

AMENDMENT NO. 3 ... TO TECHNICAL SPECIFICATION (SECTION VI)

S. No.	SPECIFICATION REFERENCE				Existing	Read as
	SEC/PA RT	Sub- Section	Clause No.	PAGE NO.		
1.	IV/Part B	Chapter IVD	19.01.00	34of 37	Cement Fly ash based portland pozzolana cement conforming to IS:1489 (Part-1) shall be used for all areas other than for the critical structures identified below. However, Engineer may allow the use of other types of cement namely, ordinary portland cement & portland slag cement conforming to IS: 269 and IS: 455 respectively under special circumstances on specific request of the bidder and prior approval of the Engineer. Minimum grade of cement shall be Grade 33. Higher grade of portland ordinary cement namely Grade 43 and Grade 53 conforming to IS:8112 and IS:12269 respectively can also be used for specific application. However the ordinary portland cement shall necessarily be used for following structures.	Cement Fly ash based portland pozzolana cement conforming to IS:1489 (Part-1) shall be used for all areas other than for the critical structures identified below. Ordinary Portland Cement (OPC) shall necessarily be used for the following structures. a) Engine foundation b) Spring supported decks of all machine foundations However, Engineer may allow the use of other types of cement namely, ordinary portland cement & portland slag cement conforming to IS: 269 and IS: 455 respectively as mentioned in 'FOUNDATION SYSTEM AND SOIL DATA' chapter of Civil.
2.	Section VI, PART-B	Sub-Chapter- IIIC, Volume- III	Sl. No. 12, clause no. 4.01.00	11,12 of 52	SO₂/NO_x :- Hot-extractive sampling type/ Dilution Extractive/ In-situ (Path) type CO :- Hot-extractive sampling type/ Dilution Extractive/ In-situ (Cross-duct) type. (can be combined with SO₂/NO_x) CO₂ :- Hot-extractive sampling type/ Dilution Extractive/ In-situ (Cross-duct) type (can be combined with CO or SO₂/NO_x above). Stack Opacity :- Extractive type with reheating or dilution. Mercury (Hg) :- Hot extractive type Low temp O₂ & High temp O₂ :- In-situ type Note:- For Hot extractive sampling type and Dilution extractive sampling type system – The components involved in sample handling system shall be imported & further, Sample handling system design shall be vetted by Original Analyzer Manufacturer (OAM). Necessary documents shall be furnished during detailed engineering	SO₂/NO_x :- Hot-extractive sampling type/ Dilution Extractive/ In-situ (Path) type CO :- Hot-extractive sampling type/ Dilution Extractive/ In-situ (Cross-duct) type. (can be combined with SO₂/NO_x) CO₂ :- Hot-extractive sampling type/ Dilution Extractive/ In-situ (Cross-duct) type (can be combined with CO or SO₂/NO_x above). Stack Opacity :- Extractive type with reheating or dilution. Mercury (Hg) :- Hot extractive type Low temp O₂ & High temp O₂ :- In-situ type Note:- For Hot extractive sampling type and Dilution extractive sampling type system – The components involved in sample handling system shall be imported sourced

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					in order to establish the above requirement. Technical expert of OAM shall witness testing of sample handling system and validate it. Alternatively sampling handling system assembled at Original Analyzer manufacturer (OAM) works shall also be accepted.					from Original Analyzer Manufacturer (OAM) approved reputed suppliers having successful trouble free operation duly certified by Original Analyzer Manufacturer (OAM) & further, Sample handling system design shall be vetted by Original Analyzer Manufacturer (OAM). Necessary documents shall be furnished during detailed engineering in order to establish the above requirement. Technical expert of OAM shall witness testing of sample handling system and validate it. Alternatively sampling handling system assembled at Original Analyzer manufacturer (OAM) works shall also be accepted.				
3.	SEC-VI, PART-B	Chapter E-13	1 of 25	1.01.00 (ii)	(ii)	Voltage Ratio (KV)	Voltage (kV) – V/34.5	Ratio – Gen kV	11/0.433 kV	(ii)	Voltage Ratio (KV)	Voltage (kV) – V/34.5	Ratio – Gen kV	33/0.433 kV
4.	SEC-VI, PART-B	Chapter E-13	2 of 25	1.01.00 (xviii)	(xviii) Method of neutral earthing and Vector group (Indicative only/As per system requirement):					(xviii) Method of neutral earthing and Vector group (Indicative only/As per system requirement):				
					KVA RATING	HV RATING (kV)	LV RATING (kV)	Method of Neutral Earthing		KVA RATING	HV RATING (kV)	LV RATING (kV)	Method of Neutral Earthing	
					35000	34.5	11	HV SIDE SHALL BE SOLIDLY GROUNDED.		35000	34.5	11	HV SIDE SHALL BE SOLIDLY GROUNDED.	
					2,500/2,000/1,600/1,000/630	11	0.433	LVN – Solidly Grounded.		2,500/2,000/1,600/1,000/630	33	0.433	LVN – Solidly Grounded.	

