

**REQUEST FOR EXPRESSIONS OF INTEREST**

**PAKISTAN**

**Electricity Distribution Efficiency Improvement Project (EDEIP)**

**Loan No./Credit No./ Grant No.: IBRD-93180**

**Assignment Title: Engagement of Energy Modelling Specialist – Power Sector**

**Reference No. (as per Procurement Plan): PK-MOE-349863-CS-INDV**

Applications are invited for the following position, under the Electricity Distribution Efficiency Improvement Project (EDEIP), funded by the World Bank. The duration of the assignment shall be one year extendable for similar or extended period based on performance (maximum upto December-2027) and market-based salary will be offered.

<b>ENERGY MODELLING SPECIALIST – POWER SECTOR</b>
<b>Qualification (s):</b> <ul style="list-style-type: none"><li>• Bachelor's or Master's degree Mechanical / Electrical / Mechatronics / Energy / Electronics Engineering / Engineering Sciences / or related fields (16 years of HEC equivalent education) from HEC recognized institution.</li><li>• Certification(s) in the relevant field will be preferred.</li></ul>
<b>Required Experience:</b> <ul style="list-style-type: none"><li>• Minimum 03 years of total experience</li><li>• The candidate should possess experience related to:<ul style="list-style-type: none"><li>○ Generation planning and forecasting</li><li>○ Tariff design &amp; modelling</li><li>○ Sensitivity analyses, scenario developments and decision support systems</li><li>○ Energy planning &amp; scenario designing</li></ul></li></ul> <p>Preference will be given to candidates possessing hands-on experience of relevant tools including PLEXOS, SDDP, LEAP, etc.</p>

Covering letter / application along with C.V, CNIC, one passport size recent photograph and experience/education certificates/testimonials should reach to the undersigned within 15 days after publication of this advertisement in the press. The individuals shall bear the expense associated with the selection process for the position. Detailed Terms of Reference (ToR) are available at Power Division's website <https://power.gov.pk/>

Attention of interested candidates is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers" July 2016 [revised November 2017, July 2018 & November 2020] ("Procurement Regulations"), setting forth the World Bank's policy on conflict of interest.

Consultants will be selected in accordance with the Individual Consultants selection method following open competitive market approach set out in the Procurement Regulations of the World Bank for IPF Borrower July 2016 Revised November 2017, July 2018 & November 2020.

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## Terms of References (ToRs)

### **Energy Modelling Specialist – Power Sector**

#### **Key Role and Responsibilities:**

The said Consultant shall:

- Develop, validate, document, conduct back-casting, and update forecasting & simulation models pertaining to electricity prices, quantities, resources, capital requirements, and energy demand/supply (bottom-up approach).
- Create models for tariff design & projections, perform sensitivity analyses, and provide decision support for policymakers.
- Undertake long-term, medium-term, and short-term resource assessments based on power system planning (Generation/Transmission & Distribution Expansion Plans).
- Utilize state-of-the-art tools and models for energy planning and designing various energy transition scenarios.
- Formulate incentive schemes for consumers and evaluate their impacts.
- Conduct critical analyses of modelling methodologies for dispatch optimization, simulation & forecasting and explore emerging tools & approaches.
- Development of internal / external processes / SOPs to standardize all the integrated energy planning functions of PIU.
- Keep track of applicable global modelling frameworks for development of energy transition scenarios and subsequent alignment of local frameworks / approaches / models
- Foster internal collaboration for sharing results and recommendations.
- Regularly review and update tools/models, considering the cyclic changes in underlying data.
- Gather and coordinate relevant statistical data and draft reports and documents.
- Prepare technical reports and presentations to communicate model(s) findings and recommendations to project teams and stakeholders.
- Organize tasks, set priorities, and maintain effective working relationships.

#### **Profile and Qualification:**

- Bachelor's or Master's degree Mechanical / Electrical / Mechatronics / Energy / Electronics Engineering / Engineering Sciences / or related fields (16 years of HEC equivalent education) from HEC recognized institution.
- Certification(s) in the relevant field will be preferred

#### **Required Experience:**

- Minimum 03 years of total experience
- The candidate should possess experience related to:
  - Generation planning and forecasting
  - Tariff design & modelling
  - Sensitivity analyses, scenario developments and decision support systems
  - Energy planning & scenario designing

Preference will be given to candidates possessing hands-on experience of relevant tools including PLEXOS, SDDP, LEAP, etc.

#### **Period of assignment:**

- The duration of the assignment will be one year with the possibility of extension for an additional year.
- **Remuneration:** *Remuneration of the position is negotiable based on the overall experience and qualification*