



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 on progress and issues of 400 kV Kudus S/s & 400kV Babhleshwar to Kudus D/C line (Tour date: 8/8/2017 to 13/8/2017).

The undersigned visited 400 kV Kudus S/s on 9/8/2017 and 400kV Babhleshwar to Kudus line (near GMRT) on subsequent days. Report on the same is hereby submitted for your kind information and necessary action.

Encl: As above

(Yadav Manojkumar)  
AD-II (PSPM)

**Deputy Director**

**Director**

**Chief Engineer**

---

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

Dated: 16/08/2017

सेवा भवन ,आर .के .पुरम-1 ,नई दिल्ली110066- टेलीफोन : 011-26103242 ईमेल: ceapspm@gmail.com वेबसाइट: www.cea.nic.in

Sewa Bhawan, R.K Puram-1, New Delhi-110066 Telephone: 011-26103242 Email: ceapspm@gmail.com Website: [www.cea.nic.in](http://www.cea.nic.in)

## **Tour report on the visit to 400/220 kV Kudus S/s on 09.08.2017**

Site Photos are attached at annexure.

### **1. Project status**

#### **400/220 kV Kudus S/s by MSETCL**

Progress of substation:

Civil Works	:	78%
Equipment Received	:	80%
Equipment Erected	:	78%
Expected Date of Completion	:	April 2018

### **2. Background**

The owner of the substation is MSETCL & the contract for construction of S/s is awarded to GE T&D (Formerly Alstom T&D). The Substation comprises of 1000MVA (6X167MVA units) capacity with voltage ratio 400/220kV/33kV(Aux.). It was planned in order to overcome the acute power crisis especially in Mumbai and nearby sub-urban areas during the period 2010-11 thereby enabling evacuation of power from Eastern to Western Region of Maharashtra i.e. Mumbai and nearby areas.

400kV Padghe (PG) - Padghe (Kudus) D/C line (Q) & 400kV Babhleshwar –Kudus D/C line will be terminating at this S/s. This will reduce overloading on 400 kV Babhleshwar-Padghe line.

### **3. Site observations after Inspection**

There are two switchyards in the substation with voltage levels at 400 kV and 220 kV. Civil works of Control room is complete.

400/220 kV: All the 7X167MVA, 400/220kV transformers are available at the site. 3 units have been erected & the remaining 4 units will be erected after the rainy season.

The following are the major pending works at the substation:

- a) Erection of 4 ICT's.
- b) Erection of 4 LA and 1 Wave trap.
- c) Laying of control cable (400kV side: 59 km out of 75 km;  
220kV side: 13km out of 35km).
- d) Testing & Commissioning of SCADA system.

The substation is planned to be charged from 400kV Padghe (PG) - Padghe (Kudus) D/C line (Q) of PGCIL which is ready since Feb'17.

Construction status of Kudus S/s is given below:

1. Construction of Boundary wall 70% completed.
2. All 400kV & 220kV Tower/transformer Foundations completed.
3. All 152 nos. 220kV equipment erected, and 224 nos. (out of 229 nos). 400kV equipment erected.
4. Construction of internal road within the substation pending.
5. 7 firewalls completed.
6. Cable trench work (Out of 2339 RMT) 2283 RMT completed and remaining work is under progress.

It is very much possible to complete the site by Dec' 17 based on the current status of the project.



**Tour report on the visit to 400kV Babbleshwar –Kudus D/C line on 10.08.2017 & 11.08.2017**

**1. Project status**

**400kV Babbleshwar –Kudus D/C line by MSETCL**

- Progress of transmission line:

Sr.no.	Particular		Status as on Jul'2017	Status as on Jan'2017
1	Total length of line (Ckm)	:	456	456
2	Total no. of locations (nos.)	:	726	726
3	Foundation completed (nos.)	:	558	551
4	Tower erections done (nos.)	:	485	484
5	Stringing completed (Ckm)	:	156	156
6	Target date of commissioning	:	Dec'2017	
7	Original date of commissioning	:	Feb'2013	

- Status of locations held up in line up to July'2017:

