

**REQUIREMENTS FOR LICENCES TO BE GRANTED PURSUANT TO THE APPLICATION FOR LICENCES ( GENERATION, TRANSMISSION, SYSTEM OPERATION, DISTRIBUTION AND TRADING) REGULATIONS, 2006**

An Application for a licence should be made using the prescribed form. In addition, an Applicant is also required to file an electronic version of the application using Microsoft office software format in a compact disk which must accompany the paper copies to be filed with the Commission.

The details of the general and specific requirements should be provided in the application form and/or attachment to the form. Care should be taken to endorse the name of the Applicant on all attachments.

**PART I GENERAL REQUIREMENTS**

**A. LEGAL**

1. Certificate of Registration, Certificate of Incorporation, Memorandum and Articles of Association, Deed of Partnership, Deed of Trust (as Applicable)
2. Certified Audited Financial Statements and Accounts for the last or latest three years (if applicable)
3. Tax Clearance Certificate for the last or latest three years (if applicable)
4. Environmental Impact Assessment Report and approval
5. Agreements (e.g PPA, FSA etc.), if applicable
6. Certificate of Occupancy for project site (if any)
7. Evidence of consents or permits from other relevant Authorities and Agencies relating to the Project.

**B. FINANCIAL**

1. Tariff methodology and calculation
2. Short term cash flow projection
3. Medium term cash flow projection
4. Funding arrangements
5. Investment plans
6. Asset base
7. Risk Management Strategy
8. Management experience and depth

**C. TECHNICAL**

1. Details of experience in and knowledge of the electricity industry
2. Summary of skills and experience of the Directors and top management

**PART II SPECIFIC REQUIREMENTS**

**1. TECHNICAL DATA REQUIREMENTS FOR A NEW POWER STATION**

**A. Site Information of Power Station**

- i. Furnish location map to scale showing roads, railway lines, transmission lines, rivers, and reservoirs if any.
- ii. For Hydro, map should show proposed dam, reservoir area, water conductor system, fore bay, powerhouse etc.
- iii. For Hydro station, provide information on area of villages, forestland, agricultural land etc. Submerged.

- iv. Fuel supply arrangement (contractual, gas and oil pipelines-where available)
- v. Furnish information on means of Coal transport from mines or means of coal carriage if coal is to be brought from distance.
- vi. In case of other fuels, furnish details of sources of fuel and their transport.
- vii. Water Sources (furnish information on availability of water for operation of the Power Station).
- viii. Environmental (State whether forests, wetlands, mining areas are affected).
- ix. On the site map show area required for the following:
  - Fuel delivery point,
  - fuel storage space,
  - water pipe line,
  - liquid waste disposal area, -
  - ash disposal area (in case of coal plant)

#### **B. Power Station Information**

- i. Total Capacity (MW)
- ii. Number of Generating Units
- iii. Size of Generating Units (MW)
- iv. Fuel Type
- v. Annual Generation
- vi. Running Regime
- vii. Station load
- viii. Station Load Factor
- ix. Ancillary Services to be provided by station
- x. Single Line diagram of station including connection at Transmission Substation
- xi. Commissioning Date
- xii. State whether development will be carried out in phases and if so, furnish details.
- xiii. Information on waste handling and management

#### **C. GENERATING UNIT INFORMATION**

- i. Generator Type
- ii. Rating (MVA)
- iii. Terminal Voltage (KV)
- iv. Rated Power Factor
- v. Unit efficiency
- vi. Reactive Power capability (MVAR) in the range 0.95 leading and 0.85 lagging.

- APPLICATION FORM FOR LICENCE
- vii. Short Circuit Ratio
  - viii. Direct axis transient reactance (% on MVA rating).
  - ix. Direct axis sub-transient reactance (% on MVA rating).
  - x. Auxiliary Power requirement.
  - xi. Generator Transformer / Station Transformer:
    - Rated Capacity (MVA)
    - Voltage Ratio (HV/LV)
    - Tap change range (+%to-%)
    - Percentage Impedance (Positive Sequence at Full load).
  - Xii. Turbine (Thermal Power Plant)
    - Boiler and Major accessories (for steam turbines)
    - State Type
    - capacity (minimum and rated)
    - Steam pressure
    - Steam temperatures (superheat and reheat)
    - Heat Rates (minimum, maximum, incremental)
    - Efficiency at rated capacity
    - Gas turbine pressure ratio
    - Gas temperatures (gas turbine)

**B. TECHNICAL DATA REQUIREMENTS FOR CAPTIVE/OFF GRID GENERATION**

- i. Total Capacity (MW) per site
- ii. Number of Generating Units per site
- iii. Size of Generating Units (MW and MVA)
- iv. Fuel Type
- v. Terminal Voltage
- vi. Rated Power Factor
- vii. Reactive Power Capability
- viii. Noise Level (State distance from power plant)
- ix. Environmental Impact Assessment (for plants greater than 10MW) If EIA is not applicable, give detailed information on effluents and discharges and how they will be managed
- x. State if generator will be connected directly or indirectly to Distribution or Transmission Network.
- xi. Provide information on protective measures against infeed current (if applicable)