

# **Agenda for SPS Review Meeting scheduled to be held at ERPC,**

**Kolkata on 6<sup>th</sup> April 2018**

## **1. Issues of SPS associated with tripping of any pole of HVDC Talcher-Kolar**

During synchronization of NEW grid with SR grid, to limit the surplus power likely to be wheeled to SR through ER and WR, in the event of single or bi-pole outage of 500 kV Talcher-Kolar HVDC, arrangement for 600 MW generation reduction in ER (200 MW each at SEL, GMR and JITPL) by sending digital signals from Talcher STPS was made, apart from the pre-existing reduction/tripping of TSTPS-II generation.

To implement this SPS, signal is transmitted from Talcher to the concerned generating stations.

The SPS needs to be reviewed in view of the following:

- A. Availability of new high capacity AC transmission elements in ER, SR and WR:** A number of new high capacity transmission elements have been commissioned in ER, SR and WR after implementation of the SPS. Since 765kV Angul-Srikakulam D/c line is available, the chances of wheeling of surplus power from ER to SR via WR are limited.
- B. Sending SPS signal to Vedanta (SEL):** after removing LILO of Rourkela-Jharsuguda at SEL, this link is no more available. In view of removal of 400kV Rourkela-Jharsuguda LILO at SEL, PLCC link for sending SPS signal to Vedanta/Sterlite may be re-established either via Jharsuguda or via Meramandali or via Angul.
- C. Continuous receipt of generation back down signal on shutdown of HVDC Talcher-Kolar single pole:** The SPS could not be taken back into service as there was continuous receipt of backing down signal at the respective generator ends. Hence, the SPS had to be kept by-passed throughout the shutdown period even though Pole-II was in service.

**Members may decide.**

## **2. Issues related to Rangpo SPS operation**

Rangpo SPS is designed in a special meeting held on 14<sup>th</sup> October 2016 to facilitate maximum evacuation from the hydro generation projects in Sikkim.

- A. Operation of SPS-I & II:** The following issues related to operation of SPS-I & II were identified in monthly PCC meetings:

<b>SPS operation Date</b>	<b>Issue</b>
27-07-17	Time delay for SPS-2 more than 500 ms
10-01-18	Time delay of SPS-2 less than 500 ms
21-02-18	SPS-1 operated even though the flow did not cross 850 MW after tripping of one line

In 54<sup>th</sup> PCC, Powergrid informed that the scheme was implemented using PLC and there may be minor errors in MW transducers. This problem would be resolved when the SPS scheme implemented through BCU and SAS which is under the awarding stage. The implementation would take 3 to 4 months.

PCC felt that the time delay between SPS 1 and II may be reviewed till the SPS scheme implemented through SAS. PCC decided to review the time delay.

- B. Review of generation reduction:** In 138<sup>th</sup> OCC, it was informed that Tashiding HEP is also included under Rangpo SPS, two units of Tashiding HEP will trip on actuation of SPS. However, it will be reviewed in coordination with other generators covered in the SPS.

**Members may decide.**