

**CENTRAL ELECTRICITY AUTHORITY**  
**Grid Management Division**

**AGENDA FOR THE SECOND MEETING OF NATIONAL POWER COMMITTEE**

**Time & Date for the meeting:** 1130 Hrs. on 14<sup>th</sup> February 2014 (Friday).  
**Venue for the meeting:** 2<sup>nd</sup> Floor, Conference Room, CEA, Sewa Bhawan,  
R.K. Puram, Sector-I, New Delhi.

**A. CONFIRMATION OF SUMMARY RECORD**

Summary record of discussions of the 2<sup>nd</sup> meeting of NPC held on 16<sup>th</sup> July 2013 at CEA, New Delhi was circulated vide CEA letter No. 8/X/MMS/GM-13 dated 01-08-2013 . No comments have been received on the summary record.

**Members may, therefore, like to confirm the summary record of discussions.**

**B. FOLLOW-UP ACTION ON DECISIONS TAKEN EARLIER**

**B.1 IMPLEMENTATION OF MEASURES TO PREVENT GRID DISTURBANCE**

**B.1.1 Reactive Power Planning**

it was decided that all States would carry out reactive power planning not only at transmission level but also at distribution level and prepare schemes to maintain voltage profile as per relevant Regulations / Standards. These schemes would be forwarded by the States to the Power System wing of CEA under intimation to the NPC secretariat at the earliest. Further, execution of approved schemes would be taken up by the States without waiting for the funds from PSDF.

**Members are requested to intimate the progress in this regard.**

**B.1.2 Ensuring proper functioning of Under Frequency Relays (UFRs) and df/dt relays**

It was decided that all SLDCs & RLDCs would upload the details of feeders to be tripped through the UFRs and the expected load relief at different frequency levels in their respective States / Regions on operation of UFRs. It was also decided that RPCs would send inspection report for healthiness of UFR and df/dt regularly on quarterly basis to NPC secretariat.

**RPCs are requested to submit the summary of the progress in regard to the inspection and its report and related uploading on the website of SLDCs/RLDCs.**

### **C. FRESH AGENDA ITEMS FOR DISCUSSION**

#### **C1: ISSUES RELATED TO SCHEME FOR OPERATIONALIZATION OF PSDF:**

##### **C1.1: Type of projects to be funded through PSDF:**

The PSDF will be utilized for the following activities:

- a) Creating necessary transmission systems based on operational feedback by Load Despatch Centers for relieving congestion in inter-state transmission system (ISTS) and intra-state system which are incidental to the ISTS.
- b) Installation of shunt capacitors, series compensators and other reactive energy generators for improvement of voltage profile of the Grid.
- c) Carrying out system studies, for furtherance of above objectives and capacity building.
- d) Installation of special protection schemes, pilot and demonstrative projects, protection schemes and for setting right the discrepancies identified in the protection audits on regional basis.
- e) R&M of transmission and Distribution system for relieving congestion.

Additional areas for projects:

- f) Providing ancillary services
- g) Installations of Wide Area Measurement System (WAMS), expert system or any other advance system for improving visibility, reliability, safety and security of the integrated grid.
- h) For developing information dissemination mechanism for the participants of Power Exchanges
- i) Servicing of investment for transmission schemes of strategic importance, identified by CEA and CTU that such a schemes is not being utilised up to optimum level for servicing of capital costs during the initial years.
- j) Parking with a financial institution for grant of loans at concessional rates to projects specific to congestion reduction in the grid.
- k) Works already completed under R&U as per protection audit after the submission of DPRs to CEA in year 2012.
- l) Any other scheme for common benefit of the grid operation or any activity which will help in enhancing grid security.

Before submission of schemes to Appraisal committee the projects for the regional scheme shall have approval of respective RPC and for inter- regional/ national level scheme approval of National Power Committee is required so as to avoid the duplicity of schemes by states/regions. Schemes for within the states the approval from head of the state utility shall be required.

