

# भारत सरकार Government of India विद्युत मंत्रालय Ministry of Power केन्द्रीय विद्युत प्राधिकरण Central Electricity Authority विद्युत प्रणाली परियोजना प्रबोधन प्रभाग Power System Project Monitoring Division

Subject: Site Visit Report to assess construction progress of OPGC-Jharsuguda 400kV D/C line being implemented by OGPTL-II, Sterlite TPP – Jharsuguda 400kV 2xD/C line being implemented by Sterlite Energy Limited(SEL) and corresponding bays at Jharsuguda being implemented by PGCIL. (Tour date: 8/9/2017 to 11/9/2017).

The undersigned visited Sterlite TPP – Jharsuguda 400kV 2xD/C line on 8/9/2017, OPGC-Jharsuguda 400kV D/C line and Jharsuguda (Sundergarh) 765kV S/s PGCIL on subsequent days. Report on the same is hereby submitted for your kind information and necessary action.

Encl: As above

(Rajesh) AD-I (PSPM)

**Deputy Director** 

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Dated:2//09/2017

No. CEA/PS/PSPM/11/9/2017/ 929

## A. Tour report on the visit to OPGC-Jharsuguda 400kV D/C line being implemented by OGPTL-II awarded through TBCB route and corresponding bays at Jharsuguda on 09.09.2017:

#### 1. OPGC-Jharsuguda 400kV D/C line

#### i. Background

Transmission project "Common Transmission system for phase-II generation projects in Orissa and immediate evacuation system for OPGC project (Orissa)" is awarded to Odisha Generation Phase-II Trans. Limited (A subsidiary of Sterlite Grid Limited) through TBCB route. Under the scope of work 2 transmission lines are being constructed i.e. Jharsuguda – Raipur pool 765 kV D/C line and OPGC – Jharsuguda 400 kV D/C line. OPGC STPP (2X660MW) is under construction which will need startup power by Nov-17 through OPGC – Jharsuguda 400 kV D/C line. OPGC STPP unit#1&2 is likely to commission by Jun-18 & Sep-18 resp.

#### ii. Project status

Sr.no.	Particular	OPGC-Jharsuguda 400kV D/C line	
1.	Total length of line (Ckm)	51.35x2=102.7	
2.	Total no. of locations (nos.)	152	
3.	Foundation completed (nos.)	152	
4.	Tower erections done (nos.)	152	
5.	Stringing completed (Ckm)	102.7	
6.	Schedule date of commissioning	Jul'17	
7.	Actual completion date	30 <sup>th</sup> Aug'17	

#### iii. Site observations after Inspection

- a) Tower foundation, tower erection and stringing at all locations from Jharsuguda(Sundergarh) PGCIL gantry to OPGC gantry is completed.
- b) Stringing of 1 out of 2 OPGW between AP 61A/0 to AP 62/0 was under implementation, which was expected to complete by 13.09.2017.
- c) Tower location no. AP1/0, AP32/0, AP33/0, AP42A/0, AP42B/0, AP43/0, 43/1, AP44/0, AP45/0, AP49/0, 49/3, 49/4, AP53/0, 53/1, 54/1, AP55/0, AP56/0, AP57/0 and AP62/0 were visited. It was observed that at AP62/0, 49/4 tower locations anticlimbing, danger plates, circuit plate and number plate were not installed. Executives of OGPTL-II clarified that anti-climbing, danger plates, circuit plate and number plate were installed at these 2 tower locations but theft has occurred at these 2 tower locations.



## 2. GIS Bays at PGCIL Jharsuguda(Sundergarh) 765/400kV s/s for OPGC-Jharsuguda 400kV D/C line:

#### i. Progress of bays:

Civil Works : 95% Equipment Received : 100% Equipment Erected : 95%

Testing of Equipments : Bays equipment are under testing.

SCADA is under testing.

Expected Date of Completion : 30<sup>th</sup> Sep 2017

#### ii. Pending works:

- Wave trap foundations are to be installed again due to wave trap design issues.
- GIS ducts to be installed upto Gantry towers.

Bays are expected to be commissioned by 30<sup>th</sup> Sep 2017.



