The State of the Governance in the Power Sector of Bangladesh: Problems and the Way Out

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Corruption increases deprivation and injustice. Let's fight it together.

List of Acronyms

ADB	- Asian Development Bank
BD	- Bidding Document
BERC	- Bangladesh Energy Regulatory Commission
BPDB	- Bangladesh Power Development Board
BUET	- Bangladesh University of Engineering and Technology
CBA	- Consumers Bargaining Agent
CEI	- Chief Electrical Engineer
DESA	- Dhaka Electric Supply Authority
DESCO	- Dhaka Electricity Supply Company Limited
EGCB	- Electricity Generation Company of Bangladesh
EPWAPDA	- East Pakistan Water and Power Development Authority
FSA	- Fuel Supply Agreement
GDP	- Gross Domestic Product
GO	- Government of Bangladesh
GT	- Gas Turbine
GWh	- Gegawatt (=1,000 MW)
IMF	- International Monetary Fund
IPP	- Independent Power Project
KVA	- Kilo Volt Ampere
KWth	- Kilowatt-hour (=1,000 watt-hours)
MPEMR	- Ministry of Power, Energy and Mineral Resources
MoF	- Ministry of Finance
MoU	- Memorandum of Understanding
MP	- Member of the Parliament
MW	- Megawatt (=1,000 KWh)
NLDC	- National Load Dispatch Center
PBS	- Polli Bidyut Samity
PGCB	- Power Grid Company of Bangladesh
PP	- Power Plant
PPA	- Power Purchase Agreement
PPR	- Public Procurement Regulation
PSMP	- Power System Master Plan
PSRB	- Power Sector Reforms in Bangladesh
REB	- Rural Electrification Board
RPCL	- Rural Power Company Limited
SBU	- Strategic Business Unit
SPP	- Small Power Plants
TEC	- Technical Evaluation Committee
WAPDA	- Water and Power Development Authority
WZPDCL	- West Zone Power Distribution Company Ltd.

Executive Summary

The Government of Bangladesh (GoB) is committed to provide affordable and reliable electricity to all citizens by 2020. However, among the country's 138 million people, only 42 percent has access to electricity of 140 kwh. The power sector includes the generation, transmission, and distribution of electricity among different holdings including residential, commercial, business and service sectors under the guidance of the Power Division of the Ministry of Power, Energy, and Mineral Resources (MPEMR).

In the power sector, a number of problems have been reported. These include adverse power crisis, widespread presence of corruption in the procurement and distribution network, poor financial performances, high T&D losses, decay in the contribution of power in GDP growth, poor commercial and day-to-day services, consumer harassments, intervention of vested interest group, poor co-ordination, and absence of accountability and transparency.

Key Statistics of Power Sector

Sectors	Public	IPP + Captive
Installed Capacity	5275 mw	2490 mw*
De-rated Generation Capacity	4582 mw	
Generation (Effective)		**Demand***
Maximum Generation (Sep'07)	4130 mw	5368 mw
Minimum (Jan'07)	2331 mw	
Transmission Lines (230 and 132 KV in km)	4119	
Distribution Lines in km	2,64,891	
Access to Electricity (%)	42	
Per capita generation	165 kwh	
Per capita consumption	140 kwh	
Consumer Number including WZPDCL	97.33 Lac	
Agricultural Consumers	2.16 Lac	
System Loss (Average Percentile)	21.3	

Source: Power Cell, February 25, 2007
* 1290 mw generation in IPP and 1200* captive power consumption

A number of efforts have been made by the present caretaker government in order to mitigate the power failures. These efforts include the following:

- Cancellation of the tendering process of small power plants addressing the allegation of non-transparent process and attempt for re-tender.
- Identification of major targets to rehabilitate and maintain the power station, and sign of treaties to establish both public and private power plants. Unfortunately, it is alleged by local power company that the aid providing agencies have put several clauses in the bid manual so that they cannot submit the bid papers fulfilling the conditions.
- Approval of five IPPs (three foreign companies) of 1,930 mw capacity, increasing the share of IPPs in the total power generated up to 3,190 mw (62%). As a result, the cumulative financial burden of BPDB will be increased further.
- Appointment of two members for the BERC and development of several guidelines along with the methodology of the determination of power tariff. However, in this methodology, the peak and off-peak demand was not considered. Besides, there is no vivid guideline from BERC on how submitted documents and information by applicant IPPs would be cross-checked and the previously completed contracts between PDB and IPPs are out of the proposed formula.

