

ADDITIONAL AGENDA FROM NERPC FOR 7th STANDING COMMITTEE MEETING

1.0 Alternative Transmission Line for Evacuation of Power from 60MW Tuirial HEP of NEEPCO - Agenda by NERPC:

- 1.1. Tuirial HEP with capacity of 60MW has been commissioned on 01.12.2017. The power is being evacuated by 132kV Tuirial-Kolasib S/C line. In the meeting of NEEPCO & Secretary, Power & Electricity Department, Govt. of Mizoram (on 17.02.2017) it was decided that "2nd evacuation line is necessary to render stability to the evacuation network. The Engineer-in-Chief P&E Department stated that it may be feasible to bifurcate 132kV PGCIL line between Jiribam and Luangmual for providing 2nd evacuation line. It was therefore decided that the P&E Department, Mizoram will explore the possibility of bifurcation of the 132kV Jiribam-Aizawl at a convenient point."
- 1.2. Since Tuirial project has been fully commissioned it is imperative that the 2nd transmission line for reliable evacuation of power is available urgently applying N-1 criterion. NEEPCO has confirmed that two additional 132kV line bays in accordance with above concept, has already been constructed and commissioned at Tuirial switchyard.
- 1.3. Members may discuss.

2.0 Proposal for Connection of Upcoming Dikshi HEP (24MW) in West Kameng District of Arunachal Pradesh - Agenda by NERPC:

- 2.1 Dikshi HEP (24MW) located near Rupa of West Kameng District has been allotted to M/s Devi Energies Pvt. Ltd. on BOOT basis. The project is in advance stage of construction now and Govt. of Ar.Pradesh is actively considering signing of PPA with the developer. However, no transmission line either of the state or of any other entity exists in the proximity of this project to facilitate power evacuation.
- 2.2 Under Comprehensive Scheme for strengthening T&D system in Ar.Pradesh construction of 132kV Khupi-Tawang and 132kV Bomdila-Kalaktang is envisaged with sub-stations at Bomdila, Tawang and Kalaktang. However, these lines and substations would take considerable amount of time to be constructed.
- 2.3 Since, Dikshi HEP is on the verge of commissioning, it is proposed to connect Dikshi HEP with 132kV Balipara-Khupi line through a LILO arrangement at a place called Nechiphu, which is 32 Ckt. Km away from Dikshi HEP. Construction of a 132kV D/C line from Dikshi HEP to Nechiphu has been entrusted to developer (i.e. M/s Devi Energies), which is also under advance stage of construction.
- 2.4 Necessary approval is required for connection of Dikshi HEP with 132kV Balipara- Khupi with LILO at Nechiphu, so that power generation may be utilised from the upcoming HEP.
- 2.5. Members may discuss.

3.0 Handing over of 132kV Balipara-Khupi-Kimi S/C line by NEEPCO to POWERGRID - Agenda by NERPC

- 3.1 132kV S/C Balipara-Khupi-Kimi transmission line and its associated substations were constructed by NEEPCO through M/s PGCIL on deposit work basis for drawing construction power for Kameng HEP at Ar.Pradesh.
- 3.2 The details of the asset constructed are as follows:-
 - A)Transmission Line:
 - a)132kV Balipara - Khupi S/C line.
 - b)132kV Khupi- Kimi S/C line
 - B)Substation at Balipara:
 - a) 2x50 MVA, 220/132 kV transformer at Balipara with associated bays.
 - b) 1No. of 132kV line bay for the line to Khupi.
 - c) 1No. of 132kV bay for bus transfer.

C)132/33 kV substation at Khupi

a) 2 Nos. of 132kV line bays: 1No. bay for the line to Balipara and 1 No. bay for the line to Kimi.

b) 4x5 MVA, single phase, 132/33 kV transformer with associated bays.

c) 1 No. of 132kV bay for bus transfer.

d) 1 No. of 33kV line bay at Khupi (for operating Khupi-Kimi portion at 33kV)

3.3 GOI has approved Comprehensive Scheme for strengthening T&D system of Ar.Pradesh. In the scheme there are a number of lines in the West Kameng, East Kameng districts viz. 132kV Khupi-Tawang, 132kV Khupi-Seppa-Bameng, 132kV Seppa- PakkeKesang-Seijosa. It has to be noted that 132kV Khupi station will be vital to the Transmission system of Ar.Pradesh in the coming years.

3.4 In the 5th Standing Committee Meeting of Power System Planning of NER held at Imphal on 08.08.2015 it was proposed that all ISTS would be handed over to POWERGRID in the interest of maintaining system efficiency, integrity and security.

3.5 NEEPCO had communicated its intention to hand over the 132kV Balipara-Khupi-Kimi S/C line and its associated substations to M/s PGCIL vide letter dated. 28.07.2017. M/s PGCIL vide letter dated. 01.09.2017 informed that "In case this line is to be handed over to POWERGRID, the line status is to be changed to ISTS category. For this permission of respective RPC, SCM on Power System Planning as well as CERC is required."

3.6. Members may discuss.

4.0 Installation of 80MVAR Bus reactor at Ranganadi - Agenda item by NERPC

4.1 As per deliberations in 5th & 6th SCM for Power System Planning for NER it was decided to install 420kV 80 MVAR bus reactor at Ranganadi with GIS bay.

4.2 However in view of high excavation costs and environmental issues on direction of Member Secretary, NERPC studies were carried out by NERPC & NERLDC. The grid pre-requisites for the studies as required by NERLDC were:- (i) N-1 of 400kV Ranganadi - Biswanath Chariali D/C should be satisfied i.e. no circuit should be kept open, (ii) the voltage at Ranganadi should not exceed 415kV in the worst case.

4.3 In 141st OCCM, SE,NERPC informed that as per fresh studies conducted by NERPC and NERLDC the 80MVAR Bus reactor or 75MVAR (3x25MVAR) tertiary reactor is required at Ranganadi as well as 2x63MVAR bus reactor at Biswanath Chariali. However as per NEEPCO there is no space at Ranganadi switchyard to accommodate tertiary reactors. Sr. Manager, NEEPCO also informed that the commissioning of the 80MVAR bus reactors would require at least 3 to 4years. DGM,SLDC,AEGCL opined that Assam is facing high voltage issues at 132kV Gohpur, so this reactor is required. All the rest of the members assented to the requirement of the reactor. SE,NERPC stated that the installation of the 80MVAR bus reactor at RHEP would involve considerable expenditure as well as excavation works which may damage the fragile terrain beyond salvaging. Member Secretary, NERPC concluded that the matter would be referred to the next SCM of NERPC with the views of the forum.

4.4 Members may discuss.