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5.	SEC-VI, PART-B	Chapter E- 13	2 of 25	1.01.0 0 (xx)	(xx) Bushing CT Parameters (Indicative only)			deleted				
					SI N O.	Transfor mer Rating	CT Parameters					
							Earth fault CT Class : 5P20		R.E.F.CT Class: PS			
							2.5MVA,1 1/0.433kV			4000/1A, $R_{CT} \leq 15\Omega$, VK $\geq 450V$, $I_m \leq$ 30mA at VK/2		
							2MVA,11/ 0.433kV			3000/1A, $R_{CT} \leq 15\Omega$, VK $\geq 450V$, $I_m \leq$ 30mA at VK/2		
							1.6MVA,1 1/0.433kV			2500/1A, $R_{CT} \leq$ 12.5 Ω , VK $\geq 450V$, I_m $\leq 30mA$ at VK/2		
							1MVA,11/ 0.433kV			1600/1A, $R_{CT} \leq 8\Omega$, VK $\geq 450V$, $I_m \leq$ 30mA at VK/2		
630KVA,1 1/0.433kV		1000/1A, $R_{CT} \leq 5\Omega$, VK $\geq 450V$, $I_m \leq$ 30mA at VK/2										
6.	SEC-VI, PART-B	Chapter E- 13	3 of 25	1.01.0 0 (xxii)	(xxii) Bushing Rated Current (in Amperes)							(xxii) Bushing Rated Current (in Amperes)
					SR. No.	K V A R A T I N G	HV RAT ING (kV)	LV RA TI NG (kV)	HV- Lin e	LV - Li ne	N eu tra l	

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					<table> <tr> <td>b.</td><td>2,000</td><td>11</td><td>0.433</td><td>250</td><td>3150</td><td>3150</td></tr> <tr> <td>c.</td><td>1,600</td><td>11</td><td>0.433</td><td>250</td><td>3150</td><td>3150</td></tr> <tr> <td>d.</td><td>1,000</td><td>11</td><td>0.433</td><td>250</td><td>2000</td><td>2000</td></tr> <tr> <td>e.</td><td>630</td><td>11</td><td>0.433</td><td>250</td><td>1250</td><td>1250</td></tr> </table>	b.	2,000	11	0.433	250	3150	3150	c.	1,600	11	0.433	250	3150	3150	d.	1,000	11	0.433	250	2000	2000	e.	630	11	0.433	250	1250	1250	<table> <tr> <th>SR. No.</th><th>KVA RATING</th><th>H V R A T I N G (k V)</th><th>LV R A T I N G (kV)</th><th>HV- Line</th><th>LV- Line</th><th>Neutra l</th></tr> <tr> <td>a.</td><td>2,000</td><td>33</td><td>0.433</td><td>100</td><td>4000</td><td>4000</td></tr> <tr> <td>b.</td><td>1,600</td><td>33</td><td>0.433</td><td>100</td><td>3150</td><td>3150</td></tr> <tr> <td>c.</td><td>1,000</td><td>33</td><td>0.433</td><td>100</td><td>2000</td><td>2000</td></tr> <tr> <td>d.</td><td>630</td><td>33</td><td>0.433</td><td>100</td><td>1250</td><td>1250</td></tr> </table>	SR. No.	KVA RATING	H V R A T I N G (k V)	LV R A T I N G (kV)	HV- Line	LV- Line	Neutra l	a.	2,000	33	0.433	100	4000	4000	b.	1,600	33	0.433	100	3150	3150	c.	1,000	33	0.433	100	2000	2000	d.	630	33	0.433	100	1250	1250
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7.	VI / B	I (Chapter-M-3)	8 of 8	11.03.00	Valves Type and material of construction of valves in RO skid shall be as per Manufacturer's Standard practice.	Valves Type and material of construction of valves in RO skid shall be as per Manufacturer's Standard practice. Further, other usage valves pertaining to water System portion shall be as per manufacturer's proven practice. However, the same shall be compatible with the respective water/chemical etc.																																																															
8.	VI / A	III	5 of 69	11.02.00 d)	HDPE Piping, butterfly valves, fittings, accessories etc. from sea water intake pumps to Desalination plant.	Piping, butterfly valves, fittings, accessories etc. from sea water intake pumps to Desalination plant.																																																															