

Minutes of meeting taken by Member (PS), CEA at New Delhi, on 28.08.2019 to review the progress and constraint associated with some of critical/ important Inter-state/ Inter-regional and Intra-state transmission projects (220 kV & above) in the country being implemented by various State Transmission Utilities (STUs)/ transmission licensees/ Powergrid.

List of participants is enclosed at Annexure-I.

At the outset, Member (PS), CEA welcomed all the participants and after brief introduction, he requested Chief Engineer (PSPM) to take up the agenda of meeting. Chief Engineer raised concern about the delay in completion of the transmission system associated with the Generation Projects, particularly hydro project. Transmission system should not be stumbling block for evacuation of power from generating station to load centers.

He requested all the utilities to update the progress of the construction of transmission projects on National Power Portal (NPP) including new lines and substations and asked all the utilities to mail the power map as well as the details of the existing transmission system (220 kV & above) in the prescribed format. The physical progress, constraints associated with following critical/ important inter-state/ inter-regional and intra-state transmission system being implemented by various State Transmission Utilities (STUs)/ transmission licensee/ power grid in Central / State/ Private sector was deliberated.

The summary of discussions is as under:

CENTRAL SECTOR

The representative of PGCIL gave the status of physical progress and bottlenecks in execution of various central sector transmission projects.

A. PGCIL

1. LILO of one ckt. of Bamnauli – Jhatikara 400KV D/C at Dwarka.

This lines is associated with strengthening of transmission system of NCT of Delhi and had been facing issues of forest clearance/ obtaining tree cutting permission.

Forest proposal under FCA was submitted on 23.03.19. DDA has informed that they cannot allot land free of cost for raising Compensatory Afforestation and also informed about non-availability of degraded land. Therefore, the request for allotment of alternate land in neighboring states was submitted to Govt. of Delhi on 30.04.2019. Progress of this line is as under:

Line Length	18 Ckm
Total tower locations	41 nos.
Foundation completed	15 nos
Tower erected	6 nos
Stringing completed	0 Ckm

LILO of one ckt. of Bamnauli – Jhatikara 400KV D/C line at Dwarka s/s is expected to be completed in Dec, 2019. PGCIL was asked to expedite the completion of this line as it is important for system strengthening in Delhi NCR region.

2. Bhadla – Bikaner 765 kV D/C line

This line is facing forest clearance issue. However, working permission have been received for Part 1 (10.3 Ha) on 09.08.2019 and the working permission for Part 2 (1.06 Ha) is still awaited. He also informed that the stringing work had been hampered due to ROW since 01.08.19 in section 38/0 – 39/0 – 39A/0 (7.4 km) in Bikaner district. Progress of this line is as under:

Line Length	339 Ckm
Total tower locations	455 nos.
Foundation completed	455 nos.
Tower erected	455 nos.
Stringing completed	232 Ckm

Bhadla – Bikaner 765 kV D/C line is expected to be completed in Sept, 2019.

3. Rajarhat – Purnea 400 kV D/C line;

The works had come to standstill since Jan'17 due to mass agitation, protest from local public/agitators. After resumption of work in June, 2018, all works have been completed except at 2 locns. [15A/0 & 16/0] in Deganga Block, North 24 Pargana District. The matter is being pursued with District Administration and State Govt. The shutdown of 400 kV Farakka-Gokarna portion is required for connectivity for charging of Purnea – Gokarna section. Shutdown approval is awaited from ERLDC / WBSETCL. Progress of this line is as under:

Line Length	881Ckm
Total tower locations	1219 nos.
Foundation completed	1217 nos.
Tower erected	1217 nos.
Stringing completed	875 Ckm

Rajarhat – Purnea 400 kV D/C line is expected to be completed in Nov'19. WBSETCL was asked for early shutdown approval in order to charge Purnea – Gokarna section. WBSETCL assured to extend support for charging.

