Joint Venture Company do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/ Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EOI shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or the Qualified Steam Generator Manufacturer or Subsidiary(ies) or the Indian Manufacturing Company in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, Subsidiary(ies), *The Indian Joint Venture Company and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s

(BIDDER/CONTRACTOR)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address) Designation.....

Common Seal of the
Company

For M/s.....

(Qualified Steam Generator Manufacturer/
Holding Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the
Company.....

For M/s

(SUBSIDIARY 1 OF HOLDING COMPANY)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the
Company

For M/s
(SUBSIDIARY 2 OF HOLDING COMPANY)
WITNESS :

1.
(Signature of the Authorised
Representative)
..... Name.....
(Official Address)
Designation.....
Common Seal of the
Company

For M/s
(SUBSIDIARY 3 OF HOLDING COMPANY)
WITNESS :

1.
(Signature of the Authorised
Representative)
..... Name.....
(Official Address)
Designation.....
Common Seal of the
Company

*For M/s.....
(Indian Manufacturing Company)

WITNESS :
1.
(Signature of the Authorised
Representative)
..... Name
(Official Address) Designation.....
Common Seal of the
Company.....

Note:

(i) However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength / experience to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI

before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, shall be equally divided among them and shall aggregate to 1.0% of the total contract price.

(ii) Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

(iii) *Bidder to strike out, whichever is not applicable.

Annexure 1-
Scope for “Steam Generator & Auxiliaries” package

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc.,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING
AS PER CLAUSE 3.5.2, AND NOTE *7 & *8 OF CLAUSE 3.0 OF ITEM 3.0 of EOI**

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (INDIAN COMPANY WHO HOLDS ATLEAST 51% EQUITY IN THE JOINT VENTURE COMPANY DIRECTLY OR THROUGH ITS SUBSIDIARY AS PER NOTE 7 OF CLAUSE 3.0), *WHOLLY OWNED SUBSIDIARY OF BIDDER AS PER NOTE 7 OF CLAUSE 3.0, *THE INDIAN JOINT VENTURE COMPANY CREATED FOR MANUFACTURING OF SUPERCRITICAL STEAM GENERATOR IN INDIA, *SUBSIDIARY COMPANY OF ABOVE INDIAN JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 FOR CLAUSE 3.0 AND QUALIFIED STEAM GENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 3.1.1 ITEM 3.0 of EOI

The DEED OF JOINT UNDERTAKING executed on this..... day ofTwo thousand by M/s..... a Company incorporated under the Companies Act having its Registered Office at.....(hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

*M/s....., a Company incorporated under having its Registered Office at (hereinafter called the "Wholly owned Subsidiary Company of Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered under having its Registered Office at (hereinafter called the "Qualified Steam Generator Manufacturer", which expression shall include its successors, administrators, executors and permitted assigns), and

M/s a Company registered in India under the Companies Act of India having its Registered Office at for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company / Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and M/s....., a Company incorporated under..... registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at..... (hereinafter called the "Subsidiary Company of Indian JV Company", which expression shall include its successors, administrators, executors and permitted assigns) and in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or " Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPSII Second Expansion(2X660 MW) Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: XXXXXX.

*AND WHEREAS Clause 3.5.2 and note no. *7 of clause 3.0 ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulates that the bidder, who meets the requirements stipulated in clause 3.5.1, ITEM 3.0 of EOI as an Indian Company who holds atleast 51% equity in Joint Venture

Company for manufacturing supercritical steam Generator in India shall associate with the Qualified Steam Generator Manufacturer meeting the requirements specified in Clause 3.1.1, and furnish a Deed of Joint Undertaking executed by him, *Wholly owned Subsidiary Company of Bidder/Contractor, the Qualified Steam Generator Manufacturer meeting the requirements specified in Clause 3.1.1 and the Indian Joint Venture Company who meets the requirements stipulated in clause 3.5.1, ITEM 3.0 of EOI. Further as per note 8 of clause 3.0, ITEM 3.0 of EOI, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW) Neyveli** against the Purchaser's Bidding Documents No. XXXXXX .

*WHEREAS M/s (Bidder), *M/s (Wholly Owned Subsidiary Company of the Bidder) and M/s (Qualified Steam Generator Manufacturer) as the promoters, have set up a Joint Venture Company (M/s Name of the JV Company) (hereinafter called the "Joint Venture Company/ Indian Manufacturing Company") incorporated in India under the Companies act, for manufacturing of supercritical Steam Generator sets through M/s (Indian JV Company/*Subsidiary of JV Company/) , meeting the requirements of Clause 3.5.1 (a) of the Qualifying Requirements, ITEM 3.0 of EOI.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries,

including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company, and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever.

Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of *the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, the *Subsidiary Company of Indian Manufacturing Company, *The Indian Joint Venture Company hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company, nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company, and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the

Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and ratings specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) for **Steam Generator & Auxiliaries Package for TPSII Second Expansion (2X660 MW), Neyveli** awarded to the Bidder/ Contractor or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract. We, the Contractor, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantee as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety(90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or the Indian Manufacturing Company or *Wholly owned Subsidiary Company of Bidder/Contractor or the *Subsidiary Company of Indian Manufacturing Company or the Qualified Steam Generator Manufacturer in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company, and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s

(BIDDER/ CONTRACTOR)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s

(*WHOLLY OWNED SUBSIDIARY OF BIDDER/ CONTRACTOR)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company
For M/s
(Qualified Steam Generator Manufacturer)
WITNESS :

1.
(Signature of the Authorised
Representative)

..... Name.....
(Official Address) Designation.....
Common Seal of the
Company

*For M/s.....
(Indian Joint Venture Company)

WITNESS :

1.
(Signature of the Authorised
Representative)

..... Name
(Official Address) Designation.....
Common Seal of the
Company.....

