

No. 11/05/2018-Coord.

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

Shram Shakti Bhawan, New Delhi
dated 4th April, 2020

ORDERS

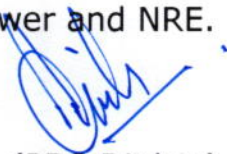
**Subject: Public Procurement (Preference to Make in India),
Order 2017 No. P-45021/2/2017-PP (BE-II) dated 29.05.2019
(latest version)**

1. The Department for Promotion of Industry and Internal Trade (DPIIT), Government of India has issued Public Procurement (Preference to Make in India) Order, 2017 latest version vide notification dated 29.05.2019 referred above to encourage "Make in India" initiative and to promote manufacturing and production of goods and services in India with a view to enhancing income and employment.
2. In the light of the earlier version of Public Procurement (Preference to Make in India) Order 2017, the Ministry of Power (MoP) vide Orders No. 11/05/2018-Coord dated 20.12.2018 had notified purchase preference (linked with local content) in respect of Hydro Generation and Transmission sector. In respect of Thermal Generation sector, notification was issued vide order No. 11/05/2018-Coord dated 28.12.2018.
3. In furtherance of DPIIT Notification No., P-45021/2/2017-PP(BE-II) dated 29.05.2019 and in continuation of the aforementioned MoP orders dated 20.12.2018 and 28.12.2018 it has now been decided as follows-
 - i) In pursuance of the provision of clause 3(a) of the DPIIT Order, 2017, items in respect of the goods, material, equipment etc. used in the power sector under the classification of " where local capacity and local competition " exists and where only the local suppliers shall be eligible to bid irrespective of purchase value of the goods, equipment and material are listed as under **Annexure-I**.
 - ii) In pursuance of the provision of clause 13 of the DPIIT Order, 2017, equipment used in the power sector which are manufactured under license from foreign manufacturers holding intellectual property rights and where there is a transfer of technology agreement are listed as under **Annexure-II**.
 - iii) In order to further encourage Make in India initiative and promote manufacturing and production of goods and services in India,

general guidelines as enclosed at **Annexure-III**, may be selectively adopted in an appropriate manner by procuring entities in their tendering process.

4. All other conditions shall be as laid down in the DPIIT Notification No. P-45021/2/2017-PP (BE-II) dated 29.05.2019 (latest version) and related MOP orders issued till date of issue of this order. This shall be complied with by all attached or subordinate Offices or autonomous body under the Ministry of Power, Government of India including Government Companies as defined in the Companies Act, and /or the States and Local Bodies making procurement under all Central Schemes/ Central Sector Schemes where the Scheme is fully or partially funded by Government of India.

This issues with the approval of Hon'ble MoS(IC) for Power and NRE.



(PBS Dinker)

Under Secretary to the Government of India
Tele No. 011-23752495

Annexure-I

A. Transmission Sector- List of equipment pertaining to transmission system of 66 kV and above voltage level.

1. Transformers and Reactors (66 kV to 765 kV AC)
2. Air Insulated Switchgear (Circuit Breakers, Disconnectors), Surge Arrester, Wave trap (66 kV to 765 kV AC)
3. Gas Insulated Switchgear (66 kV to 400 kV AC)
4. Instrument Transformers (66 kV to 765 kV AC)
5. Bus Post Insulators
6. Substation structure material
7. Transmission line tower material
8. Conventional conductors and accessories
9. Porcelain Insulators and hardware fittings
10. Control & power cables
11. High Voltage Cables (upto 220 kV AC)
12. Control and Protection System including Substation Automation System
13. DG set
14. DC system (DC Battery & Battery Charger) in a substation
15. AC & DC Distribution Board for substation
16. Material for Grounding system
17. Items for illumination system

B. Hydro Sector- List of equipment pertaining to Hydro Generating Station.

1. Hydro Turbine & Associated equipment (Francis, Kaplan & Pelton Turbine)
2. Generator & Associated Equipment
3. Generator Transformer & Reactors
4. Main Inlet Valve & Associated Equipment
5. Penstock protection Valve and Associated Equipment
6. Governing system & Accessories