This study was undertaken with the aim to diagnose the problems prevailing in this sector. The scope of this study includes review the state of governance in this sector and its failures, identification of the reasons of demand-supply shortfalls, the current procedure of power plant procurements and identifying the nature and extent of corruption, accountability of the staff, investigate the sufferings and harassments faced by the consumers, day-to-day services, billing, load shedding, and rural-urban disparities and to provide policy recommendations.

Information from both primary and secondary sources has been used in preparing the report. Sources of secondary information included acts and rules, published articles, periodicals, reports,

as well as official documents. Primary sources of information include a consumer survey, informal discussion with stakeholders, employees, and experts of the power sector. The consumer survey covered the nature and the extent of corruption and harassments faced by the consumers. The cross section survey among all types of consumers (1027) was administered to find out the quality of services provided by different organization including PDB, REB/PBSs, DESA and DESCO.

Major Findings of the Study

Limitation and Ineffectiveness of the Electricity Acts and Magistracy
Around 25 percent cases related to bill defaulters or pilferages, illegal connections or distribution of power are unsettled. Major reasons of this unsettlement include: the act is not well defined and equitable with the current age, magistrates are not oriented about the act during courses, abuse of legal compulsion for continuing power supply to huge defaulters, same staff (might be linked with corruption) is engaged in both filing cases and investigation, absence of an independent investigation cell of power division, extent of punishments are almost same for small and large corruption, there is no obligation of incorporating the technical person in the judgment process, under collusion with the defaulter consumers, the distributor organization do not appoint efficient lawyer.

Adverse power crises and governance failures
The PDB's official report shows a shortfall of generation of around 2000 – 2200 mw. However, according to PSMP 2006, the total shortage of power would be around 4350 mw in 2010. The reasons for power shortages are identified below.

A. Policy Level Failures
The government failed to put adequate emphasis on the power sector; there has not been any clear and specific guideline to estimate the real demand and supply; there have also been violation of the PSMP in the form of politicization of the location, size and types of plants, emphasis on short-term planning, inadequate autonomy in making financial and administrative decisions, appointment of foreign consultants for rent-seeking purpose despite the availability of local hands, and imbalanced expansion of distribution lines for rent-seeking purposes.

- **Limitations and malpractice within the procurement process**

The procurement process in power sector has been distorted due to unwanted intervention in the procurement process, complexities of the bidding process, wrong evaluations, absence of uniform Technical Evaluation Committee (TEC), delay in hiring consultants and resolving disputes due to bureaucratic dilemma, corruption such as putting specific condition, nepotism, extortion by vested interest groups, collusion between the bid officials and bidders, false experience certificate submitted by bidders, appointment of contractors for maintenance and rehabilitations without any tender, abuse of funds by plant and policy-level staff, supply of low quality machinery violating the contract, and power purchase agreements made at high rates. As a result, around *Tk 4,007 crore or US$ 688 million (from purchase of the 6 power plants and outsourcing the maintenance and rehabilitation works to a foreign company) during 1996-2005 have been abused.*

- **Inadequate financial capacity**

Around 17000 crore Taka is required to meet the demand for power of 8000 mw by next 2010; but the concerned organizations have inadequate financial capacity due to i) cumulative increase of unpaid bills and unaccountable indebted organizations, ii) poor rate of collection (caused by high T&D losses, legal shelter taken by large bill defaulters, low density of consumers in several PBSs of REB), and iii) instantaneous increase of financial burden due to contract with IPPs at a floating exchange rate, iv) contract, under PPA, with IPPs at high tariff arte, v) high input cost of diesel based generation plants.

