

PROCUREMENT PLAN AND INDICATIVE CONTRACT PACKAGES FOR PROJECTS 1 AND 2

1. Procurement of goods and services to be financed under the investment program will be carried out in accordance with the Asian Development Bank's (ADB's) *Procurement Guidelines* (2007, as amended from time to time). For such procurement, bid specifications will be prepared in a manner to ensure maximum competition under international competitive bidding.
2. To further facilitate procurement process, the Power Grid Corporation of India Ltd (POWERGRID) will initially prepare a model bidding document for each type of contract package under the Facility, such as transmission towers, conductors, insulators, hardware fittings, and substations, and will seek approval from ADB for such model bidding documents. In preparing such model bidding documents, POWERGRID will follow ADB's *Standard Bidding Document for Procurement of Goods* for supply, erection, and commissioning contracts as well as supply-only contracts, and identify sections of bidding documents that may be specific to each procurement package. Upon ADB's approval of the model bidding documents, POWERGRID will be exempted from ADB's prior approval of its bidding documents provided that (i) such documents are in line with the corresponding model bidding document, and at the time of release of invitation for bid, they are forwarded to ADB for post-facto approval, and (ii) POWERGRID issues amendments to such documents based on comments made by ADB, if any, during the bidding period.
3. Further, POWERGRID may also award contracts of value less than \$10 million in each case without seeking prior approval of ADB, provided that the lowest priced bidder at bid opening is also the recommended bidder for contract award, and further provided that (i) all cases involving unusual issues shall be submitted to ADB for prior approval; and (ii) all cases shall be subject to post-facto approval of ADB, which shall retain the right to disallow utilization of loan proceeds in case it is unable to agree with POWERGRID on either the bidding documents or the bid evaluation report.

Table A7.1: Procurement Plan

Project Information	
Country	India
Name of Borrower	Power Grid Corporation of India Limited
Project Name	National Power Grid Development Investment Plan
Loan Reference	(to be assigned after loan approval)
Date of Effectiveness	(to be indicated after the loan effectiveness)
Amount	Project 1: \$280.8 million Project 2: \$900.5 million
Executing Agency	Power Grid Corporation of India Limited
Approval date of Original Procurement Plan	This is the first procurement plan
Period covered by this plan	Up to 18 months after loan approval
Procurement Threshold: Goods and Related Services, Works, and Supply and Install	
Procurement Mode	To be used for Contract Value
International Competitive Bidding (ICB) Works	\$1,000,000 and above
ICB – Goods, Supply, and Installation	\$500,000 and above
National Competitive Bidding (NCB) Works	Below \$1,000,000
NCB – Goods, Supply, and Installation	Below \$500,000
Procurement Threshold Consulting Services	
Procurement Mode	To be used for Contract Value
No consulting services are envisaged	

Table A7.2: Indicative Contract Packages for Project 1: Upgradation of Transmission Capacity from Uttarakhand

Bidding Document No	Package No	Contract Description	Contract Type	Procurement Mode	Estimated Contract Value (\$ million)
I		Construction of new 800 kV gas-insulated substation (GIS) switchyard and extension of existing 400 kV GIS switchyard at Tehri Pooling station covering, erection, testing, and commissioning of equipment, control and relay panels, automation system, PLCC, structures, cables, electrical and mechanical auxiliaries, bus-bar materials, earthing, lighting etc., and civil works	S+E+C	ICB	154.51
II		Construction of new 800 kV switchyard, extension of existing 400 kV switchyard and modification of existing 400 kV FSC to operate at 765 kV, at Meerut Substation covering, erection, testing, and commissioning of equipment, control and relay panels, automation system, PLCC, structures, cables, electrical and mechanical auxiliaries, bus-bar materials, earthing, lighting etc., and civil works	S+E+C	ICB	28.90
III		(a) Auto-Transformers Supply, erection, testing, and commissioning of: (i) 10 x 765/400/33 kV, 500 MVA Auto Transformers (1-phase) at Tehri Pooling Station (ii) 10 x 765/400/33 kV, 500 MVA Auto Transformers (1-phase) at Meerut Substation	S+E+C	ICB	86.04
		(b) Shunt Reactors Supply, erection, testing, and commissioning of: (i) 4 x 765 kV, 80 MVAR Bus Reactors (1-phase) at Tehri Pooling Station (ii) 6 x 765 kV, 80 MVAR Shunt Reactors (1-phase) along with SA and NGR at Meerut Substation (iii) 4 x 765 kV, 80 MVAR Bus Reactors (1-phase) at Meerut Substation	S+E+C	ICB	19.34
		Total			288.79