7. Gas Insulated Switchgear/ Gas Insulated Bus Ducts (Up to 400 kV)
8. Switchyard/Pothead Yard Equipment(excluding Transformer and Reactors)
9. Automation and Controls
10. Protection System
11. XLPE Cable (up to 400 kV)
12. Static Excitation System
13. SST,UAT & SAT
14. LV, MV & HV Switchgear
15. LV, MV & HV Bus Ducts
16. DC System
17. Power and Control Cable
18. Illumination system
19. D.G. Set
20. PLCC
21. Grounding System
22. Workshop Equipment
23. EOT Crane
24. Cooling Water System
25. Compressed Air System
26. Drainage/Dewatering System
27. Fire Protection System
28. Heating, Ventilation & Air Conditioning System (HVAC)
29. Elevator
30. Oil Handling System
31. Mechanical BOP Items

C. Thermal Sector- List of equipment pertaining to Thermal Generating Station.

Coal/ lignite based thermal power projects/ plants:

1 Boiler Auxiliaries

- i) Air pre-heater
- ii) SCAPH
- iii) Steam soot blowers (wall blowers & LRSB)
- iv) Auxiliary Steam PRDS
- v) Mill reject system
- vi) Fuel oil system

- vii) Seal air Fan
- viii) Ducts and dampers
- ix) Duct expansion joints
- x) Blowdown tanks

2 Electro- static precipitators (ESPs)

- i) Casing
- ii) Electrodes
- iii) Rapping system
- iv) Hopper heaters
- v) Transformer rectifiers
- vi) Insulators

3 Turbine Auxiliaries

- i) Condensate extraction pumps
- ii) Condenser On line Tube Cleaning System (COLTC)
- iii) Debris filters
- iv) Deaerator
- v) Drain cooler and flash tanks
- vi) ECW pumps
- vii) Plate heat exchangers
- viii) Self- cleaning filters
- ix) Condensate polishing units (CPUs)
- x) Chemical dosing system

4 Generator Auxiliaries

- i) Seal oil system
- ii) Hydrogen cooling system
- iii) Stator water cooling system

5 Electrical Works

- i) Transformers
- ii) Bus ducts
- iii) Motors
- iv) Switchgears
- v) Power & control cables
- vi) Control and metering equipment
- vii) Protective relays
- viii) Switch yard equipment - Insulators, Circuit Breakers, Isolators, Conductors, CTs, PTs, Bushings, surge arresters etc.
- ix) Earthing & Lightning protection system

- x) DC batteries & battery charger system
- xi) Electrical laboratory & testing equipment
- xii) Emergency DG sets
- xiii) Plant illumination system

6 Control & Instrumentation System (C&I System)

- i) Thermocouples
- ii) Measuring instruments
- iii) Burner management system
- iv) Flame scanners
- v) Actuators
- vi) Automation and Control Cards
- vii) PLC System
- viii) SWAS system
- ix) Vibration monitoring system
- x) Interplant communication/ public address system

7 Coal Handling Plant

- i) Conveyors
- ii) Hydraulic drives, hydraulic motor
- iii) Wagon Tippler
- iv) Side Arm Charger
- v) Paddle feeder
- vi) Crushers & Screens
- vii) Dust suppression (dry fog & plain water) system
- viii) Air Compressors
- ix) Magnetic separators & metal detectors
- x) Coal sampling system
- xi) Stacker cum reclaimer
- xii) Belt weighing & monitoring system.

8 Ash Handling System

- i) Clinker grinder
- ii) Water jet ejectors
- iii) Scrapper chain conveyor
- iv) Dry fly ash vacuum extraction system
- v) Pressure pneumatic conveying system
- vi) Ash water & ash slurry pumps
- vii) Compressors, air dryers & air receivers
- viii) Ash water recovery system

9 Raw water intake & supply system

- i) Travelling water screens
- ii) Raw water supply pumps
- iii) Valves, RE joints etc.