##### **C1.2: Fund Requirement:**

An assessment of total fund requirement from PSDF for carrying out the works during the financial year after prioritizing them will be made before the beginning of the financial year which can be reviewed quarterly. The projects which have more strategic importance for grid

security like SPSs, replacement of UFRs can be given higher preferences over long gestation projects like studies for tuning of PSSs etc.

### **C1.3: Threshold levels for Funding of Schemes**

The threshold levels for schemes except scheme of capacity building and project consultancy and/ or study not below cost of Rs.5.00 lakh to be considered for funding from Power System Development Fund shall be as follows:

- i. Schemes like Special Protection Schemes (SPS), System studies, Capacity building, Pilot projects, Demonstration Projects, New technology development in power system etc. having project outlay above Rs. 50 (fifty) Lakhs.
- ii. Other schemes having project outlay above Rs. 1 (one) Crores.

### **C1.4. Criteria of Funding**

The schemes shall be funded only as a grant subject to availability of the funds and admissibility of the scheme as per these procedures, the grant shall depend on the strategic importance and the size of the scheme and shall be considered for release as per the following criteria:

- a) Upto 100% grant for the schemes mentioned at Para 3.1(i) above.
- b) 30% to 50% grant for other schemes mentioned at Para 3.1(ii) above as per the recommendation of the Appraisal committee

In view of funding by way of grant as above, assistance through interest subsidy or grant of financial assistance at concessional rate of interest shall not be considered.

### **C1.5 Funding and Payment Security Mechanism:**

In case of the schemes costing up to an amount of Rupees 5 crores, the Fund shall be disbursed in a single payment on completion of the scheme and on submission of documents and details as stipulated at para 6 under this procedure.

In case of the schemes costing above Rupees 5 crores, disbursement of the funds shall be as below:

- i. The entity shall incur an expenditure of 30% of the total cost of the scheme.
- ii. A certificate from the statutory agency which has appraised the scheme shall be submitted in support of the expenditure incurred as per above.
- iii. Fifty percent of the approved funding shall be released to the entity on submission of a bank guarantee of equivalent amount valid for a period of six months after completion the scheme.
- iv. Balance fifty percent of the approved funding shall be released on completion of the scheme duly supported by a completion certificate from the statutory agency which has appraised the scheme and submission of the relevant documents as mentioned in para 10 of the Note.
- v. The documents and details as stipulated under this procedure shall be submitted along with the application for release of the fund.

## **C1.6 Implementation of the scheme:**

Formation of two groups one for monitoring the implementation of the scheme other for preparing the methodology for evaluation of the scheme.

- (i) Implementation monitoring group: this group shall have members from Director level officers from CEA and GM level and above officers from CTU / POSOCO. Group shall be headed by Member Secretary, NPC. This group can also seek the details of works being done and related documents from the implementing agency.
- (ii) Committee for framing scheme guidelines should comprise of representative of CEA, Technical Coordination Sub-Committee (TCC), Operation Coordination Sub-Committee (OCC) & Protection Coordination Sub-Committee (PCC) of RPCs, Power Grid, POSOCO. This Committee should be headed by respective Member Secretary, RPC. The Committee shall also be responsible for detailed examining, recommending the schemes to Appraisal Committee.
- (iii) Regional Power Committees, transmission licensees, distribution licensees, Load Despatch Centres, Power Exchanges, Central Transmission Utility (CTU), State Transmission Utilities (STU)- for intra-state systems which are incidental to the ISTS) as the case may be, will be the implementing agencies.

**C1.7** Amendment to the existing PSDF regulation of CERC should also include that the expenditure from PSDF can be done for any type of projects as mentioned in item 1.0 above, though the fund inflow to PSDF may be from various sources as per the different CERC regulation in vague.