4. Jigmeling - Alipurduar 400 kV D/C (Q) line

Jigmeling - Alipurduar 400 kV D/C (Q) line has been facing forest clearance issue at 133 locations (45.4 km, 208.807 Ha). However, working permission has been received in Feb'19. Corporate Insolvency Resolution Process (CIRP) has been initiated on the lead partner i.e., M/s C&C under provisions of Insolvency & Bankruptcy Code by an order of NCLT Special Bench dated 14.02.19. Thereafter, works in the line is being managed by IRP of M/s C&C resulting delay in decision making leading to slow progress of works. Other JV partner i.e. M/s Skipper agreed to take up balance work. Agreement needs to be signed between IRP of C&C and M/s Skipper, which is expected shortly. Presently work is affected due to rain and ROW problem in forest area by forest dwellers who are asking land compensation and hutment demolition compensation in forest area. Progress of this line is as under:

Line Length	324 Ckm
Total tower locations	466 nos
Foundation completed	320 nos
Tower erected	303 nos

Jigmeling - Alipurduar 400 kV D/C (Q) line is expected to be completed in Mar'20. PGCIL was asked to expedite the completion of this line as it is important for evacuation of power from Mangdechhu HEP.

5. LILO of Lonikhand (MSEB) – Kalwa (MSEB) 400kV S/C line at Navi Mumbai (16 ckms)

The construction of LILO of Lonikhand (MSEB)–Kalwa (MSEB) 400kV S/C line at Navi Mumbai was completed in May'19. Representative of PGCIL informed that MSETCL is not providing shutdown since May'19 for energisation of LILO as per agreed scheme. The downstream system at Navi Mumbai is not available. MSETCL was requested to look into the matter.

6. Wardha – Aurangabad 400 kV D/C line [upgradable to 1200 kV]

The construction of this line is affected due to ROW in Distt. Washim, Buldhana, Jalna & Aurangabad. Contract was terminated due to unsatisfactory performance and was re-awarded / revived in Feb'15. Due to cyclone in June'18, 5 nos. foundation, 06 nos. erected towers and 2.7 Km stringing got damaged. Rectification work is in progress. Progress of this line is as under:

Line Length	696 Ckm
Total tower locations	961 nos
Foundation completed	961 nos
Tower erected	956 nos
Stringing completed	563 Ckm

Wardha – Aurangabad 400 kV D/C line is expected to be completed in Dec'19. PGCIL was asked to expedite the construction of this line as it is an important corridor for transfer of power in Western region.

7. Edamon – Muvattupuzha (Cochin) 400 kV D/C [Quad] line

The works were held up due to severe ROW constraints in Distt. Kollam, Pathanamthitta, Kottayam & Ernakulam. The construction works restarted in 2017 with the help of State Govt. under Police protection. The work at one loc. (291/0) in Ernakulam was stopped due to High Court injunction. However, with the intervention of Govt. of Kerala, the issue has been resolved on 9th Aug'19 and the foundation work is under progress. Progress of this line is as under:

Line Length	297 Ckm
Total tower locations	447 nos
Foundation completed	447 nos
Tower erected	446 nos
Stringing completed	296 Ckm

The construction of Edamon – Muvattupuzha (Cochin) 400 kV D/C [Quad] line is expected to be completed in Sept'19. PGCIL was asked to expedite the construction of this line as this line is required for power evacuation from Kudankulam APP and also to decongest North & South corridor in Kerala.

8. Madhugiri – Yelankha 400 kV D/C [Quad] line

Due to severe ROW problem the executing agency had declined to continue with the work and package was awarded afresh in Dec., 2017. The works at one location 31/5 (Piggery farm) was getting affected due to resistance from land owner. However, the issue has now been resolved and the work is under progress. Progress of this line is as under:

Line Length	131 Ckm
Total tower locations	178 nos
Foundation completed	177 nos
Tower erected	164 nos
Stringing completed	114 Ckm

The construction of Madhugiri – Yelankha 400 kV D/C [Quad] line is expected to be completed in Oct'19. PGCIL was asked to expedite the construction of this line as it is important for system strengthening in southern region.

9. Vemagiri – Chilakaluripeta 765 kV D/C line

The works of Vemagiri – Chilakaluripeta, in 40 km stretch, in Mandals of Nandigama, Chadarlapadu & Veerulapadu in Krishna Dist. (Andhra Pradesh) was held up since Feb'17 due to obstruction by villagers demanding enhanced compensation. DC, Krishna issued an order for additional compensation and the same has been deposited by POWERGRID in July'19. The works have been re-started on 14.08.2019 with the help of District administration. Progress of this line is as under:

Line Length	558 Ckm
Total tower locations	748 nos
Foundation completed	721 nos
Tower erected	690 nos
Stringing completed	478 Ckm

The construction of Vemagiri – Chilakaluripeta 765 kV D/C line is expected to be completed in Oct'19.

