



**Bangladesh Energy Regulatory Commission**  
TCB Bhaban (3rd floor), 1, Karwan Bazar, Dhaka-1215, Bangladesh  
[www.berc.org.bd](http://www.berc.org.bd)

**Request for Expressions of Interest (EOI)**

1	Name of Procuring Entity	Bangladesh Energy Regulatory Commission (BERC)
2	Procuring Entity Code	Not used at present
3	Procuring Entity District	Dhaka
4	Expression of Interest for Selection of	Consultancy Firm (National)- Lump sum for 'A Comparative Study on Grid versus Captive Power for Export Oriented Industry in Bangladesh: Past, Present and Future'
5	EOI Ref. No.	28.01.0000.012.99.001.19. 285
6	Date	28/01/2020
7	Procurement Method	Selection Under Fixed Budget Method (SFB) Open
8	Budget and Source of funds	Own fund
9	Development Partner(s)	Not Applicable
10	EOI Closing Date and Time	Date: 20/02/2020, Time: 12:00 PM
11	Brief Description of the Assignment	The main assignment of the firm to have a comparative analysis of the reliability of grid power versus captive power and comparative analysis of the price competitiveness of grid based export oriented industry versus captive power based export oriented industry and submit the study report according to the scope of the study. Detail TORs will be available upon request from the Tariff section of BERC.
12	Experience, Resources & Delivery Capacity Required	The firm is expected to have expertise in conducting relevant national level study/impact analysis in complex export oriented industrial sector. It must have experiences in policy analysis/strategy formulation at aggregate level especially in grid vs non-grid issues. Experiences in cost calculation, economic analysis, economic modeling relation to export oriented sector is required. Experiences in domestic economic growth analysis, export oriented industry, energy and economic growth nexus cost analysis, export market analysis and productivity analysis is required. The Consultancy/Research Firm needs to consist of national experts in different relevant fields. The firm should have minimum of the following consultants: (1) Economist (Team Leader) (2) Electrical Engineer (3) Financial Analyst (4) Senior Research Associate/Research Associate Additional staff can be proposed by the firm with specific argument within their financial proposal for the study. Further, for the study, the research firm's team members must be nationally recognized in their field of expertise.
13	Other Details	Bangladesh Energy Regulatory Commission (BERC) now invites eligible firms to indicate their interest in providing the services. Firms are needed to provide information and documents in 5 (five) sets (brochures, descriptions of similar assignments, experiences, availability of appropriate professional, qualification and experience among staff, trade license, VAT, income tax certificate, financial solvency certificate, audit report for 3 years, etc.) indicating that they are qualified to perform the services.
14	Association with foreign firms is	Not Applicable
15	Name of the Official Inviting EOI	Dr. Md. Didarul Alam
16	Designation of the Official Inviting EOI	Secretary (Additional Charge), BERC
17	Address of the Official Inviting EOI	Bangladesh Energy Regulatory Commission (BERC), TCB Building (3rd floor), 1 Karwan Bazar C/A, Dhaka 1215
18	Contact Details of the Official Inviting EOI	Phone: +88-02-9140125, E-mail: <a href="mailto:berc2003@gmail.com">berc2003@gmail.com</a> , <a href="mailto:info@berc.org.bd">info@berc.org.bd</a>
<b>The Procuring Entity reserves the right to accept or rejects all or any of the EOI without assigning any reason whatsoever.</b>		
<b>The Tender notice and a Terms of Reference (ToR) in this regard is available at website <a href="http://www.berc.org.bd">www.berc.org.bd</a></b>		

*Signature*  
28/01/2020

**Dr. Md. Didarul Alam**  
Secretary (Additional Charge)

## **Terms of Reference (TOR) for Research Study**

On

“A Comparative study on grid versus captive power for export oriented industry in Bangladesh- past, present and future”