For M/s.....
(*Subsidiary of Indian Joint Venture
Company)

WITNESS :

1.
(Signature of the Authorised
Representative)

..... Name
(Official Address) Designation.....
Common Seal of the
Company.....

Note:

1. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

2. * Strikeout whichever is not applicable.

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc.,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING
AS PER CLAUSE 3.5.2 AND NOTE 4 AND NOTE *7 & *8 TO CLAUSE 3.0, ITEM 3.0 of EOI
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (INDIAN COMPANY WHO HOLDS AT LEAST 51% EQUITY IN THE JOINT VENTURE COMPANY DIRECTLY OR THROUGH ITS SUBSIDIARY AS PER NOTE 7 OF CLAUSE 3.0), *WHOLLY OWNED SUBSIDIARY OF BIDDER AS PER NOTE 7 OF CLAUSE 3.0, THE INDIAN JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 3.5.1, ITEM 3.0 of EOI, *SUBSIDIARY COMPANY OF ABOVE INDIAN SUBSIDIARY/ JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 FOR CLAUSE 3.0, QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 of EOI)

The DEED OF JOINT UNDERTAKING executed on this..... day of Two thousand by M/s..... a Company incorporated under the Companies Act having its Registered Office at..... (hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

*M/s....., a Company incorporated under having its Registered Office at (hereinafter called the "Wholly owned Subsidiary Company of Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered under having its Registered Office at (hereinafter called the "Qualified Steam Generator Manufacturer/ Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered under the Companies Act of India having its Registered Office at for manufacturing of supercritical Steam Generator in

India (hereinafter called the "Indian Joint Venture Company / Indian Manufacturing Company", which

expression shall include its successors, administrators, executors and permitted assigns) and

*M/s....., a Company incorporated under registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at

..... (hereinafter called the "Subsidiary Company of Indian Subsidiary / Joint Venture Company", which expression shall include its successors, administrators, executors and permitted assigns) and

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or "Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW) Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.:XXXXXX.

*AND WHEREAS Clause 3.5.2 and note no.*7 of clause 3.0, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulates that the bidder who meets the requirements stipulated in clause 3.5.1,

ITEM 3.0 of EOI as an *Indian Company who holds atleast 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India shall associate with the Qualified Steam Generator Manufacturer meeting the requirements specified in Clause 3.1.1, and furnish a Deed of Joint Undertaking executed by him, *Wholly owned Subsidiary Company of Bidder/Contractor, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (alongwith its subsidiaries) meeting the requirements specified in Clause 3.1.1, ITEM 3.0 of EOI and the Indian Joint Venture Company who meets the requirements stipulated in clause 3.5.1, ITEM 3.0 of EOI. Further as per note 4 iii) of clause 3.0, ITEM 3.0 of EOI, the Holding Company, as a Qualified Steam Generator Manufacturer, shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 3.0, ITEM 3.0 of EOI, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW) Neyveli**, against the Purchaser's Bidding Documents No. **XXXXXX**.

*WHEREAS M/s (Bidder), *M/s (Wholly Owned Subsidiary Company of the Bidder) and M/s (Qualified Steam Generator Manufacturer) as the promoters, have set up a Joint Venture Company (M/s Name of the JV Company) (hereinafter called the "Joint Venture Company/ Indian Manufacturing Company") incorporated in India under the Companies act, for manufacturing of supercritical Steam Generator sets through M/s (Indian JV Company/*Subsidiary of JV Company/) , meeting the requirements of Clause 3.5.1 of the Qualifying Requirements, ITEM 3.0 of EOI

AND WHEREAS the Bidder, *the Wholly owned subsidiary of the Bidder, the Qualified Steam Generator Manufacturer, the Joint Venture Company, *the Subsidiary Company of the JV Company are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally responsible and bound unto the Purchaser for the successful performance of the Contract, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary

Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company, and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC). The liability of *the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, the *Subsidiary Company of Indian Manufacturing Company, *The Indian Joint Venture Company hereunder shall, however, be limited to an amount calculated @ **65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company, nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company, the *OTHER PROMOTER and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buck-stay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam

Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and ratings specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) for **Steam Generator & Auxiliaries Package for TPSII Second Expansion (2X660 MW) Neyveli** awarded to the Bidder/ Contractor or completion of the Phased Manufacturing

Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract. We, the Contractor, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantee as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or the Indian Manufacturing Company or *Wholly owned Subsidiary Company of Bidder/Contractor or the *Subsidiary Company of Indian Manufacturing Company or the Qualified Steam Generator Manufacturer in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract. IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company, and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s

(BIDDER/ CONTRACTOR)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)
Designation.....
Common Seal of the
Company
For M/s
(*WHOLLY OWNED SUBSIDIARY
OF BIDDER/ CONTRACTOR)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)
Designation.....
Common Seal of the
Company
For M/s.....

(*Subsidiary of Joint Venture Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....
Common Seal of the
Company.....
For M/s

(Qualified Steam Generator Manufacturer/Holding Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address) Designation.....
Common Seal of the
Company
*For M/s.....

(Indian Joint Venture Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....
Common Seal of the
Company.....

Note: 1.