10. Raigarh – Pugalur 800 kV HVDC line

The implementation of this line was delayed due to severe RoW problem in Tamil Nadu which is being resolved progressively through intervention from State Govt. and help from Dist. Administration. The construction works was affected mostly in Tirrupur, Erode, Namakkal, Coimbatore, Karur & Salem Districts due to agitation by people led by Farmers' Protection Association, since Dec., 2017. Stage-I forest clearance was issued in Sept'18 and working permission was received on 31.10.2018. Wildlife Proposal (25 Ha Tiger Corridor, 10 locs, 2.6 KM) has been cleared in the NBWL meeting held on 18.07.19 and the Minutes of meeting is still awaited. Progress of this line is as under:

Line Length	3532 Ckm
Total tower locations	4773 nos
Foundation completed	4596 nos
Tower erected	4430 nos
Stringing completed	2655 Ckm

The construction of Raigarh – Pugalur 800 kV HVDC line is expected to be completed in Nov'19.

STATE SECTOR

The representatives of following state transmission utilities gave the status of physical progress and bottlenecks in execution of transmission projects.

A. UPPTCL

11. Anpara D - Unnao 765 KV S/C line

The construction of this line was awarded in two parts: Anpara-Jhansi & Jhusi-Unnao. He further informed that Jhusi-Unnao section has been completed and the contract of Jyoti Structures Limited for Anpara-Jhansi section had been terminated on 26.07.18 due to very poor progress and has been awarded to M/s Simplex Infra on 17.09.18 but the work is held up due to hindrances created by local sub-contractors of previous contractor (M/s Jyoti Structures). However, the matter is being constantly pursued and the necessary help from District Administration/Local Police Authorities is being provided to the new working agency. Progress of this line is as under:

Line Length	416 Ckm
Total tower locations	1225 nos
Foundation completed	1218 nos
Tower erected	1177 nos
Stringing completed	383 Ckm

The construction of Anpara D - Unnao 765 KV S/C line is expected to be completed in Nov'19. UPPTCL was asked to expedite the construction of this line as it is important for evacuation of power from Anpara D STPS (2x500 MW).

12. & 13. Bara TPS - Mainpuri 765kV S/C line & Mainpuri – Unnao 765kV S/C line

The construction work of these lines is at standstill for more than a year due to poor financial health of SEUPPTCL. The original Transmission Service Provider (TSP) was M/s Isolux. Govt. of UP is considering various options for quick and amicable resolution for completion of project on commercially viable purchase price. PFC was requested to exercise its option for awarding the contract to some other vendor or M/s Isolux may be allowed to bring new investor to complete the project.

Progress of Bara TPS - Mainpuri 765kV S/C line is as under:

Line Length	378 Ckm
Total tower locations	903 nos
Foundation completed	613 nos
Tower erected	346 nos
Stringing completed	0 Ckm

Progress of Mainpuri - Unnao 765kV S/C line is as under:

Line Length	188 Ckm
Total tower locations	450 nos
Foundation completed	380 nos
Tower erected	274 nos
Stringing completed	0 Ckm

The completion of Bara TPS - Mainpuri 765kV S/C line and Mainpuri - Unnao 765kV S/C line is uncertain and the representative of UPPTCL informed that following alternate transmission system (lines and substations) are planned to evacuate power:

- 1) 765/400 kV, 1500MVA substation at Bara
- 2) 400 kV Bara – Meza D/C line
- 3) 400 kV Meza – Rewa Road D/C line

Bara TPS - Mainpuri 765kV S/C line will be constructed to meet N-1 criteria.

14. & 15. Tanda – Gonda 400 KV D/C line & Gonda - Shahjehanpur (PG) 400 KV D/C line

These lines are part of TBCB project awarded to M/s Isolux and work is at standstill for more than two years due to poor financial health. The BPC (PFC) was requested to exercise its option for awarding the contract to some other vendor or M/s Isolux may be allowed to bring new investor to complete the project.