FSC = fixed series capacitor; GIS = gas-insulated substation; ICB = international competitive bidding; kV = kilovolt; MVA = megavolt-ampere; MVAR = megavolt-ampere reactive; NGR = neutral grounding resistor; PLCC = power line carrier communication; SA = surge absorber; S+E+C = supply, erection, and commissioning.
Source: Power Grid Corporation of India Limited.

Table A7.3: Indicative Contract Packages for Project 2: ± 800 kV High Voltage Direct Current Northeastern – Northern/Western Interconnector

Bidding Document No	Package Number	Contract Description	Contract Type	Procurement Mode	Estimated Contract Value (\$ million)
I	A1	Tower Package (for Biswanath Chariyali–Bongaigaon 800 kV HVDC line, Part I, 160 km) including Earthwire, Earth Electrode (50 km) including insulator, hardware, and accessories	S+E+C	ICB	50.74
	A2	Tower Package (for Biswanath Chariyali–Bongaigaon 800 kV HVDC line, Part II, 165 km) including earth wire	S+E+C	ICB	48.25
	A3	Tower Package (for Bongaigaon–Purnea 800 kV HVDC line, Part I, 94 km) including earth wire	S+E+C	ICB	42.24
II	A4	Tower Package (for Bongaigaon–Purnea 800 kV HVDC line, Part II, 194 km) including earth wire	S+E+C	ICB	42.24
	A5	Tower Package (for Purnea–Muzaffarpur 800 kV HVDC line, 241 km) including earth wire	S+E+C	ICB	55.05
	A6	Tower Package (for Muzaffarpur–Gorakhpur 800 kV HVDC line, 261 km) including earth wire	S+E+C	ICB	56.85
III	A7	Tower Package (for Gorakhpur–Agra 800 kV HVDC line, Part I, 200 km) including earth wire	S+E+C	ICB	44.63
	A8	Tower Package (for Gorakhpur–Agra 800 kV HVDC line, Part II, 200 km) including earth wire	S+E+C	ICB	44.63
	A9	Tower Package (for Gorakhpur–Agra 800 kV HVDC line, Part III, 200 km) including earth wire and earth electrode line (40 km) including insulator, hardware, and accessories	S+E+C	ICB	47.15
IV	C1	ACSR LAPWING and ZEBRA Conductor package (3,680 km + 406 km)	S	ICB	33.68
	C2	ACSR LAPWING Conductor package (3,680 km)	S	ICB	31.43
	C3	ACSR LAPWING and PANTHER Conductor package (3,680 km + 134 Km)	S	ICB	31.43
V	C4	ACSR LAPWING Conductor package (3,680 km)	S	ICB	31.43
	C5	ACSR LAPWING Conductor package (3,680 km)		ICB	31.43
	C6	ACSR LAPWING and ZEBRA Conductor package (3,709 km + 325 km)		ICB	33.36
VI	I1	210/300/400 KN HVDC Insulator package	S	ICB	41.02
	I2	210/300/400 KN HVDC Insulator package	S	ICB	41.02
	I3	210/300/400 KN HVDC Insulator package	S	ICB	41.02
VII	I4	210/300/400 KN HVDC Insulator package	S	ICB	41.02
	I5	210/300/400 KN HVDC Insulator package	S	ICB	41.02
	I6	210/300/400 KN HVDC Insulator package	S	ICB	41.02
VIII	H1	Hardware Fittings and Accessories except Spacer Damper and Rigid Spacer	S	ICB	10.42
	H2	Hardware Fittings and Accessories except Spacer Damper & Rigid Spacer	S	ICB	10.42
	S1	Spacer Damper and Rigid Spacer	S	ICB	4.32
	S2	Spacer Damper and Rigid Spacer	S	ICB	4.32
		Total			900.52

HVDC = high-voltage direct current; ACSR = aluminum conductor steel reinforced; ICB = international competitive bidding; km = kilometer; KN = kilo Newton; kV = kilovolt; S+E+C = supply, erection, and commissioning.

Source: Power Grid Corporation of India Ltd.