**NPC may like to deliberate**

## **C2. CERC (INDIAN ELECTRICITY GRID CODE) (SECOND AMENDMENT) REGULATIONS, 2014.**

CERC vide its notification dated 06-01-2014 has made second amendment in the IEGC to be called the Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Second Amendment) Regulations, 2014. These Regulations shall come into force with effect from 17.2.2014.

As per the Clause (10) of amendment Regulation the Clause 6.5.17 of Principal Regulations has been substituted with the following:

“In case of any grid disturbance, scheduled generation of all the ISGSs supplying power under long term / medium term/short term shall be deemed to have been revised to be equal to their actual generation and the scheduled drawals of the beneficiaries/buyers shall be deemed to have been revised accordingly for all the time blocks affected by the grid disturbance. Certification of grid disturbance and its duration shall be done by the RLDC.

The declaration of disturbance shall be done by the concerned RLDC at the earliest. A notice to this effect shall be posted at its website by the RLDC of the region in which the disturbance occurred. Issue of the notice at RLDC web site shall be considered as declaration of the disturbance by

RLDC. All regional entities shall take note of the disturbance and take appropriate action their end.

For Bilateral short term and collective transactions, the methodology of settlement of accounts for the period of Grid Disturbance shall be formulated by National Power Committee(NPC) and same shall be put up to the Commission for approval. The methodology shall cover all possible scenarios with illustrative examples to cover the instances where the Grid disturbance is either partial or it affects only one region.”

The above requirement of developing the methodology of settlement of accounts for the period of Grid Disturbance by NPC need to be deliberated in the forthcoming meeting of the NPC to be decided by the Chairperson, CEA. RPCs and POSOCO are requested to submit the draft methodology for discussion and finalization in the meeting.

### **C3. HOLDING OF PROTECTION SUB-COMMITTEE MEETINGS AT LEAST TWICE A MONTH**

Considering the difficulties expressed by the RPCs, Chairperson, CEA & NPC accepted the request of RPCs for holding the Protection Sub-Committee meetings on monthly basis during current summer season. However, he directed them to ensure that whenever there is an instance of tripping of multiple critical transmission / generation elements in the grid, it should be got investigated & analysed on immediate basis and remedial action should also be taken in a time-bound manner under intimation to NPC secretariat / Grid Management Division of CEA.

**RPCs are requested to submit the summary of the analysis and investigation reports of the trippings in their respective regions for deliberations.**

**C4. Shutdown of ISGS unit under RSD (Reserve Shutdown) during low regional demand - (Agenda from WRPC).** Chairman, TCC, WRPC & Managing Director (GETCO) has stated that during rainy season, there is drop in demand even upto 30%, especially during the night. In such a scenario, it becomes extremely difficult for SLDC to curb under drawl. In order to avoid this scenario, SLDC generally submits their requests to RLDC for zero/less quantum of Central sector generation well in advance. However, RLDC schedules generation required for technical minimum capacity of Central Sector machines, thereby forcing SLDC to accept this and shutdown other cheaper sources of power. It has been suggested by WRPC that one of the ISGS units may be stopped and other units may run on full load.

Similar situation of load reductions, after rains during harvesting periods in agrarian states like UP Rajasthan, Punjab etc., may occur.

**NPC may discuss.**

**C5. Utilization of Power System Development Fund (PSDF) – (Agenda from WRPC).**

Chairman, TCC, WRPC & Managing Director (GETCO) has stated that around Rs.1000 crore has been deposited in PSDF by WRLDC and they are not being utilised.

Implementation of schemes like Grid Security Expert System (GSES), Automated Demand Management Scheme (ADMS), R&M scheme etc. can be effectively done through funding from PSDF. The proposal for using these funds and procedure for using this fund can be finalised.

**NPC may like to discuss.**

**C6. Fund Requirement:** Members may like to finalize the methodology for meeting the requirement of fund for establishment expenditure of NPC.

**NPC may like to discuss.**