Progress of Tanda - Gonda 400kV line is as under:

Line Length	200 Ckm
Total tower locations	241 nos.
Foundation completed	97 nos
Tower erected	54 nos
Stringing completed	0 Ckm

Progress of Gonda – Shahjehanpur 400kV line is as under:

Line Length	460 Ckm
Total tower locations	543 nos.
Foundation completed	296 nos
Tower erected	140 nos
Stringing completed	0 Ckm

On enquiring about any other alternate arrangement for evacuation of power from Tanda TPP, the representative of UPPTCL informed that following transmission system (lines and substations) are planned to evacuate power from

For Tanda TPP unit-I

- 4) Tanda New - Tanda 220kV D/C line have been constructed and energised on 10.05.2019.
- 5) LILO of Sultanpur-Azamgarh 400kV line at Tanda has been constructed and energised on 02.06.2019.

The Generation of unit-1 of Tanda TPS is being evacuated through this system without any hindrance.

For Tanda TPP unit-II

- 1) 400/220/132kV GIS substation at Basti, the work of which has been awarded to Tata Projects Ltd.
- 2) Tanda - Basti 400kV D/C line is likely to be ready by Nov' 19.
- 3) LILO of both circuits of Gorakhpur - Lucknow 400 kV line at 400 kV Basti substation which is almost complete.

Although schedule completion of substation is Mar'20, firm has assured to complete 400kV system of substation required for evacuation of power from Tanda by Dec'19 on best effort basis.

Chief Engineer (PSPM) told that Tanda TPP unit-II is targeted for COD in fourth quarter of FY 2019-20 so UPPTCL should ensure the commissioning of 400/220 kV GIS at Basti by Dec'19 so that there will be no constraint in power evacuation.

B. HPPTCL

16. Bajoli HEP-Lahal 220kV D/C line

This line was awarded in Dec'17. During tree cutting the no of trees encountered are found to be more than anticipated no of trees and revised forest clearance was required and the same has been received on 05.08.2019. The work is delayed due to resistant from landowners in handovering over land for tower base. Progress of this line is as under:

Line Length	36 ckm
Total tower locations	59 nos.
Foundation completed	15 nos.
Tower erected	4 nos.
Stringing completed	0 ckm

Bajoli HEP-Lahal 220kV D/C line is expected to be completed in Apr'20. As this line planned to evacuate power from Bajoli HEP (3x60 MW) which is scheduled for commissioning in Mar'20, HPPTCL was advised to expedite the work so that the transmission system is in place by Mar'20 on the best effort basis.

17. Lahal-Chamera 400kV D/C line

The project award delayed due to delay in signing of Tranche-3 of ADB loan and also due to delay in handover of tower land to contractor because of resistance of landowners. The construction progress is slow due to hilly terrain and constraints in availability of manpower. Chief Engineer (PSPM) informed that as per meeting held in CEA on 31.07.2019, the interim arrangement for evacuation of power from Bajoli Holi HEP will be via Lahal substation through Lahal Pooling Station – Budhil 220 kV S/C line (1.8 km) which is likely to be completed in Oct'19. This power would be further transmitted through Budhil HEP–Chamera-III 220 kV S/C line on D/C Towers [dedicated line for Budhil generating station (60 MW) of M/s GREENKO] and Chamera-III–Chamera Pooling station 220 kV D/C line (existing ISTS transmission system). Stringing of 2nd circuit of existing Budhil HEP–Chamera-III 220 kV S/C line on D/C Towers would be required to evacuate full power of Bajoli Holi HEP and same has already been discussed in 3rd Meeting of Northern Region Standing Committee on Transmission (held on 24.05.2019). As per decision in the Standing Committee, HPPTCL have to submit the proposal for stringing of 2nd ckt of Budhil HEP - Chamera 220 kV S/C line on D/c towers in consultation with M/s GREENKO for proper planning to avoid long shut down of the line for carrying out stringing works. Progress of this line is as under:

Line Length	71 ckm
Total tower locations	114 nos.
Foundation completed	0 nos.
Tower erected	0 nos.
Stringing completed	0 ckm

Lahal-Chamera 400kV D/C line is expected to be completed in Apr'21. Hence HPPTCL was advised to complete the stringing of 2nd circuit of existing Budhil HEP–Chamera-III 220 kV S/C line on D/C Towers before Mar'20, to ensure that transmission lines are in place before commissioning of Bajoli HEP (3x60 MW).

18. 630 MVA, 400/220/33 kV Lahal (GIS)

The connecting road from Chamba to Bharmour was severely damaged in September 2018 which delayed transportation of transformer to site. Now road has been repaired and transportation of transformer has been started. The progress of this substation is as under:

Land Acquired	100%
Civil Work	80%
Equipment Received	95%
Equipment Erected	50%

Lahal (GIS) is expected to be completed in Dec'19.

