

Amendment I
Office of The Executive Engineer (Civil-Mtc.-I)
Kota Super Thermal Power Station
Rajasthan Rajya Vidyut Utpadan Nigam Ltd.
Revised G - Schedule

Name of work :- Strengthening and special repair work of RCC structure of cooling tower of unit 6 at KSTPS, Kota.

(Based on CPWD DSR 2014 & CPRI approved rates)

S. No.	BSR Ref.	Particulars	Qty	Rate	Unit	Amount
1	P. 237/ 14.72	Scaffolding :- Providing and fixing double scaffolding system (Cup lock type) on the exterior side of up to seven storied height made with 40mm diameter M.S. tubes 1.5m centre to centre horizontal and vertical tubes joining with cup and lock system with M.S. tubes, M.S. tubes chollies, M.S. clamps and M.S. Staircase system in the scaffolding for working platform etc and maintaining it in a serviceable condition for the required duration as approved and removing it thereafter. The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever require for completion of work at required locations with essential safety features for the workmen etc complete as per the directions and approval of Engineer-In-charge. The elevational area of the scaffolding shall be measured for payment purpose. The payment will be made once irrespective duration of scaffolding. (Note: This item to be used for maintenance work judicially necessary deductions for scaffolding in the existing item to be done)	6400	159.90	sqm	1023360.00
2	P. 220/ 15.56	Chipping :- Dismantling old plaster or loose concrete raking out joints and cleaning the surface for plaster including disposal of rubbish to dumping grounding within 50 meters lead.	3000	20.05	sqm	60150.00
3	Appd. Rate	Sealing of cracks & honey combed patches Providing & applying epoxy patching compound of approved brand as per manufacturers specification for sealing of cracks & honey combed patches including applying bond coat and finishing the surface etc. complete as per direction of Engineer In charge. Epoxy Mortar : Nitobond VF (Fosroc) / Sika Top77 (Sika) or equivalent to be approved by Engineer in charge in writing.	300	433.00	Kg.	129900.00

		Epoxy Bond coat & finish coat: NitobondEP (Fosroc)/Sika Hibond (Sika) or equivalent to be approved by Engineer in charge in writing.				
4	Appd. Rate	<p>Injection Low viscosity Epoxy Grouting</p> <p>Opening the cracks on the surface and sealing the cracks using epoxy putty as per manufacturer's specification (The payment in this item rate is inclusive of Epoxy Putty/Mortar) Drilling holes of 14 mm dia into concrete at a typical spacing of 300-450mm; cleaning the holes; fixing flexible pvc pipe nozzle for grouting purpose; sealing the gap around the nozzle with epoxy putty as per site condition, as per manufacturer's specification etc. complete as directed by engineer-in-charge.</p> <p>Providing and injecting Low viscosity epoxy grout as per manufacturer's specification till the nozzle refuses to take further grout etc. complete as directed by Engineer-In-charge.</p> <p>In case, the said low viscosity epoxy grout does not permeate in to the concrete, proceed with a treatment using the Super low viscosity. Epoxy grout as per manufacturer's specification complete as directed by Engineer-in-charge.</p> <p>Epoxy putty :- Nitocote VF (Fosroc) / Sika Top 77 or equivalent to be approved by Engineer in charge in writing.</p> <p>Epoxy Grout :- Conbextra EP-10 (Fosroc)/ Sika grout / Master inject 1315(BASF) or equivalent to be approved by Engineer in charge in writing.</p>	1500	3000.00	Kg.	4500000.00
5	Appd. Rate	<p>Shear Connectors/Keys</p> <p>Providing and fixing shear connectors ("L" shaped) of 10 mm dia and 125 mm embedding length for fixing new reinforcement by drilling holes of 14 mm dia in concrete. The shear connectors are to be provided in staggered pattern such that new reinforcement shall be properly fixed with the connector in position and subsequently anchored. The anchoring of shear connectors shall be done with suitable epoxy resin hardening system of approved brand following manufacturer's specifications etc. complete as directed by Engineer-in-charge.</p> <p>Epoxy resin hardening system: Lock fix (FOSROC) / Master Flow 935(BASF) / HILTY / CICO Fast or equivalent to be approved by Engineer in charge in writing.</p>	9860	100.00	each	986000.00

6	P. 99/ 5.22A.3	Reinforcement in RCC works for Jacketing with micro concrete. Steel reinforcement for RCC work including straightening, cutting, bending, placing in position & binding all complete up to plinth level. Cold twisted bars	4500	68.10	Kg.	306450.00
7	Appd. Rate	RCC Jacketing with microconcrete Providing and casting Non shrink, Free flow High strength Microconcrete with fixing of required shuttering. The Micro-concrete of approved brand for Jacketing work shall be prepared as per manufacturer's specification etc. complete all as per direction of Engineer-In-Charge. Non shrink, free flow high strength Micro-concrete : Renderloc RG(Fosroc) / Sika Rep Microcrete-4(Sika) / Master Emaco S346 (BASF) or equivalent to be approved by Engineer in charge in writing.	135	43200.00	cum	5832000.00
8	P. 97/ 5.9.1	Form work for Columns & Beams : Centring & Shuttering including strutting, propping etc & removal of form work for RCC columns & beams.	2115	196.45	sqm	415491.75
9	Appd. Rate	Epoxy resin Bond : Providing and applying epoxy resin bond coat of approved brand as per manufacturer's specification before Jacketing with micro-concreting / shotcreting /polymer modified plaster to have perfect bond between old and new surface on prepared old concrete surfaces using nylon brushes etc complete as per the direction of Engineer-In-charge. Epoxy resin Bond : Nitobond EP(Fosroc) / Sika Hibond(Sika) /Masterbrace 1414(BASF) / Concrete Bond (Roff) or equivalent to be approved by Engineer in charge in writing.	1480	985.00	sqm	1457800.00
10	Appd. Rate	Chemically modified fibre reinforced Polymer mortar : Providing & applying chemically modified fibre reinforced mortar with trowel and finishing the smooth surface in layers not exceeding 20mm at a time. The Chemically modified polymer mortar of approved brand shall be prepared as per manufacturer's specification in to which the polymer fiber reinforcement is to be added and uniformly mixed as per Polymer fiber manufacturer specification. The quantity of fiber that shall be added at the rate of 125 gms per 25 Kg of Chemically modified mortar etc. complete as per direction of Engineer-in-charge.	2500	376.00	sqm	940000.00

		Chemically modified Polymer Mortar: RENDERLOC S2 (Fosroc) / SikaTop-122 HS / Master Emco S 348 (BASF) or equivalent to be approved by Engineer in charge in writing.				
11	Appd. Rate	Crack Bridging waterproof Coating Providing and applying Crack bridging water proof flexible coating as per manufacturer's specification of approved brand, manually using brushes on the wet hardened concrete surfaces after cleaning the surface and removing all loose particles/deposits etc. complete as directed by the Engineer-in-charge. Crack bridging Water proof coating : Nitocote CM 210(fosroc) / Sikagard XT White Base(Sika) / Master seal 180(BASF) /MKY Acquafin 2C(MYK SCHOMBURG) or equivalent to be approved by Engineer in charge in writing.	2005	405.00	sqm	812025.00
12	P. AR/ 13.4.1	12mm thick Cement Plastering 12mm thick Cement Plastering in C.M. 1:3 with waterproof coating and addition of synthetic polyester fiber.	12900	172.30	sqm	2222670.00
		Total				18685846.75

Executive Engineer (Civil Mtc-I)
KSTPS, RVUNL, Kota