

ANNEXURE-3

**TENTATIVE BILL OF MATERIAL OF NITROGEN INJECTION
SYSTEM FOR BHOPAL**

Sl. No.	Description of Transformer / Reactor on which Nitrogen Injection Fire Protection System is to be fitted	Unit	Quantity
			Bhopal
1.	315 MVA 400/220/33 kV Transformer	Nos.	1
2	125 MVAR 3 Phase 400 kV Shunt Reactor	Nos.	0

Sl. No.	Item Description	Unit	Qty.
			Bhopal
1	Fire extinguishing Cabinet with base frame, consisting of: a. Nitrogen Gas cylinder	SET	1
2	Control box	Nos.	1
3	Signal box	Nos.	1
4	Pre-stressed non-return valve (PNRV)/ high speed pneumatically operated ball valve	Nos.	1
5	Fire detectors	Nos.	12
6	Fire survival cables of size 4C X 1.5 mm ²	Mtrs	50
7.1	FRLS cable of size 12C X 1.5 mm ²	Mtrs.	300
7.2	FRLS cable of size 4C X 1.5 mm ²	Mtrs.	100
8	Piping along with supports & fittings between transformer / Reactor, FE cubicle and oil drain pit		
8.1	Oil drainpipe connection between outlet valve provided on transformer / Reactor tank and flange provided on top of FE cubicle.	Mtrs.	12
8.2	Oil drainpipe connection between oil drainpipe bottom (in FE cubicle) to the oil pit.	Mtrs.	6
8.3	Nitrogen injection pipe connection	Mtrs.	18
8.4	50N pipe	Mtrs.	12
9	OIL STORAGE TANK ALONG WITH ASSOCIATED ACCESSORIES.	LOT	1