10 Water Treatment System and Effluent Treatment System

- i) Clarification plant
- ii) Filtration plant
- iii) Ultra filtration plant
- iv) Reverse osmosis plant
- v) DM plant
- vi) Chlorination plant
- vii) Chemical dosing system
- viii) Effluent Treatment Plant

11 CW & ACW System

- i) CW & ACW Pumps
- ii) BF valves, NRVs etc.
- iii) RE joints
- iv) Air release valves

12 Cooling towers (NDCT/ IDCT)

- i) Water distribution system,
- ii) spray nozzles,
- iii) packing,
- iv) drift eliminators
- v) CT Fans (for IDCT)
- vi) Gear boxes, shafts & motors (for IDCT)

13 Air Conditioning & ventilation system

- i) Split & window air conditioners
- ii) Chilling/ condensing unit
- iii) AHU and Fresh air unit
- iv) Cooling towers
- v) AWUs, axial fans, roof extractors
- vi) Ducts, louvers & dampers

14 Cranes, EOT cranes, gantry crane & chain pulley blocks etc.

15 Fire Protection and Detection System

- i) Motor driven fire water pumps
- ii) Diesel engine driven fire water pumps
- iii) Hydrant system for the power plant.

- iv) High velocity water spray system
- v) Medium velocity water spray system
- vi) Foam protection system
- vii) Inert gas flooding system
- vii) Fire tenders
- viii) Portable fire-extinguishers
- ix) Automatic fire detection, alarm & control system
- x) Fire alarm panels

16 Flue Gas Desulphurization (FGD)

- i) Spray header
- ii) Mist eliminators

Annexure-II

The items manufactured under license from foreign manufacturers holding intellectual property rights and where there is a transfer of technology.

A. Transmission Power sector-

1. Gas insulated switchgear (400 KV and above)
2. 400 KV XLPE cable
3. Numerical protection relays.
4. SCADA
5. Power Transformers, 765KV
6. HVDC Transformers
7. Reactors 400 KV and above
8. Composite Core Conductor
9. GAP Conductors
10. ACSS Conductor
11. INVAR Conductors
12. EHV Cables (up to 220 KV)
13. EHV Cables 400 KV
14. Composite Long Rod Insulators
15. HV Gas Insulated Switchgear (72.5 kV to 420 kV)
16. MV AIS Panels(incl. Circuit Breakers) up to 36 KV, indoor
17. MV Breakers up to 40.5 kV, Outdoor
18. MV GIS Panels (Up to 33kV)
19. RMUs (11kV)
20. RMUs (33kV)
21. Control & Relay Panels, SCADA, Sub-Station Automation etc

B. Hydro Power sector

1. Gas Insulated Switchgear/ Gas Insulated Bus Ducts (400 KV and above)
2. Automation and Controls
3. Protection System
4. 400 kV XLPE Cable

C. **Thermal Power sector**

D. **Coal/ lignite based thermal power projects/ plants:**

1 Boiler pressure parts

- i) Tubes
- ii) Steam pipes/ headers
- iii) Steam headers
- iv) Steam drum
- v) Separator

2 Boiler Auxiliaries

- i) Coal burners and oil burners
- ii) Coal mills
- iii) Coal feeders
- iv) PA /FD/ ID fans
- v) SCR

3 Steam turbine

- i) HP/ IP/ LP turbine
- ii) Bearings
- iii) Steam inlet valves
- iv) Generator

4 Steam turbine auxiliaries

- i) Gland steam condenser
- ii) Lub oil pumps
- iii) Oil filters
- iv) Oil purifiers
- v) Condensate extraction pumps
- vi) Condenser
- vii) HP & LP heaters
- viii) Boiler Feed Pumps (BFPs)
- ix) BFP hydraulic coupling
- x) BFP Drive turbines

5 Control & Instrumentation System (C&I System)

- i) Distributed digital control, Monitoring and Information System (DDCMIS)

6 Flue Gas Desulphurization (FGD)

- i) Spray nozzles
- ii) Oxidation Blowers
- iii) Limestone slurry handling pumps
- iv) Booster fans
- v) Vacuum belt filters