- **Constraints and inefficiency in reform measure**

The reform measure suffers from the absence of corporate governance and experts on the Board, absence of future guidelines, knowledge gap, inadequate commitment at the policy-making level, and absence of corporate culture among the sector staff, malpractice and widespread corruption in the corporatized units, and poor quality of services.

- **Conditional loans from International Financing Agencies and Its Effectiveness**

Conditions of aid agencies are sometimes unattainable such as ask for the privatization of all publicized units against the disbursement of specific loans/credit to the power sector, or conditional loan with the provision of spending a specific amount on consultancy purposes and hiring foreign consultants against the disbursed funds. The aid agency prioritizes the scope of investment of Western or developed/financially strong countries and more IPPs and also create pressure the GoB to pursue the interest of specific companies.

- **IPP policy and Its Inequality**

The provision of tax exemption on technical know-how, interest on foreign loans, capital gains, and share transfer for foreign investors have made them the beneficiaries of investment and enabled them to offer a competitive tariff.

- **Ineffectiveness of BERC**

BERC is still ineffective owing to the lack of political will, lack of human resource and other resources, donor interference, political interferences.

B. Institutional or Administrative Malpractices

B.1. The irregularities, constraints and problems in HRM are caused by poor access to information or data and inadequate reliability of data, and inadequate recruitment of technical staff (10% to 15% of the posts are still vacant). The constraints of the HR management of the power sector include the absence of a human resource policy, complicated recruitment process, malpractice in the recruitment process, and frequent changes of the high officials, absence of effective human resource development programs, and rewarding the guilty and punishing the honest staff.

Several cases of corruption have been identified with regard to appointment of casual labor, commission of transfer, promotion, contracts and shelter with bribes, taking of bribes for HT connection by CBA leaders, payment of overtime without work, abuse of resources, and CBA leaders' intervention in the usual process of allocating residential facilities for the staff.

B.2. The accountability is weak due to stripping down the 'Detective and Investigation' department of the PDB, absence of a central database of the allegations submitted and the actions taken against the concerned staff, connection of corrupt staff with the CBA and high-level officials, and absence of effective administrative and financial accountability of the high officials. This poor accountability system is one of the major reasons of the poor performance of the public power plants and abrupt corrupt practice.

C. Inefficiency in the Generation of Public Power Plants and Corrupt Practices

The PDB has been supplying around 3000-3200 mw, including 1260 mw from IPPs, against a demand of around 6000 mw. The major reasons may be identified as follows:

- *Poor Performance of Generation at Public Plants*

i) Lack of plan to replace the outdated or expired life time of public plants[1];

[1] only 37 to 40 percent of the plants have standard 85 to 90 percent level, out of 63 around 42 or 66 % have already exhausted their life time and 29 plants are serving at 100 to 300 percent of their life time; 168 units of 20 power stations was 3867 mw, but the de-rated capacity of the power plant is around only 3164 mw

ii) Unusual delay in taking decision on rehabilitation due to administrative and poor financial accountability;
iii) High cost of diesel based power generation;
v) Lack of incentive or benefit for the efficient and honest staff members of the plant;
vi) Malpractices/irregularities and abuse of inputs by the staff of the existing public power plants

C.1. Malpractices and irregularities in Power Generation

The main obstacles to ensuring that the generation of power from the public plants is at the optimal level are mal-practice in hiring foreign consultants without any practical experiences, abuse of public money by vested interest groups for overhauling, maintenance and repair, and irresponsibility of the staff in storing and maintaining the imported/purchased items, theft of oil from the store, theft of spare parts, and sold equipment of the power stations.

D. Corruption in Transmission System

In the administrative and finance divisions of PGCB, corrupt practices include appointment of surplus CAs for a limited number of staff members, engagement of the same staff members for both the bidding process as well as billing section related to bidders, financial allegations, syndicating in the tender process, abuse of supplied input by submitting equipments without a serial number, and ignoring the national security related to KPI in order to create space for graft of materials.