*****However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength /experience to the Holding Company for fulfilment of requirement of clause 3.1.1, before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, shall be equally divided among them and shall aggregate to 1.0% of the total contract price.***

2. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

3.* Bidder to strike out, whichever is not applicable.

**Annexure 1-
Scope for “Steam Generator & Auxiliaries” package**

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc.,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING
AS PER CLAUSE 3.5.2 AND NOTE 4 AND NOTE *7 & *8 TO CLAUSE 3.0, ITEM 3.0 of EOI
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR (INDIAN COMPANY WHO HOLDS AT LEAST 51% EQUITY IN THE JOINT VENTURE COMPANY DIRECTLY OR THROUGH ITS SUBSIDIARY AS PER NOTE 7 OF CLAUSE 3.0), *WHOLLY OWNED SUBSIDIARY OF BIDDER AS PER NOTE 7 OF CLAUSE 3.0, THE INDIAN JOINT VENTURE COMPANY MEETING THE REQUIREMENT OF CLAUSE 3.5.1, ITEM 3.0 of EOI, *SUBSIDIARY COMPANY OF ABOVE INDIAN JOINT VENTURE COMPANY FOR MANUFACTURING SUPER CRITICAL STEAM GENERATOR IN INDIA AS PER NOTE 8 FOR CLAUSE 3.0, QUALIFIED STEAM GENERATOR MANUFACTURER (HOLDING COMPANY WHO ALONG WITH ITS SUBSIDIARIES MEETS THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 OF EOI), SUBSIDIARIES OF HOLDING COMPANY LENDING STRENGTH/EXPERIENCE TO THE HOLDING COMPANY,

The DEED OF JOINT UNDERTAKING executed on this..... day of Two thousand by M/s

..... a Company incorporated under the Companies Act having its Registered Office at (hereinafter called the "Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

*M/s....., a Company incorporated under having its

Registered Office at (hereinafter called the "Wholly owned Subsidiary Company of Bidder/Contractor", which expression shall include its successors, administrators, executors and permitted assigns) and

*M/s....., a Company incorporated under registered for manufacturing of Supercritical Steam Generator in India, having its Registered Office at (hereinafter called the "Subsidiary Company of Indian JV Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered under having its Registered Office at (hereinafter called the "Qualified Steam Generator Manufacturer/ Holding Company", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered under having its Registered Office at M/s a Company registered under having its Registered Office at and M/s..... a Company registered under having its Registered Office at (Subsidiary(ies) of the Holding company who are lending strength/experience to the holding company for meeting the requirements stipulated in clause 3.1.1(A) and hereinafter collectively called the "Subsidiary(ies)", which expression shall include its successors, administrators, executors and permitted assigns) and

M/s a Company registered in India under the Companies Act of India having its Registered Office at for manufacturing of supercritical Steam Generator in India (hereinafter called the "Indian Joint Venture Company / Indian Manufacturing Company", which expression shall include its successors, administrators, executors and permitted assigns) and

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or " Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPSII Second Expansion(2X660 MW) Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: XXXXXX.

*AND WHEREAS Clause 3.5.2 and note no. *7 of clause 3.0, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulates that the bidder who meets the requirements stipulated in clause 3.5.1, ITEM 3.0 of EOI as an *Indian Company who holds at least 51% equity in Joint Venture Company for manufacturing supercritical steam Generator in India shall associate with the Qualified Steam Generator Manufacturer meeting the requirements specified in Clause 3.1.1, and furnish a Deed of Joint Undertaking executed by him, *Wholly owned Subsidiary Company of Bidder/Contractor, the Qualified Steam Generator Manufacturer {who is a holding company, singularly or collectively (along with its subsidiaries) meeting the requirements specified in Clause 3.1.1, ITEM 3.0 of EOI and the Indian Joint Venture Company who meets the requirements stipulated in clause 3.5.1, ITEM 3.0 of EOI. Further as per note 4 ii) of clause 3.0, ITEM 3.0 of EOI, the Holding Company and all such subsidiaries lending strength / experience to the Holding Company shall necessarily be part of the DJU being submitted by the Bidder. Further as per note 8 of clause 3.0, ITEM 3.0 of EOI, the manufacturing may, alternatively, be carried out by another subsidiary registered for manufacturing Supercritical Steam Generator in India of the above Indian subsidiary / JV Company and shall necessarily be one of the executants of Deed of Joint Undertaking.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPSII Second Expansion(2X660 MW) Neyveli**, against the Purchaser's Bidding Documents No. XXXXXX.

*WHEREAS M/s (Bidder), *M/s (Wholly Owned Subsidiary Company of the Bidder) and M/s (Qualified Steam Generator Manufacturer) as the promoters, have set up a Joint Venture Company (M/s Name of the JV Company) (hereinafter called the "Joint Venture Company/ Indian Manufacturing Company") incorporated in India under the Companies act, for manufacturing of supercritical Steam Generator sets through M/s (Indian JV Company/*Subsidiary of JV Company) , meeting the requirements of Clause 3.5.1 of the Qualifying Requirements, ITEM 3.0 of EOI.

AND WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the contract for the scope related to Steam Generator and auxiliaries for **TPS II Second Expansion (2X660 MW), NEYVELI (As per Annexure-I)**, fully meeting the stipulated technical requirements, and Guaranteed parameters and characteristics as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

AND FURTHER WHEREAS the Bidder, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful implementation of the Phased Manufacturing Program and transfer of technology in accordance with the bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the execution and successful performance of the contract for the scope related to Steam Generator and auxiliaries including satisfactory thermal performance of Steam Generator and its auxiliaries and achievement of all guaranteed parameters of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the contract for the scope related to Steam Generator and auxiliaries, including its satisfactory thermal performance and achievement of all guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract(s) related to any or all of the Steam Generators and its auxiliaries, we the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company, and the Contractor jointly and severally undertake to promptly indemnify and pay such losses/ damages caused to the Purchaser on its written demand without any demur, reservation, contest or protest in any manner whatsoever. Determination of losses/ damages shall be in line with provisions on Limitation of Liability of the said Contract(s).