TYPE OF ISSUES	CONSTRUCTION	KALYAN QUAD LINE			KALYAN TWIN LINE			NASHIK QUAD LINE			TOTAL		
		FDN	EREC	STRG	FDN	EREC	STRG	FDN	EREC	STRG	FDN	EREC	STRG
	<b>Total Locations</b>	231	231	76.573	13	13	3.402	482	482	148.7	726	726	<b>228.68</b>
	<b>Progress till Date</b>	137	109	-	3	-	-	418	376	77.96	558	485	<b>77.96</b>
Statutory	Forest	59	60	49.585	3	3	1.205	26	28	13.96	88	91	<b>64.76</b>
	Railway crossing	4	4	1.070	-						4	4	<b>1.07</b>
	NH Crossing/ Collector Order			0.231	-			4	4	5.921	4	4	<b>6.15</b>
GMRT	GMRT Objection/MLA							34	51	16.463	34	51	<b>16.46</b>
ROW	Under Collector Jurisdiction	9	27	15.603	-			-	23	29.30	9	50	<b>44.91</b>
	Severe ROW /ROW demanding High Compensation	17	17	2.293	7	10	2.197				24	27	<b>4.49</b>

TYPE OF ISSUES	CONSTRUCTION	KALYAN QUAD LINE			KALYAN TWIN LINE			NASHIK QUAD LINE			TOTAL		
		FDN	EREC	STRG	FDN	EREC	STRG	FDN	EREC	STRG	FDN	EREC	STRG
MSETCL	Compensation payment orders awaited from MSETCL	5	5	2.389							5	5	2.39
	<b>Total held</b>	<b>94</b>	<b>113</b>	<b>71.17</b>	<b>10</b>	<b>13</b>	<b>3.40</b>	<b>64</b>	<b>106</b>	<b>65.65</b>	<b>168</b>	<b>232</b>	<b>140.23</b>
	Available Stretch	-	9	5.402	-	-	-	-	-	5.090	-	9	10.49

## 2. Background

The owner of the 400KV Babhaleshwar to Kudus D/C Transmission Line is MSETCL & the contract for construction was awarded to Kalpataru Power Transmission Limited (KPTL) on 6th April'2011 with a completion period of 18 months.

## 3. Site observations after Inspection

As understood from MSETCL and KPTL officials, there are mainly three hurdles to start the work as given below:

- a) The forest proposal is pending at REC Nagpur for the compliances of the issues raised by forest officials, which includes diversion of line to minimize the forest corridor, which is practically not possible, and the same is confirmed by the respective forest SDO. Further it was observed that the LOA was awarded in 2011 and the forest proposal was submitted in 2015 by MSETCL. MSETCL could not answer the reason behind the delay of submission. Further, it has been asked that from April 2015 to till date why the forest approval has not been availed by MSETCL, which need to be availed before commencement of the project. MSETCL was unable to provide the reason. It is seen that due to non-approval of forest, GMRT & Collector orders the project got delayed.
- b) MSETCL requested to intervene the issue by calling a meeting with forest officials. As per the expert committee report of GMRT issue, M/S KPTL have carried out the detailed survey of the diverted route near W5 W6 antennas and submitted to MSETCL vide letter ref. KPTL/197/N'Gaon/400KV/EXE/17-18/15 dated. 17.06.2017. MSETCL confirmed that after scrutiny and approval of the same, will be informed to GMRT for getting NOC of the said section on 22.08.2017. The process of getting the NOC from GMRT could have been expedited before intervention of CEA, which is agreed to be submitted on 22.08.2017.
- c) During our visit to one of the 500kV HVDC crossing of this, it was observed that a new 33kV line has been built without informing MSETCL. MSETCL officers confirmed that a letter will be issued to the concerned party for reconstructing the line with underground cable & this won't affect the schedule of the line.

- d) MSETCL agreed that due to quantity variations (exceeded quantity) they are unable to pay the bill amount submitted by M/S KPTL since 3 years, now, the final quantity variation will be get cleared and the bill processing will through by the end of October 2017.
- e) M/S KPTL expressed that though the billing is not through, they were ready to work for the cleared locations and they have completed 07 foundations, 06 erections and 0.566 Ckt KM stringing. However, crop compensation amounting to Rs 32 Lacs already paid for these location by KPTL which is also not reimburse by MSETCL showing the reason of budget exceed.
- f) M/S KPTL got informed from MSETCL vide letter no. Add /EE 400KV LPr. SD/ Wada/T/No.72 dated 22.05.2017 to stop the work till the approval of quantity variations.

**SINGLE LINE DIAGRAM OF THE LINE**

Sketch for 400KV QDC Babahaleshwar - Kudus S/S