B. Gas based thermal power projects/ plants :

1 Gas turbine generating set and auxiliaries :

- i) Gas turbine unit Upto 44 MW
- ii) Combustion unit (Standard)
- iii) Compressor unit upto 145 MW
- iv) Lubrication and control oil system
- v) Oil purification and cooling system
- vi) Compressor cleaning system
- vii) Inlet air system

2. Exhaust gas system

- i) Ducting
- ii) Silencers
- iii) Bypass stack
- iv) Guillotine gates & Diverter damper
- v) Expansion joints

3. Heat Recovery Steam Generator (HRSG)

- i) Drums
- ii) Evaporators & superheaters
- iii) Condensate preheater
- iv) Feed regulating station
- v) Blow down tank
- vi) Chemical dosing system
- vii) HRSG Stack

Annexure-III

General guidelines to be adopted selectively in an appropriate manner by the procuring entities in their tender documents.

1. The bidder shall have to be an entity registered in India in accordance with law.
2. The bids shall be in the language as prescribed by the tenderer/procurer.
3. The bids shall be in Indian National Rupees (INR) only in respect of local content only.
4. Indian subsidiaries of foreign bidders shall meet the qualifying criteria in terms of capability, competency, financial position, past performance etc.
5. The bidder shall follow Indian laws, regulations and standards.
6. To be eligible for participation in the bid, foreign bidders shall compulsorily set up their manufacturing units on a long term basis in India as may be specified by the tenderer/ procurer.
7. Similar or better technology than the technology offered in respect of material, equipment and process involved shall be transferred to India. Along with the transfer of technology, adequate training in the respective field shall also be provided.
8. Country of origin of the equipment/material shall be provided in the bid.
9. For supply of equipment / material from the country of origin other than India, the bidder shall submit performance certificate in support of satisfactory operation in India or a country other than the country of origin having climatic and operational conditions including ambient temperature similar to that of India for more than --- years (to be specified by the procurer).
10. The technologies/ products offered shall be environmentally friendly, consuming less energy, and safe, energy efficient, durable and long lasting under the prescribed operational conditions.
11. The supplier shall ensure supply of spares, materials and technological support for the entire life of the project.
12. The manufacturers/ supplier shall list out the products and components producing Toxic E-waste and other waste as may be specified. It shall have an Extended Producers Responsibility (EPR) so that after the completion of the lifecycle, the materials are safely recycled / disposed of by the Manufacturer/ supplier and for this, the

Manufacturer/supplier along with procurer has to establish recycling / disposal unit **or** as may be specified.

13. Domestic Content requirement (based on the cost of the product) shall be in accordance with the conditions laid down in respective Order(s) of the sectors on Public Procurement (Preference to Make in India) to provide for purchase preference (linked with local content).
14. The equipment/ material sourced from foreign companies may be tested in accredited labs in India before acceptance wherever such facilities are available.
15. The Tender fee and the Bank Guarantee (BG) shall be in Indian Rupees only.
16. The bidder shall have to furnish a certificate regarding cyber security/safety of the equipment/process to be supplied/services to be rendered as safe to connect.
17. Applicable safety requirements shall be met. Regular safety audit shall be carried out by the manufacturer/ supplier.
18. Statutory laws/regulations including the labour and environmental laws shall be strictly complied with during supply, storage, erection, commissioning and operation process. A regular compliance report shall be submitted to the procurer/appropriate Authorities.
19. Formation of new joint venture in India shall be permitted only with the Indian companies.
20. Tendering by the agent shall not be accepted.
21. The original test report in the language prescribed by the procurer shall generally be accepted. Preferably the translated test report shall not be accepted. However, the notarized translation of test reports shall be accepted.
22. Certification/compliance as per the Indian Standards/ International Standards/ Indian Regulations/ specified Standards shall be mandatory, where ever applicable.
23. Quality assurance of the product shall be carried out by the procurer or an independent third party agency appointed by the procurer. Manufacturing Quality Plan as approved by the procurer shall be followed by the manufacturer/supplier.
24. Wherever required, the foreign supplier shall establish fully functional service centers in India and shall keep spares/material locally for future needs of utilities.
25. Arbitration proceedings shall be instituted in India only and all disputes shall be settled as per applicable Indian Laws.