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), the *Subsidiary Company of Indian Manufacturing Company, *The Indian Joint Venture Company hereunder shall, however, be limited to an amount calculated **@ 65% of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/ Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company and the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies) hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Qualified Steam Generator Manufacturer for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Qualified Steam Generator Manufacturer, *The Indian Subsidiary/Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company, *Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company, nor any extension of time or any relaxation given by the

Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company, and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Qualified Steam Generator Manufacturer shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/drawings and manufacturing drawings for all the lignite fired Steam Generators; selection of their auxiliaries and interfacing/ integrating all Steam Generators with their auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators and auxiliaries as well as thermal performance meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract(s).

b) We, the Qualified Steam Generator Manufacturer shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators as well as design of structural/supporting system, buckstay system etc.
- (ii) Selection of auxiliaries for all Steam Generators
- (iii) Design of controls, protections and interlocks for all the Steam Generators and their auxiliaries for their safe and reliable operation as integral units with other equipments of the Main Plant
- (iv) Providing all design data required by the Contractor to carry out design/selection of balance equipment/ system for Steam Generators & auxiliaries and for their proper interfacing and integration.
- (v) Providing the design for the beater wheel mills for pulverizing lignite.

Further, we, the Qualified Steam Generator Manufacturer shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's works and/ or at Purchaser's project site. Without prejudice to the overall responsibilities of the Qualified Steam Generator Manufacturer for successful commissioning and performance of the Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall depute its technical experts from time to time to the Contractor's works/ Purchaser's project site, as mutually agreed upon between the Purchaser and the Contractor in accordance with the stipulation of the Contracts.

c) We, the Qualified Steam Generator Manufacturer will supply equipment/ components manufactured at our works or at our vendor's works as per requirements/ schedules specified in the Contracts.

d) We, the Qualified Steam Generator Manufacturer will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in all the Steam Generators and auxiliaries. For the items to be manufactured by the contractor at his/ or his vendor's works as per the Qualified Steam Generator Manufacturer's design, the Qualified Steam Generator Manufacturer shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at Qualified Steam Generator Manufacturer's works and shall meet Qualified Steam Generator Manufacturer's approval/ acceptance.

e) The Contractor shall be responsible to manufacture portion of the equipment which are to be manufactured at its works or its vendor's works as per the Qualified Steam

Generator Manufacturer's design and to the Qualified Steam Generator Manufacturer's quality acceptance level (to be finalised before Notification of Award). Further, the contractor shall erect, commission and carry out the guarantee tests of all the Steam Generators and auxiliaries as per the contract in accordance with the Qualified Steam Generator Manufacturer's advice, procedure and guidance. In case, there is any need to modify the design/ drawings/ procedure in certain areas, the Contractor shall seek specific approval of Qualified Steam Generator Manufacturer before proceeding further.

f) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators and auxiliaries meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators and auxiliaries, the Qualified Steam Generator Manufacturer shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators and auxiliaries under all the Contracts directly to the Purchaser and the Contractor and Qualified Steam Generator Manufacturer shall promptly carry out all corrective measures and modifications (as suggested by the Qualified Steam Generator Manufacturer and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Qualified Steam Generator Manufacturer shall demonstrate the successful performance of the Steam Generators and auxiliaries meeting the guaranteed parameters and demonstration parameters.

4. We the Contractor, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for successful implementation of the Phased Manufacturing Program specified in the said Contract(s).

5. We, the Contractor, Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do jointly hereby undertake, declare and confirm that we shall be fully responsible for indigenizing the manufacturing of lignite fired supercritical Steam Generator sets in India in a phased manner in accordance with the Phased Manufacturing Program specified in the said Contract(s).

6. We, the Contractor, Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do jointly hereby undertake, declare and confirm that we shall be fully responsible for ensuring that transfer of the technological know-how for lignite fired super critical Steam Generator (of the type, size and ratings specified in the Contract(s)) in the form of complete transfer of design dossier, design software's, drawings and documentation and quality system manuals is transferred to the Contractor as per the Contract(s).

7. We, the Contractor, Qualified Steam Generator Manufacturer, *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do further undertake, declare and confirm that we shall be fully responsible for ensuring that relevant training is imparted to the personnel of the Indian Manufacturing Company as part of the technology transfer agreement.

8. We, the Contractor, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do hereby undertake and confirm

that this Deed of Joint Undertaking shall be initially valid till ninety (90) days beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) for **Steam Generator & Auxiliaries Package for TPSII Second Expansion (2X660 MW), Neyveli** awarded to the Bidder/ Contractor or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 24 months from the scheduled end of warranty period of the last unit under the Contract. We, the Contractor, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantee as well as other obligations of the Contractor in terms of the Contract(s).

9. In case of award, in addition to the Contract Performance Guarantees to be furnished by the bidder/Contractor, the on demand Bank Guarantees in favour of the Purchaser as specified in Qualifying Requirements stipulated at ITEM 3.0 of EO shall be furnished.