E. Distributional Inefficiency and Reduction of Access to Electricity

The highest officially accumulated T&D loss is around 30 percent. The problems/failures/key constraints to bringing about the efficiency at the distribution level or the quality of supply to the consumers are i) unplanned expansion of distribution lines, ii) high non-technical or distribution loss, iii) poor accountability and inadequate monitoring of the staff, iv) abuse of supplied equipment or funds for local purchase, v) inefficiency in the operation and maintenance of distribution lines are the cause of several disputes between the REB and PDB/DESA, high technical losses and overloaded transformers, frequent hooking, burnt transformer and equipment, inadequate reliability of power supply, vi) CBA's illegal intervention and activities in the commercial service, vii) high technical losses due to poor maintenance, shortcomings in system design, expiry of the distribution network and poor maintenance, and viii) high load shedding.

E.1. High T&D Losses and Increase in Tariff

The gain from a 5% increase in the tariff would be around Tk 426 crore. If the non-technical/T&D losses could be reduced to 15% or 12% then the gain would have been Tk 1003 and 625 crore respectively.

E.2. Irregularities and corrupt practices on the distribution sides

A few examples of corrupt practices are inconsistency in the balance sheet, graft of bills and tampering with the meter or making the meter slow, abuse of the funds through the purchase of low quality digital meters to reduce distribution loss and the supply of equipment or funds for local procurement of the '5 Town', '16 Town' projects, and replacement of low quality and smaller amount of equipment by the REB to the PDB.

E.3. Problems in Maintenance and Development

Problems in maintenance and development include political intervention in bidding process and allocation of work orders for maintenance and development to the recommended bidder, withdrawal of funds without the completion of work, and the supply of low quality input.

E.4. Abuse of Equipments from Store

Theft of brand-name meters without seals from the store, abuse of funds during emergencies or natural disasters, theft of oil, theft of electric transformers in the collusion with the staff, bogus supply of input from the store, embezzlement of bills/revenue from agricultural consumers, and

work orders for amounts over the approved funds are the major areas of corruption on the distribution side.

F. Corruption and Harassments Faced by Consumers

The findings in this section are illustrated from the consumer survey which was conducted in June, 2006.

F.1.New Connection Process and Harassments faced by Consumers

On average, 27% of the consumers face harassment during the new connection process. Around 80% of the consumers of PDB reported unusual delays in the new connection process. The 30-day time limit goes up to 103 days, but at the payment of a bribe in place of 30 days they took only 6 and 7 days for getting a new connection (in case of DESA and PDB respectively). Application files usually move around 36/38 tables until the applicants finally gets a connection.

1. Tyranny of the Broker

In case of both LTI and HT connections 94% of the applicants took the new connection through brokers/agents to avoid the hassle and to save time. They include meter readers, MLSS/fourth class employees, and electrical contractors. In case of taking connection from REB, 42.4% took assistance of brokers. Usually, the contracts for getting new connections from the brokers include 40% contract for the whole package, 55% for urgent connection, and 5% to avoid hassles.

2. Load approval and collection of meter

In DESA areas, without even visiting the place, the CEI provides the certificate against the average bribe of at least Tk 15,000. 61% of the applicants influenced the officials or paid extra money for getting meters, while 55% of DESA paid extra money for meters.

3. Transactions of approximate total bribes for new connection and beneficiaries

Consumers of several categories paid bribes worth Tk 447 crore in FY 2005-06 for new connections. DESA consumers paid the highest amount of Tk 252 crore as bribe. The beneficiaries of the bribes from providing a new connection, load sanction, and inspection report are line man, CBA leader, store keeper, assistant to executive/superintendent engineer, and CEI when are supposed to be engaged in corruption.