## B. Tour report on the visit to Sterlite TPP – Jharsuguda 400kV 2xD/C line (owned by Vedanta Ltd (Earlier Sterlite Energy Ltd)) on 08.09.2017

#### 1. Sterlite TPP – Jharsuguda 400kV 2xD/C line

#### i. Background

A special meeting was organized by ERPC on "Issues related to Vedanta Limited" held on 14.10.2016 at ERPC, Kolkata in chairmanship of Member Secretary, ERPC in which, it was decided that LILO of both circuit of Rourkela-Raigarh 400kV D/C at Vedanta will be extended to Jharsuguda (Sundergarh) 765kV/400kV Substation and LILO connection will be dismantled. Target date for completion of transmission line will be 30.11.2016. In case Vedanta fails to adhere to the schedule then, LILO connection may be withdrawn. Contract of construction of Sterlite TPP – Jharsuguda 400kV 2xD/C line and its corresponding bays at PGCIL Jharsuguda(Sundergarh) is awarded to M/S SR Associates Infrastructures Private Limited.

#### ii. Project status

Sr.no.	Particular	LILO-I point to Jharsuguda 400kV D/C line	LILO-II point to Jharsuguda 400kV D/C line
1	Total length of line (Ckm)	40	Unknown as construction not started yet
2	Total no. of locations (nos.)	64	Unknown
3	Foundation completed (nos.)	64	0
4	Tower erections done (nos.)	64	0
5	Stringing completed (Ckm)	36	0
6	Anticipated date of commissioning	20 <sup>th</sup> Sep'17	Unknown
7	Schedule date of commissioning	Nov'16	Nov'16

#### iii. Site observations after Inspection

#### a. LILO-I point to Jharsuguda 400kV D/C line

There are 2 spans pending for stringing in the line as given below (**Visual Chart Attached**):

- a) Span from AP-35/0 to AP-40/0 is pending for stringing. There is overhead transmission line crossing of Rourkela-Raigarh 400kV 2xD/C line in the span whose shutdown is not available. The stringing of the span would be done through hotline mode from 13.09.2017 to 20.09.2017. At the crossing locations, the OPGW of Rourkela-Raigarh and Sterlite-Jharsuguda line will be connected in diamond form to maintain clearance between the lines.
- b) Stringing of span from AP-13/0 to AP-14/0 is under execution, which would be completed by 12.09.2017.



#### b. LILO-II point to Jharsuguda 400kV D/C line

Construction work of LILO-II point to Jharsuguda 400kV D/C line has not started yet and LILO-II of Rourkela-Raigarh 400kV D/C at Vedanta is still charged. As understood from Vedanta Ltd officials, they are seeking approval of CEA to continue the LILO-II connection; however, they have not applied for the same yet. They would apply for approval to CEA for continuing the LILO-II connection till end of Sep-2017.

### 2. AIS Bays at PGCIL Jharsuguda(Sundergarh) 765/400kV s/s for Vendanta to Jharsuguda 400kV 2xD/C line:

i. Progress of bays of Vendanta (LILO-I) to Jharsuguda 400kV D/C line:

Civil Works : 100% Equipment Received : 100% Equipment Erected : 100%

Testing of Equipments : Bays equipment are under testing.

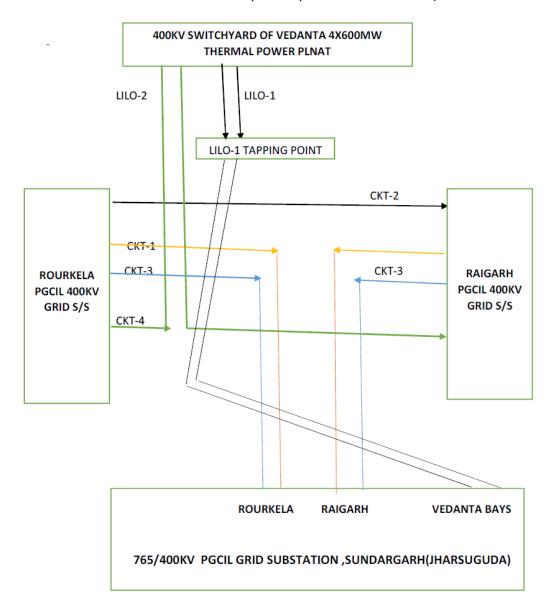
SCADA is under testing.

Expected Date of Completion : 30<sup>th</sup> Sep 2017



ii. Progress of bays of Vendanta (LILO-II) to Jharsuguda 400kV D/C line: Construction work of bays has not started yet.

#### EXISTING SYSTEM OF VEDANTA (STERLITE) – SUNDARGARH 400KV D/C LINE



## SLD of OPGC-Jharsuguda 400kV D/C line, Sterlite TPP-Jharsuguda 400kV 2xD/C line



400kV