The aforesaid bank guarantees shall be unconditional, irrevocable and initially valid till ninety (90) days beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) or completion of the Phased Manufacturing Program under the Contract(s), whichever occurs later. In case of delay in completion of the warranty period under the Contract(s) or delay in the completion of the Phased Manufacturing Program beyond the aforesaid period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 27 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

10. Any dispute that may arise between the Purchaser and the Contractor or the Indian Manufacturing Company or *Wholly owned Subsidiary Company of Bidder/Contractor or Subsidiary(ies) or the *Subsidiary Company of Indian Manufacturing Company or the Qualified Steam Generator Manufacturer in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

11. That this Deed of Joint Undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Qualified Steam Generator Manufacturer, *Wholly owned Subsidiary Company of Bidder/Contractor, Subsidiary(ies), *The Indian Joint Venture Company, the *Subsidiary Company of Indian Manufacturing Company, and the Contractor through their authorised representatives have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s
(BIDDER/CONTRACTOR)
WITNESS :

1.
(Signature of the Authorised
Representative)
..... Name.....
(Official Address)
Designation.....
Common Seal of the
Company
For M/s
(*WHOLLY OWNED SUBSIDIARY OF BIDDER/ CONTRACTOR)
WITNESS :

1.
(Signature of the Authorised
Representative)
..... Name.....
(Official Address)
Designation.....
Common Seal of the
Company
For M/s
(Qualified Steam Generator Manufacturer/Holding Company)
WITNESS :

1.
(Signature of the Authorised
Representative)
..... Name.....
(Official Address) Designation.....
Common Seal of the
Company
For M/s
(SUBSIDIARY 1 OF HOLDING COMPANY)
WITNESS :

1.
(Signature of the Authorised
Representative)
..... Name.....
(Official Address) Designation.....
Common Seal of the
Company
For M/s
(SUBSIDIARY 2 OF HOLDING COMPANY)
WITNESS :

1.
(Signature of the Authorised
Representative)
..... Name.....

(Official Address) Designation.....

Common Seal of the

Company

For M/s

(SUBSIDIARY 3 OF HOLDING COMPANY)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

*For M/s.....

(Indian Joint Venture Company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

For M/s.....

(*Subsidiary of Joint Venture
Company/Indian Manufacturing company)

WITNESS :

1.

(Signature of the Authorised
Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

Note:

1. However, in case the Holding Company anticipates change of management control of any of its subsidiaries lending strength/ experience for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, the Holding Company shall arrange for signing of DJU and bank guarantees from all such subsidiaries lending strength /experience to the Holding Company for fulfilment of requirement of clause 3.1.1, before the change in management control actually occurs, in addition to the bank guarantee already furnished by the Holding Company. Such bank guarantees to be furnished by all the entities lending support to the Holding Company for fulfilment of requirement of clause 3.1.1, ITEM 3.0 of EOI, shall be equally divided among them and shall aggregate to 1.0% of the total contract price.

2. Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

3.* Bidder to strike out, whichever is not applicable.

Annexure 1-
Scope for “Steam Generator & Auxiliaries” package

Scope for steam generator and auxiliaries shall cover the following but not limited, for the purpose of Deed of Joint Undertaking (DJU):

1. Steam Generator(s) complete with all associated auxiliaries including power cycle piping/critical steam piping, including Selective Catalytic Reduction system (SCR)
2. Complete pressure parts, Integral piping, mounting and fittings, Start-up & circulation system, including blow down tanks
3. Air & flue gas system covering complete draft plant including, ducts, dampers, RAPHs& SCAPHs, FD & ID and other fans etc.,
4. Lignite Bunkers and bunker bay structures, Lignite feeders, lignite preparation, drying and beater wheel milling and complete Lignite firing system including burners
5. Fuel oil unloading system (for HFO, LDO), Fuel oil pressurizing system, Complete Fuel oil firing system including oil burners & scanners etc.
6. Bottom ash handling system, including After Burning Grates, Slag Conveyors and allied system equipment
7. Electrostatic Precipitators (ESP), ESP Control Room with passenger Elevator
8. All structural steel structures for SG and Auxiliaries, including platforms, stairs, galleries, walkways, roofing, piping, valves, supports etc.
9. Auxiliary Boiler
10. Piping & other systems including,
 - Auxiliary steam piping
 - Low pressure piping
 - Equipment cooling water system
 - Boiler fill system
 - Aux PRDS
 - Chemical LP Dosing system and oxygenated treatment system
 - Service and potable water System
 - Equipment Cooling Water System
 - Pipe & Cable racks
 - AC & Ventilation System
 - Plant & Instrument Air Systems
11. Soot blowing system with lances, steam soot blowers, piping, valves, controls etc.
12. Refractory, Thermal Insulation and Cladding
13. Vibration Isolation & Spring System
14. Complete civil & structural works for steam generator & auxiliaries
15. Complete Electrical systems including Motors of all Auxiliaries, Transformers and Electric Actuators etc
16. Complete control and instrumentation Systems for the steam generator & its auxiliaries including protection and burner management system

**FORM OF DEED OF JOINT UNDERTAKING
AS PER NOTE 5 TO CLAUSE 3.0, ITEM 3.0 of EOI
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER(SUPERCritical STEAMGENERATOR MANUFACTURER) MEETING THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 OF EXPRESSION OF INTEREST PARTIALLY AND INTENDING TO QUALIFY AS PER NOTE (5) TO CLAUSE NO.3.0, ITEM 3.0 OF EXPRESSION OF INTEREST AND THE VARIABLE PRESSURE DESIGN TECHNOLOGY OWNER (LICENSOR) MEETING THE REQUIREMENT OF NOTE (5) TO CLAUSE NO.3.0, ITEM 3.0 OF EOI

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s a Company incorporated under having its Registered Office at.....(hereinafter called the Technology Owner/ Licensor, which expression shall include its successors, administrators, executors and permitted assigns), and

M/s a Company registered under the having its Registered Office at (hereinafter called the "Bidder/Contractor"/Supercritical Steam Generator Manufacturer, which expression shall include its successors, administrators, executors and permitted assigns) in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or " Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPSII Second Expansion(2X660 MW) Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: **XXXXXX**.