C. RVPNL

19. Suratgarh TPS – Babai (Jhunjhunu) 400kV D/C line

No representative from RVNPL attended the meeting.

D. PTCUL

20. Tapovan Vishnugadh - Kunwari Pass (Pipalkoti) 400 KV D/C line (36 ckm)

NOC as per Forest Right Act, has been obtained from all villages (including Hatt Gaon). Persuasion is going on with forest department for early approval of Stage-I clearance. The same is expected in Sep '19. Thereafter construction work on 36 ckm long line will be started. Tapovan Vishnugadh - Kunwari Pass (Pipalkoti) 400 KV D/C line is scheduled to be completed in Dec'20 and effort would be made to match with commissioning of Tapovan Vishnugadh HEP, which is expected in December 2020.

21. Kunwari Pass (Pipalkoti) – Srinagar 400 KV D/C line (186 ckm)

This line has been awarded in three packages

Package-1 Pipalkoti-Nakot line (62 ckm)

Package-2 Nakot-Dhanpur forest line (62 ckm)

Package-3 Dhanpur-Srinagar line (62 ckm)

NOC as per Forest Right Act, has been obtained from all villages (including Hatt Gaon). Forest proposal has been submitted on 24.11.2018 for Package-I, on 23.10.2018 for Package-II and on 23.02.2019 for Package-III. Persuasion is going on with forest department for early approval of Stage-I clearance. The same is expected in Sep '19. Thereafter construction work on 186 ckm long line will be started. Kunwari Pass (Pipalkoti) – Srinagar 400 KV D/C line is scheduled to be completed in Dec'20 matching and effort would be made to match with commissioning of generation project.

22. Khandukhal (Srinagar)- Rampura (Kashipur) 400 KV D/C line with Quad Moose ACSR conductor (131 ckm)

The contract of this line was awarded to M/s Cobra, but due to poor financial condition of company, the company had abandoned the project. Fresh tendering is in progress. NIT was floated on 08/03/2019. Technical bid was opened on 07/05/2019. Financial bid was

opened on 13/08/2019. Evaluation is under process. LoA is expected by Sep'19 with effective date of contract is expected as 29th Nov 2019. Time of completion will be 22 months from effective date. Commissioning of line is expected in Sep 2021.

This line is required to evacuate power from Tapovan Vishnugad HEP (4x130MW) and Vishnugad Pipalkoti HEP (4x111MW) beyond Srinagar. Tapovan Vishnugad HEP is likely to be commissioned in Dec'20. On enquiring about any other interim arrangement till commissioning of Khandukhal – Rampura 400 kV D/C line, the representative of PTCUL stated that as per their system studies, about 100-150 MW power would be absorbed in Khandukhal (Srinagar) area. The existing LILO of Visnuprayag- Muzaffarnagar line at Srinagar could be used for evacuation of power from Tapovan Vishnugad HEP during lean season and effort would be made to complete the Khandukhal – Rampura 400 kV D/C line at the earliest for smooth evacuation of full power generated from HEPs during monsoon season.

Chief Engineer (PSPM) advised PTCUL to discuss the matter with PSPA-I division of CEA.

23. Singoli Bhatwari - Srinagar 220 KV D/C line

Due to contractual issue with M/s Lanco Infratech Ltd, the contract was terminated on 25.10.2017. Balance work of line was awarded to M/s L&T on 28.03.2018. M/s Lanco did not make payments to labour contractors/ Sub contractors and they are creating hurdle in construction of Line. The issues of payments to sub-contractors of M/s Lanco is required to be settled. The progress of this line is as under:

Line Length	150 ckm
Total tower locations	232 nos.
Foundation completed	221 nos.
Tower erected	194 nos.
Stringing completed	85 ckm

Singoli Bhatwari - Srinagar 220 KV D/C line is expected to be completed in Dec'19 before the commissioning of Singoli Bhatwari HEP (3x33 MW), which is expected in Mar'20.