F.2. Meter Reading and Billing Procedure

4. The appointment of illegal helpers (*Bode Alam and Gatish*) by the meter reader and adverse pilferage/theft of electricity is found in the 1st class reading section in the case of load levels beyond 100 Kwt.

5. With the help of the Executive Engineers, meter readers use false seal. They also break the seals of the meters collected from the store and tamper with them and then, replace the seals. They do not make and follow the schedule before start (the first working day) of the reading month; neither do they follow the rules of meter sealing. Usually, executive engineers do not record the meter's company name, size, and date of original and subsequent tests and the address of the premises. Also they do not serve bills on time. Consumers, on average, had to pay an extra amount of Tk 2,056 as bribes to meter reader, lineman, foreman, sometime through the Gatish of the meter reader, if he/she wanted to change the damaged meter.

6. Usually, meter readers and supervisors do not provide the correct bills to the consumers. Readers do not visit the consumers' field. 39% of the consumers informed that Supervisors did not cross-check the meter reading and issuance bills. The same percentage also feels that the office provides exaggerated bills (chi-square values are significant).

7. Consumers face harassment such as delays in getting their monthly bills, and the consumers also face delays if the bill needs correction as the bill maker has no authority to correct the bill.

8. The highest (54.4%) customers of DESA reported about that the officials demanding bribe for changing the damaged transformer. 36.2% of the PDB and 21% of the REB/PBS consumers

also reported the demand for bribes for the transformer, and clumsy process of file approval in DESA.

9. The highest (39%) heavy industries faced machinery and equipment disorder due to voltage fluctuation, and 35% of the residential consumers faced damage to their electrical equipment due to power outages. Since FY 2005-06 almost 90% of the consumers reported about load shedding more than 45 hours and hence, not withdrawal of the minimum charge.

10. *Opportunity loss of productivity/the export due to not availability of electricity* in the 90% of all RMG factories (due to use of the diesel-based generators) is additional 5%, or is roughly US$ 290 million per year[2]. The economic loss is equivalent to Tk 33,563 crore (or worth of 9,500 mw), which constitutes of the losses faced due to purchase of 6 power plants and outsource of the maintenance and rehabilitation of 1 plant at exaggerate rate of Tk 4007 crore, damage in production and equipments caused by power fluctuations and shortages of Tk. 8,355.35 crore (FY 2005-06), the unavailability of electricity in the 90% diesel-based generators used in the RMG sector is 1,824 crore Taka (FY 2005-06) and the money value of the excess T&D/non-technical losses (theft) is of 18,930 crore Taka (FY 1994 – FY 2005).

G. Irregularities and Corruptions in REB/PBS

- Political intervention in establishing new distribution line violating the existing policy,
- PTA conferences has not been arranging for last two years,
- REB's influence in the election of President of PBS, break down of the chain of command among REB staff,
- GMs are more committed to MP rather the line supervisors, taking bribe by GM/DGM of PBSs in allocation of distribution lines, new connections, transformers for agricultural purposes, providing the connection of transformers violating the maximum distance limit, bringing changes in the assumptions made for penal billing and not to execute the rule of the disconnection in the case of more than 90 days overdue. Besides, GM sometimes do not address the allegations of the consumers about the 'excess moving/mal-functioning meters', unexpected damage of meters, bribery in the collection of poles, illegal punishment fee for the theft of transformers, late fee and confiscating the meter without payment of bribe and withdraw the obligation for contractors to pay the carrying costs of equipments for new distribution network and giving scopes to contractors to shift this cost burden to the consumers at the payment of bribe.

H. Rural-urban disparities

These were evident among the consumers of the REB. The rural clients are deprived more as they face higher tariffs, relatively high minimum charge, service charges, higher load-shedding than the urban areas, poor time limit for the submission of due bills, liability due to theft of equipment, harassment and bribes for new connections such as delay in getting a connection, delays in reconnection, harassments during meter change, and in the billing and disconnection of lines.