*AND WHEREAS Note (5) to Clause 3.0, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulates that the bidder who meets the requirements stipulated in clause 3.1.1, ITEM 3.0 of EOI partially shall associate with the Licensor who satisfies the qualification requirements specified in Note (5) to Clause 3.0, ITEM 3.0 of EOI and furnish a Deed of Joint Undertaking.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPSII Second Expansion (2X660MW) Neyveli**, against the Purchaser's Bidding Documents No. **XXXXXX** .

AND WHEREAS M/s (Bidder) meets the requirement of clause 3.1.1, item no. 3.0 of EOI except that the evaporator in the reference steam generator is not designed for variable pressure operation and is designed for constant pressure (Universal Pressure) operation only, and desires to associate with M/s..... (Licensor)..... who is the original technology owner and with whom the bidder has an ongoing license agreement (which covers technology transfer) for design, manufacture, sell, use, service of once through variable pressure supercritical steam generator technology (with evaporator suitable for variable pressure operation in sub-critical and supercritical pressure ranges) and who satisfies the qualification requirements as specified in Note (5) to Clause 3.0, ITEM 3.0 of EOI.

AND WHEREAS the Bidder and the Technology Owner are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the Steam Generators, along with an extended warranty of at least one (01) year over and above what is required as per bidding

documents, fully meeting the stipulated technical requirements, and Guaranteed parameters as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Technology Owner and the Contractor do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the successful performance of complete Steam Generators, along with an extended warranty of at least one (01) year over and above what is required as per bidding documents, including its satisfactory thermal performance of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor, we the Technology Owner do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of complete Steam Generator, including its satisfactory thermal performance and achievement of guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking.

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses GCC and of SCC).

The liability of Technology Owner hereunder shall, however, be limited to an amount calculated @ **26 % of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor and the Qualified Steam Generator Manufacturer hereunder, the analysis/investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Contractor within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Technology Owner for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor before proceeding against the Technology Owner (with respect to obligations and responsibilities of the Technology Owner covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Technology Owner and Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Technology Owner shall be fully responsible for design and engineering of once through thermo dynamic and thermo hydraulic design, furnace, boiler heating surface, start up system so as to ensure satisfactory, reliable, safe and trouble free performance of all Steam Generators.

b) We, the Technology Owner shall be specifically responsible for the following:

(i) Thermal and hydraulic design of lignite fired Steam Generators.

- (ii) Evaporator design including flow distribution, temperature
- (iii) Metal temperatures and stresses, static stability and dynamic stability
- (iv) Providing all design data required by the Contractor to carry out design of steam water separator for their proper interfacing and integration.
- (v) Complete water wall system design, its supporting system and buck-stay design
- (vi) Complete design of start-up drain and circulation system.

c) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor fails to demonstrate during the guarantee tests that the Steam Generators meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators, the Technology Owner shall promptly provide all technical assistance/services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators under all the Contracts directly to the Purchaser and the Contractor and Technology Owner shall promptly carry out all corrective measures and modifications (as suggested by the Technology Owner and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor and the Technology Owner shall demonstrate the successful performance of the Steam Generators meeting the guaranteed parameters and demonstration parameters.

4. We, the Contractor and the Technology Owner do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till one (1) year beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW) Neyveli** awarded to the Bidder/ Contractor. In case of delay in completion of the warranty period under the Contract(s) beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 36 months from the scheduled end of warranty period of the last unit under the Contract. We, the Contractor and the Technology Owner do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantee as well as other obligations of the Contractor in terms of the Contract(s).

5. In case of award, in addition to the Contract Performance Guarantees to be furnished by the Contractor, the Technology Owner shall furnish as security on demand Performance Bank Guarantee(s) in favour of the Purchaser as per provisions of the bidding documents. The value of each such Bank Guarantee shall be equal to **0.1% of the contract price** and it shall be a guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and initially valid till one (1) year beyond the scheduled date of completion of warranty period of all the equipment/ component under the Contract(s) for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI** awarded to the Bidder/ Contractor. In case of delay in completion of the warranty period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 39 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

6. Any dispute that may arise between the Purchaser and Contractor or the Technology Owner in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents.

This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

7. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Bidder and the Licensor through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s

(Bidder/ Contractor)

WITNESS :

1.

(Signature of the Authorised

Representative)

..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s.....

(Technology Owner/ Licensor)

WITNESS :

1.