### **1. Background of the Study**

- 1.1 Bangladesh Energy Regulatory Commission (the Commission) has been established through the Bangladesh Energy Regulatory Commission Act, 2003 (the Act), as an independent and impartial Commission for the energy sector. It is independent in the exercise of its functions that are in accordance with the provisions as laid down in the Act. The objective of establishing the Commission is to create atmosphere conducive to private investment in the generation, transmission and distribution of electricity; transmission and distribution of gas; transportation and marketing of petroleum products, to ensure transparency in the management, operation and tariff determination in the sectors, to protect consumers' interest and to promote the creation of a competitive market in the country. The commission determines tariff for power generation in bulk and retail as well as transmission, storage, marketing, distribution and the supply of energy at the level of end-user through public hearing with the presence of licensees and stakeholders following a transparent and accountable process. Electricity generation, transmission and distribution utilities are licensees of the Commission. Gas transmission, distribution and supply/marketing entities/companies are the licensees of the Commission.
- 1.2 In Bangladesh there are mainly two sources of electricity for industrial sector. One is grid power and another is captive power plant, a power plant installed and operated by the industry itself. Captive Power plants are mainly natural gas based or diesel based. Natural gas based captive power plants are generally used for main supply of electricity and diesel based captive power plants are generally used for standby supply of electricity for the industries which use grid power as main supply. Natural gas is generally supplied by the gas distribution companies.
- 1.3 Bangladesh Energy Regulatory Commission (BERC) already issued 768 nos. of license with 3079 MW (Gas based 2497 MW and Diesel based 582 MW) generation capacity and 2437 Nos. of License Waiver Certificate with 970 MW (Gas based 252 MW and Diesel based 718 MW) generation capacity for captive power plant.
- 1.4 It is mentionable that Bangladesh Energy Regulatory Commission (BERC) started to set electricity and gas tariff from 2009. It fixed tariff (both bulk & retail) for electricity last on December 2017 and for gas it was last on July 2019. At the period of public hearing for tariff determination it is discussed that the hike of energy price has significant impact on industrial growth in Bangladesh. Specially, the export oriented industries are losing their price competitiveness in global market. The business group, i.e. the representative from BGMEA, BKMEA, FBCCI, MCCI, DCCI raised the issue. Some individual industry owner alleged that the industries which have natural gas based captive power plant are benefited on product pricing as electricity produced by

captive power plant is comparatively cheaper than grid power. As a result industries of same category are facing unfair competition. Therefore, BERC, regulator of Power & Gas sector, has taken step to have a comparative study on Grid versus Captive Power for export oriented industry in Bangladesh.

## 2. Scope of Work

The main objective of the study is to have a comparative analysis of the reliability of grid power versus captive power and comparative analysis of the price competitiveness of grid based export oriented industry versus captive power based export oriented industry. To accomplish the scope of work the research organization should carry out (but not limited to) the following tasks:

- a) To determine the factors/shortcomings of the grid power which are encouraging the industrial sector to prefer captive power over grid power;
- b) To identify the actions to be taken for overcoming the difficulties to increase the use of grid power in industrial sector;
- c) To collect and analyze the per unit total production cost and per unit energy cost of all major type of export oriented industries (i.e. Spinning, Textiles, Readymade garments, Jute, Leather, Agro based, Pharmaceuticals, Ceramics etc.) in Bangladesh;
- d) To determine the percentage of electricity cost compare to the total cost of per unit product for major types of export oriented industries
- e) To compare per unit production cost for the same type of export oriented industry using grid power versus industry using captive power;
- f) To determine and compare how much production cost is increased due to price hike of grid power and natural gas of captive power category in last 10 years for major export oriented industries.
- g) The sampling should cover all major export oriented industrial sector and major industrial hubs in Bangladesh;

## 3. General Terms of Reference of the consulting Firm

The firm's team needs to consist of national experts in different fields. The firm should have minimum of the following key consultants:

- |   |                              |
|---|------------------------------|
| a) Economist (Team Leader)                      | - 04 MM (Man Months)         |
| b) Electrical Engineer                          | - 01 MM (Man Months)         |
| c) Financial Analyst                            | - 04 MM (Man Months)         |
| d) Senior Research Associate/Research Associate | - 02X04 = 08 MM (Man Months) |

Additional staff can be proposed by the firm with specific argument within their financial proposal.