I. Overall Satisfaction regarding the commercial services of the Distributors

On average, 77% of the surveyed consumers of all distributor agencies have expressed their dissatisfaction (1.65 out of 5.0 score). In case of new connection, 59% consumers of all agencies were dissatisfied. However, 41% consumers (or score = 2.45) of the REB/PBSs stated that they were moderately satisfied. 72% were dissatisfied with the supply of meter and other equipments. On average, 35% of all consumers showed dissatisfaction with the current tariff rate and billing process. Unfortunately, on average 90 % of the consumers of all distributors (below 2 out of 5 score) reported rampant harassment, bureaucratic complexities and service provider's negligence. Consumers of the PDB expressed the highest level of dissatisfaction with the magistracy and the mobile court activities.

[2] Star Weekend Magazine, 2 March 2007

Policy and Institutional Recommendations

A. For Improvement of Governance and Combat Corruption

I. Policy Level

- An 'Independent Commission' should be formed to prepare the 'Vision 2025' plan for the power sector.
- A full fledged and honest Minister/Adviser and technically sound Secretary with adequate power to take any decision independently should be appointed.
- An experienced professional with leadership quality should be appointed as CEO and other board members for all corporatized units of the power sector.
- An Ombudsman for energy sector including power division should be appointed soon.
- The 'Right to Information Act' should be approved and implemented soon and the document of all the big procurement and financial performance should be made available to the people.
- The government should give the deadline to all public, autonomous and private agencies' to pay the outstanding to increase the financial capacity.
- Intervention of vested interest group in procurement of the plants should be removed.
- An Independent review committee consisting of High Court judges, economists, concerned experts, economists and senior citizens should be formed to review the ongoing procurement process.
- The BERC should soon be made functional with adequate resources and power.
- As a holding company, the PDB should be downsized and bring the dynamism in the works through the practice of corporate culture and at the financial, human resource and commercial policy should be introduced soon by local experts
- Political intervention in allocation of the distribution network has to be stopped by law.
- Research on alternative energy and the governance in the university area should be expedited.

II. Electricity Act and Effectiveness of Court

- Existing 'Electricity Act' The law should be revised with the provision of the justifiable punishments with respect to the extent and nature of corruption
- Under the "Speedy Tribunal Act" special courts and required judicial magistrates should be appointed to make the judgments of the ongoing cases.
- The Inquiry and Prosecution units should be different and free from any intervention.

III. Efficient and Transparent Procurement Process for New Plants or Others

- The Ministry should evaluate the bids before the presence of media, citizens and bidders.
- A legal obligation to follow the time line should be introduced.
- Agencies should allow the highest two week time limit for publication of Tender Invitation Notice.
- Both bid-related staff members and bidders should be oriented on PPR 2003; and incentives for bid-related experts, which should not be transferred too soon as well.
- No unsolicited proposal should be accepted by any organization.
- Exemplary punishment should be ensured for the bidders who fabricate documents, false experience certificate, irregularities in quoting price, losing or hide the important documents.

IV. Organization/Institutional Level

- The 'Detective and Investigation' department should be reinforced by appointing the honest, efficient and committed staff.
- Recognized and experienced professionals should be appointed as Chairman or members for BERC.
- 'Engineers Act' should be introduced soon
- PDB should be empowered to prosecute the bill defaulters including public agencies.
- Power division should follow the PSMP.

- To manage the information on bill collection, financial and human resource and purchase as well as storing a complete MIS system should be introduced through out the sector
- An impartial committee should evaluate the transparency and accountability of the PGCB and the steps should be taken as per the recommendations made.
- 'One stop' center for day-to-day services should be introduced.
- PTA conferences of REB should be arranged regularly.
- REB's influence/intervention in the election of President of PBS should be stopped and Board Chairman should be selected from REB Officers
- Staffs at all levels should be brought under the effective and transparent accountability system.
- Instant punishment to the GM/DGM of PBSs in the case of any bribes charged from consumers.