(Signature of the Authorised

Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

Note: Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

**FORM OF DEED OF JOINT UNDERTAKING
AS PER NOTE 5 TO CLAUSE 3.0, ITEM 3.0 of EOI
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER, SUPERCRITICAL STEAMGENERATOR MANUFACTURER MEETING THE REQUIREMENT OF CLAUSE 3.1.1, ITEM 3.0 OF EXPRESSION OF INTEREST PARTIALLY AND INTENDING TO QUALIFY AS PER NOTE (5) TO CLAUSE NO. 3.0, ITEM 3.0 OF EXPRESSION OF INTEREST AND THE VARIABLE PRESSURE DESIGN TECHNOLOGY OWNER (LICENSOR) MEETING THE REQUIREMENT OF NOTE (5) TO CLAUSE NO. 3.0, ITEM 3.0 OF EOI

The DEED OF JOINT UNDERTAKING executed on thisday ofTwo thousand by M/s..... a Company incorporated under having its Registered Office at.....(hereinafter called the Bidder/ Contractor, which expression shall include its successors, administrators, executors and permitted assigns), and

M/s a Company incorporated under having its Registered Office at.....(hereinafter called the Supercritical Steam Generator Manufacturer, which expression shall include its successors, administrators, executors and permitted assigns), and

M/s a Company incorporated under having its Registered Office at.....(hereinafter called the "Technology Owner"/ "Licensor", which expression shall include its successors, administrators, executors and permitted assigns

in favour of NLC INDIA Ltd., a Government of India Enterprise incorporated under the Companies Act, having its Registered Office at First Floor, No 8, Mayor Satya Murthy Road, FSD, Egmore Complex of Food Corporation of India, Chetpet, Chennai- 600031 INDIA (hereinafter called "NLC INDIA" or " Purchaser " which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for the **Steam Generator & Auxiliaries Package for TPSII Second Expansion (2X660 MW) Neyveli** (hereinafter referred to as "Plant") vide its Bidding Document No.: **XXXXXX**

AND WHEREAS Note (5) to Clause 3.0, ITEM 3.0 of EXPRESSION OF INTEREST (EOI) bidding documents stipulates that the Bidder and the Supercritical Steam Generator Manufacturer who meets the requirements stipulated in clause 3.1.1, ITEM 3.0 of EOI partially shall associate with the Licensor who satisfies the qualification requirements specified in Note (5) to Clause 3.0, ITEM 3.0 of

EOI and furnish a Deed of Joint Undertaking.

WHEREAS M/s (Bidder) is submitting its proposal in response to the aforesaid Invitation for Bid by the Purchaser for **Steam Generator & Auxiliaries Package for TPSII Second Expansion (2X660 MW)**, against the Purchaser's Bidding Documents No. **XXXXXX**.

AND WHEREAS M/s (Supercritical Steam Generator Manufacturer) meets the requirement of clause 3.1.1, item no. 3.0 of EOI except that the evaporator in the reference steam generator is not designed for variable pressure operation and is designed for constant pressure (Universal Pressure) operation only, and desires to associate with M/s..... (Licensor) who is the original technology owner and with whom the Supercritical Steam Generator Manufacturer has an ongoing license agreement (which covers technology transfer) for design, manufacture, sell, use, service of once through variable pressure supercritical steam generator technology (with evaporators suitable for variable pressure operation in sub-critical and supercritical pressure ranges) and who satisfies the qualification requirements as specified in Note (5) to Clause 3.0, ITEM 3.0 of EOI.

AND WHEREAS the Bidder, the Supercritical Steam Generator Manufacturer and the Technology Owner are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Purchaser for the successful performance of the Steam Generators, along with an extended warranty of at least one (01) year over and above what is required as per bidding documents, fully meeting the stipulated technical requirements, and Guaranteed parameters as per bidding documents, in the event, the Bid is accepted by the Purchaser resulting into a Contract/ Contracts.

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. That in consideration of the award of the Contract(s) by the Purchaser to the Contractor, we the Contractor, Technology Owner and the Supercritical Steam Generator Manufacturer do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the successful performance of complete Steam Generators, along with an extended warranty of at least one (01) year over and above what is required as per bidding documents, including its satisfactory thermal performance of all the units, as specified under the said Contract(s) to the satisfaction of the Purchaser.

2. In case of any breach of the Contract(s) committed by the Contractor and the Supercritical Steam Generator Manufacturer, we the Technology Owner do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of complete Steam Generator, including its satisfactory thermal performance and achievement of guaranteed parameters, of all the units and undertake to carry out all obligations and responsibilities under this Deed of Joint Undertaking.

2.1 The aggregate liability of the Bidder/Contractor to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price of **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI**, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Purchaser with respect to patent infringement as per provisions of bidding documents (relevant clauses of GCC and SCC).

The liability of the Technology Owner hereunder shall, however, be limited to an amount calculated **@ 26 % of contract price of Steam Generators & Auxiliaries package** to be supplied by the Bidder/Contractor. This is without prejudice to any right of Purchaser against the Contractor under the Contract and all guarantees.

Without prejudice to the joint and several obligations of the Contractor, Supercritical Steam Generator Manufacturer and the Qualified Steam Generator Manufacturer hereunder, the analysis/ investigations of the non-performance of the equipment manufactured by the Contractor may initially be carried out by the Supercritical Steam Generator Manufacturer within a period of 15 days from the date of reference of the problem by the Purchaser, before the Purchaser approaches the Technology Owner for any such analysis/ investigation. It shall not be necessary or obligatory for the Purchaser to first proceed against the Contractor or the Supercritical Steam Generator Manufacturer before proceeding against the Technology Owner (with respect to obligations and responsibilities of the Technology Owner covered under this Deed of Joint Undertaking), nor any extension of time or any relaxation given by the Purchaser to the contractor shall prejudice any right of Purchaser under this Deed of Joint Undertaking to proceed against the Technology Owner, Supercritical Steam Generator Manufacturer and the Contractor.

