



Power System Operation Corporation Limited

Western regional Load Despatch Centre

FLASH REPORT

Msg no: 10/1875

Date: 27/10/13.

WRLDC/Oct-13/GD-1

Incident: Tripping of Chandrapur 400 kV Bus I and elements connected to it.

1. Date and Time: 27/10/2013 10:51 Hrs

2. Antecedent Conditions

I. Frequency of NEW Grid/SR Grid

Event	Frequency	Time(hh:mm)
Pre incident	50.11	10:45
Post Incident	49.87	10:52

II. Demand Met

Sl.No	Area/Region	Demand Met(MW)
1	WR	34841
2	Gujarat	10355
3	Maharashtra	14528
4	Madhya Pradesh	6387
5	Chhattisgarh	2373
6	Goa	310
7	DD	266
8	DNH	632

2. Reason for Tripping: During taking out of unit 7, GT 7 Circuit breaker did not open leading to LBB operation of 400 kV Chandrapur Bus 1. This has resulted in tripping of all the elements on Bus 1 of Chandrapur. LBB protection resulted in tripping of 400 kV Chandrapur Chandrapur II line which led to overloading of 400 kV Chandrapur II- Parli resulting in tripping on over current protection. This has lead to zero power at Chandrapur II with only incoming feeder i.e. 400 kV Warora-Chandrapur II. This has led to increase in loading of Wardha flow-gate resulting in SPS operation and 84 MW backing down at Tirora.

3. Areas Affected By Disturbance: 490 MW (Unit 6: 430 MW and Unit 3: 60 MW) generation loss reported by MSEB at C'pur. Load loss has to be confirmed by MSEB.

4. Elements affected:

Name of line (400kv)	OUTAGE TIME	RESTORATION TIME
400 kV Chandrapur –Bus 1	10:51	11:28
400 kV Chandrapur- chandrapur HVDC pole 1	10:51	12:07
500 kV HVDC pole 1	10:51	12:07
400 kV Chandrapur-Bhadrawati 1	10:51	13:22
400 kV Chandrapur-Bhadrawati 3	10:51	-
400 kV Chandrapur-Chandrapur II	10:51	12:16
400 kV Chandrapur-Khaparkheda	10:51	12:38
400/220 kV ICT II	10:51	-
400 kV Chandrapur II- Parli	10:51	12:21
210 Unit 3	10:51	-
500 Unit 6	10:51	-
400 kV Chandrapur –Parli II	Was out to control H/V	11:38

5. Actions Taken: Raipur Bhadrawati flow increased to 680 MW after the event (400 kV Bhilai-Bhadrawati was under emergency shutdown). Immediately actions taken were as following:

1. HVDC Bhadrawati flow was reduced by 300 MW and Vindhyachal HVDC flow by 200 MW.
2. FSC on Raipur-Wardha was taken into service to decrease loading of Bhadrawati-Raipur T/C.
3. Korba and Sipat generation was back down by 150 MW and 250 MW respectively.
4. Koyna generation was picked up and MSEB was asked to increase Hydel generation.

6. Current Status:

Restoration has been completed. Units will be synchronized later.

(Shift Charge Manager)