B. Efficiency and Governance in the Generation

- The Power Division should take all out efforts to settle the ongoing procurement process of plants to ensure the low cost of establishment.
- The Ministry should take decision to use alternative sustainable technologies such as nuclear power plant for national energy security.
- PSMP should be a legislative document so that each Govt. is bound to follow and it should be prepared through consultation with multidisciplinary experts
- GoB should ensure at least 51 percent shares of users/Bangladeshi citizens (outside and inside the country) into the generation
- The industrial zone, EPZs and PBSs/Investors at district level should be allowed to establish Independent power plants
- The concern management should be given the financial power to conduct the scheduled maintenance and rehabilitation work of the power plants
- Local experts should be appointed for rehabilitation and maintenance purposes
- Attractive financial packages (salary, incentive, bonus, training) should be provided to the power plants Engineers and other staffs
- The higher authorities should visit the power plants regularly and spend time with the engineers and employees to listen to their prevailing problems and try to solve them
- To avoid the loss of PDB due to contract with foreign IPPs Govt. should emphasis on local investors in IPP
- In the case of establishing the IPP, the provisions should be the same for local and foreign investors
- The adjustments of certain tariff components such as variations in Taka/Dollar exchange rate, fuel price and inflation rates should be brought soon
- Keep away from the guarantee on FSA with IPP from an energy security point of view

C. Efficiency in the Distribution Sides

C.1. Reduction of High T&D or Non-Technical Losses

- Pre-paid meters should be introduced at all levels.
- The meter reader for specific 'meter route' should selected randomly every month.
- Several 'mobile courts' should be constituted to disconnect the illegal lines and collect the outstanding bills from both public and private organizations.
- Election process of CBA should be reformed to bring the transparency of their activities and political affiliation of CBA should be banned.
- Underground cable lines should be introduced and brought under strict monitoring
- Meter readers who have spent over three years in the same place should be transferred.
- Independent feeder for industrial zone and direct connection to the consumers who are believed to be faithful.
- The inspection of the electric meters, especially of HT consumers, should be undertaken by third party, excluding the concerned distributors.
- The distribution system of the BPDB and DESA should outsourced more.
- To empower high officials of the concern agency in the case of the transfer of the staff.

- The feeder database of consumers, meter reading sheets, ledger and monthly payment bills should be kept and checked regularly.
- Report of Energy balancing and effectiveness of meter of DESA should be available for public to know the exact system loss.
- Meter reader of the concern feeder should be accountable to adjust the monthly revenue against the disbursed total amount.

D. Effectiveness of Reform Measures

- Government should have clear role/position about the future reform process
- A specific guideline or future reform process should be initiated based on the evaluation
- Full autonomy of power division to take any decision on plan of operation, agreement, regulation, human resource management of corporatization
- Irrespective of public or private, an optimum mix of the efficient, honest, and committed professionals for the newly and upcoming coproratized units should be appointed
- In the case of HRM or staff recruitment, Incentive package for efficient staffs and 'Hire and fire policy' should be followed

E. Effective BERC

- Increase of the licensing fee at progressive rate to bring the financial self-sufficiency of BERC
- Co-operation between BERC and MPEMR must be increased in the planning and designing of the future development of the sector, and the determination of tariffs
- BERC's activities should receive wider coverage in the print and electronic media in order to make the process transparent
- BERC should consider the peak and off-peak issues in the determination of the methodology of generation tariff and also a transparent mechanism of auditing the submitted documents by IPP
- Status and other regulated benefits for BERC officials will be ensured soon as per rule.

F. Human Resource Management

- A dynamic and feasible 'HR policy' for the power sector should be prepared.
- A central database on Staffs' joining date, current position held promotion, expected retirement dates and place or area of work and duration of stay and trainings.
- In the case of recruitment OMR based recruiting system of REB can be followed.
- The result would be published with the result scores and appointments should be ensured based on the serial list against the vacant posts.
- To arrange the training programs for the staff based on the evaluation of their demand.
- Existing salary structure and other benefits of the staff should be feasible with the market price.