3. Without prejudice to the generality of the undertaking in para '1' above, the manner of achieving the objectives set forth in para '1' above shall be as follows:

a) We, the Technology Owner shall be fully responsible for design and engineering of once through thermodynamic and thermo-hydraulic design, furnace, boiler heating surface, start up system so as to ensure satisfactory, reliable, safe and trouble-free performance of all Steam Generators.

b) We, the Technology Owner shall be specifically responsible for the following:

- (i) Thermal and hydraulic design of lignite fired Steam Generators.
- (ii) Evaporator design including flow distribution, temperature
- (iii) Metal temperatures and stresses, static stability and dynamic stability
- (iv) Providing all design data required by the Contractor to carry out design of steam water separator for their proper interfacing and integration.
- (v) Complete water wall system design, its supporting system and buck-stay design
- (vi) Complete design of start-up drain and circulation system.

c) In the event any problem is encountered during design, manufacture, erection, testing and commissioning or if the Contractor and the Supercritical Steam Generator Manufacturer fails to demonstrate during the guarantee tests that the Steam Generators meet the guaranteed parameters and demonstration parameters as specified in the Contract, including thermal performance of Steam Generators, the Technology Owner shall promptly provide all technical assistance/ services/ support to analyse and suggest corrective measures/ modifications to the equipments/ systems of all the Steam Generators under all the Contracts directly to the Purchaser, the Supercritical Steam Generator Manufacturer and the Contractor, and Technology Owner shall promptly carry out all corrective measures and modifications (as suggested by the Technology Owner and agreed by the Purchaser) for each of their respective equipment / systems supplied by them at their own expense. Thereafter, the Contractor, Supercritical Steam Generator Manufacturer and the Technology Owner shall demonstrate the successful performance of the Steam Generators meeting the guaranteed parameters and demonstration parameters.

4. We, the Contractor, the Supercritical Steam Generator Manufacturer and the Technology Owner do hereby undertake and confirm that this Deed of Joint Undertaking shall be initially valid till one (1) year beyond the scheduled date of completion of the warranty period of the all the equipment/ component covered under the Contract(s) for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI** awarded to the Bidder/ Contractor. In case of delay in completion of the warranty period under the Contract(s) beyond the aforesaid period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. However, this Deed of Joint Undertaking shall terminate at the latest 36 months from the scheduled end of warranty period of the last unit under the Contract.

We, the Contractor, the Supercritical Steam Generator Manufacturer and the Technology Owner do further undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till its validity. We further agree that this Deed of Joint Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract(s).

5. In case of award, in addition to the Contract Performance Guarantees to be furnished by the Contractor, the Technology Owner shall furnish as security on demand Performance Bank Guarantee(s) in favour of the Purchaser as per provisions of the bidding documents. The value of each such Bank Guarantee shall be equal to **0.1% of the contract price** and it shall be guarantee towards the faithful performance/ compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be

unconditional, irrevocable and initially valid till one (1) year beyond the scheduled date of Completion of warranty period of all the equipment/ component under the Contract(s) for **Steam Generator & Auxiliaries Package for TPS II Second Expansion (2X660 MW), NEYVELI** awarded to the Bidder/ Contractor. In case of delay in completion of the warranty period, the validity of this Bank Guarantee shall be extended by such period of delay. However, this bank guarantee shall terminate at the latest 39 months from the scheduled end of warranty period of the last unit under the Contract. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.

6. Any dispute that may arise between the Purchaser and the Contractor of the Qualified Steam Generator Manufacturer or the Technology Owner in connection with this Deed of Joint Undertaking shall be finally settled as per the arbitration procedure/ rules mentioned in the Contract Documents. This deed of undertaking shall be construed and interpreted in accordance with the Laws of India.

7. That this Deed of joint undertaking shall be operative from the effective date of the Contract.

IN WITNESS WHEREOF, the Bidder/ Contractor, the Supercritical Steam Generator Manufacturer and the Licensor / Technology Owner through their authorised representatives, have executed these presents and affixed common seal of their respective companies on the day, month and year first mentioned above.

For M/s

(Bidder/ Contractor)

WITNESS :

1.

(Signature of the Authorised Representative)

..... Name

(Official Address)

Designation

Common Seal of the

Company

For M/s

(Supercritical Steam Generator Manufacturer)

WITNESS :

1.

(Signature of the Authorised

Representative)
..... Name.....

(Official Address)

Designation.....

Common Seal of the

Company

For M/s.....

(Licensor/ Technology Owner)

WITNESS :

1.

(Signature of the Authorised

Representative)

..... Name

(Official Address) Designation.....

Common Seal of the

Company.....

Note: Power of Attorney of the persons signing on behalf of each of the executants is to be furnished by the bidder and attached along with the signed Deed of Joint Undertaking.

Annexure IV- Experience List of Lignite fired Super Critical Boiler by QSGM

Sl No	Name and Address of the plant	Unit Rating MW	No of units	Type of Boiler: Tower / Two pass/ T-Type	Main steam Flow (TPH)	Main steam pressure at superheater outlet ksc (a)	Main steam temperature at superheater outlet Deg C	Steam temperature at Reheater outlet Deg C	Feed Water temperature at Economiser Inlet Deg C	Engineering Scope:CE/BE/DE	Scope of Manufacture, Erection & Commissioning	Commissioning Date

Note:

1. CE-Conceptual Engineering, BE-Basic Engineering, DE-Detail Engineering
2. Scope of Manufacture, Erection & Commissioning: Manufacture/Got Manufactured, Erected/Supervised erection, Commissioned/Supervised Commissioning