Terms of Reference:

Appoint of International Consultant for Implementation of Independent System Operator (ISO)

1. Background

Government of Bangladesh is strongly committed to provide reliable and quality electricity to all people of Bangladesh. Demand of electricity has been increasing day by day. In the recent years, peak demand was more than 11,000 MW and the generation capacity is more than 13,000 MW. Out of total 13,621 MW, 7,476 MW in public sector and 5,485 MW in private sector and 660 MW is being imported from India. During FY 2016-17 53.60% net energy is generated by private sector. At present there are 111 power plants out of which 45 plants in public sector and 66 plants in private sector. Due to change in policy, regulatory and legislation framework, participation of private sector investment is increasing day by day.

Power Grid Company of Bangladesh (PGCB), a state owned company, owns 10,436 circuit kilometers transmission line. It has grid substation capacity of 31,000 MVA. National Load Despatch Centre (NLDC) under PGCB is entrusted with the responsibilities to oversee voltage and frequency. Generation scheduling, plant despatch, plant outage etc. are operated by BPDB (Single Buyer) through NLDC. There are six state owned distribution entities including BPDB having total 401,000 kilometer distribution lines. The role of NLDC (PGCB's unit) is to play an independent role for plants operation and merit order despatch between public and private sector. Sometimes conflict arises during load sharing at grid level by the distribution entities. Under this context, government intends to establish an Independent System Operator (ISO) through separating NLDC from PGCB. Accordingly, to establish ISO, a provision has been incorporated in the proposed Electricity Act, 2017 which is under enactment by the Parliament.

2. Funding

The People's Republic of Bangladesh has received a fund from the International Development Agency for the Rural Electrification and Renewable Energy Development-II (RERED- II) Project and it intends to use a part of the proceeds of this credit for the Appointment of international consultant for implementation of Independent System Operator (ISO).

3. Scope of Work

The individual consultant will perform the following tasks mentioned below.

- 1) The Consultant will interact with the transmission company (PGCB), BPDB (Single Buyer), all public and private sector generation companies, distribution entities / companies and prepare report on present load despatch system.
- 2) Will demonstrate standard practices of ISO over the World and suggest suitable model for Bangladesh.
- 3) Prepare a TOR and model document to appoint a consulting firm. This firm will study in details about the modality of ISO establishment in Bangladesh power sector.
- 4) Assist Power Cell to appoint consulting firm.

4. Duration of the Services

Duration of the consultancy services will be 4 (Four) months. The consultant will submit a schedule of activities based on project completion period. The work schedule will be evaluated in view with the

accomplishment of the task. However, the consultant will provide assistance "as required basis" upto the appointment of the consulting firm. The time "as required basis" will be treated as additional work time which is beyond 4(four) months.

5. Report Submission

The consultant will submit progress report in every 2(two) weeks. He will submit final report to the Power Cell.

6. Facilitation and Reporting

Power Cell will ensure access to the available relevant information to the assignment. The Consultant will work in close association with the Power Cell. A coordination mechanism will be in place to review progress, provide guidance and advice.

7. Logistics Support for the Consultant

The Power Cell will provide counterpart support. Consultant will be supposed to use his own computer, transport, etc.