### Expertise of the Consultant/Research Firm:

The firm is expected to have expertise in conducting relevant national level study/impact analysis in complex sociopolitical environments. It must have experiences in policy analysis/strategy formulation at aggregate level especially in energy (grid vs non-grid electricity) and export oriented industrial sectors. Experiences in developing

macroeconomic framework, economic analysis relation with electricity, economic modeling relation to energy is required. Experiences in domestic economic growth analysis, industry, energy and economic growth nexus growth analysis, export oriented market analysis and productivity analysis is required.

The research team must contain at least an Economist and an Electrical Engineer having 20-year experiences in Power sector and an financial analyst with post graduation major in Finance. He/she also needs Economic Analysis experience as well. An Energy Economist is preferred in the team.

The consultant/Research team members must be nationally recognized in their field. They must be open and able communicators and proven to have impact in their own field based on knowledge, communication skills and experiences. For specific expertise they may rely on colleagues, being specialists in a single field of the overall subject covered by them.

The experts must be able to make easy contact with different types of stakeholders. The experts should also have the ability and willingness to transfer their knowledge and methodologies to the counterparts. The firm is invited to propose how they will ensure that the consultants are made available for the assignment at the appropriate time.

Excellent communication in Bangla and English is mandatory. The firm and the listed individual consultants under the firm should be key experts in this field. Economic visioning (past-present-future) and experiences on real sector performances analyses are must.

**Minimum eligibility criteria:**

The firm should have-

- a) at least 10 years of experience in the field of economic researches;
- b) evidence of at least 10 years of experience in the field of economic researches specially in grid & non-grid works and also delivering similar type of services to government/semi-government/autonomous bodies (in Bangladesh), during the last five years, with at least two such assignments on related field;
- c) reputation of an international standing in the delivery of credible analytical report will be an added qualification;
- d) a highly skilled management and staff members/associates;
- e) a strong background of working at the policy and advocacy level;
- f) their audit reports for last three (03) financial years;
- g) all the legal documents for Tax and VAT purposes;
- h) prior experience with economic modelling will bear extra credit.

Necessary documentation must be submitted to substantiate the above eligibility criteria.

**4. Time Period**

4 (four) months from the date of signing of the Contract.

## 5. Source of Fund

The assignment cost will be borne by the own fund of Bangladesh Energy Regulatory Commission (BERC).

## 6. Schedule of Work

The implementation will be effective upon the signature of the contract and is envisaged to be approximately for 4-month. However, the required team leader, team composition, task assignment and manning schedule will be indicated. Based on this, the schedule of work would be finalized during contract negotiation.

## 7. Reports

- (1) Inception Report: Assigning firm will prepare and submit an Inception Report within 1 month from signing of the Contract, stating their jobs understanding, concept on the requirements of the assignment, readiness and strategy for undertaking the assignment.
- (2) Interim Report: Assigning firm will submit Interim Report within 2-month from the date of Contract signing. Firm shall incorporate views of the stakeholders in the Interim Report.
- (3) Draft Final Report (DFR): The firm shall submit Draft Final Report within 3-month from the date of Contract signing. They will interact and analysis the views of the stakeholders and incorporate those in the report as required.
- (4) Final Report: The firm shall arrange a discussion with the Commission and incorporate comments in the Final Report. Final Report shall be submitted within 4-month from the date of signing of the Contract.

## 8. Proposal Contents

The project proposal shall contain the following information:

- 1) Detailed concept on the assignment
- 2) Name of hubs covered in the study period
- 3) Name of the major industrial sectors covered for the study
- 4) Individual task assignment (to be ensured with resource availability)
- 5) CVs of assigned personnel (to be updated with signature).
- 6) Organizational profile of the Firm
- 7) List of previous similar type assignments
- 8) Documents of association between firms (if applicable)
- 9) Bank solvency certificate

## 9. Facilitation and Reporting

On engagement firm will report to BERC and BERC will be responsible to oversee and payments. BERC will coordinate the total work and make recommendation for payment of the service with deductibles. BERC will coordinate with utilities & Firm and designate officer(s) to coordinate the work. BERC will ensure access to the available pertinent information to the assignment.