E. JKPDD

24. & 25. Alusteng – Zainkote 220 kV D/C Line & 320 MVA, 220/132 kV Substation at Alusteng

Transmission lines

The line was awarded to M/s ECI, Hyderabad and there was severe RoW issues. Contract was terminated with M/s ECI, Hyderabad and work is being executed departmentally by JKPDD. Tower erection/stringing under progress. The progress of this line is as under:

Line Length	100 ckm
Total tower locations	161 nos.
Foundation completed	158 nos.
Tower erected	145 nos.
Stringing completed	49 ckm

Alusteng – Zainkote 220 kV D/C Line is expected to be completed in Sep'19.

Substation

The overall 90% work of 220/132 Alusteng substation has been completed. The contract with M/S Jyoti Structures Ltd has been terminated and work is being executed departmentally by JKPDD. Alusteng substation is expected to be completed in Sep'19.

JKPDD was asked to expedite the remaining construction work of transmission line and substation so that reliability and availability of power can be ensured as soon as possible to Ladakh region.

F. WBSETCL

26. Sagardighi – Gokarna 400kV D/C line

The work delayed due to poor performance of the vendor (Jyoti Structures Ltd.). The contract with Jyoti Structures Ltd. has been terminated. A fresh contract was awarded to M/s L&T on 17.07.2019 to complete balance work. Due to crossing of railway line, the construction of line is expected to be completed in Jan'20. The progress of this line is as under:

Line Length	88.5 ckm
Total tower locations	154 nos.
Foundation completed	153 nos.
Tower erected	153 nos.
Stringing completed	86.7ckm

WBSETCL representative stated that considering the importance of line and being a part of ATS of Sagardighi TPP (to meet N-1 criteria), the vendor is advised to complete the line by Sep'19.

G. MSETCL

27. Bableshwar-Kudus 400 kV D/C line

The representative of MSETCL stated that the final forest approval for (148 ha) has been received on 06.04.2018 and the issue of GMRT has been resolved. There is severe ROW issue in Nashik Zone and Vashi Zone. In Nashik Zone, 22 cases have been filed with Collector, Pune and in Vashi Zone, 25 cases have been filed with Collector, Thane. The orders are awaited. As per GR dated 31.05.2017 there is provision for payment of compensation in respect of tower foundation and erection i.e. 2 times ready reckoner rate, however, revenue department has asked for huge compensation i.e. about 4 times. Presently work has been stopped due to heavy rains and ROW issue. The progress of this line is as under:

Line Length	459.728 ckm
Total tower locations	730 nos.
Foundation completed	572 nos.
Tower erected	508 nos.
Stringing completed	176.414ckm

KPTL representative informed that quantity variation proposal is pending with MSETCL. Representative MSETCL informed that this issue is pending for board approval and board meeting is scheduled 5th Sep '19. He further informed that land compensation as per DM order has been forwarded to corporate office for approval.

Member (PS) advised MSETCL that Bableshwar-Kudus 400 kV D/C line is being constructed to provide uninterrupted power supply to Mumbai suburban area and required to be completed at the earliest, therefore all such issues should be resolved on urgent basis. Bableshwar-Kudus 400 kV D/C line is expected to be completed in Dec'20.

28. LILO of Kolshet – Wada and Padghe – Wada 220kV line at 400/220 kV Kudus substation on M/C towers

The executing agency for the work is M/s BNC power project Ltd. The forest proposal (11 ha) has been submitted to PCCF, Nagpur on 04.04.2019. Check list received from PCCF on 29.06.2019 and same was compiled on 01.07.2019. As per GR dated 31.05.2017 there is provision for payment of compensation in respect of tower foundation and erection i.e. 2 times the ready reckoner rate, however, revenue department is asking for huge compensation i.e. 4 times. The proposal has already been forwarded from site office to corporate office of MSETCL for approval. However, quantity variation proposal is pending under board approval and the matter will be taken up in next board meeting scheduled on 5th Sep 2019. The work has been stopped due to heavy rain and ROW issues. The progress of this line is as under:

Line Length	31.62 ckm
Total tower locations	46 nos.
Foundation completed	11 nos.
Tower erected	2 nos.
Stringing completed	0 ckm

The line is expected to be completed in Jun'20.

29. LILO of Tarapur – Borivali and Boisar – Ghodbandar line at Kudus 220 KV M/C

The executive agency for the work is M/s Ashtavinayak Construction, Navi Mumbai. The forest area involvement after re-routing is now 2.95 Ha (Appr) and forest clearance is pending at DFO Dahanu. Joint inspection with ACF, dahanu in dahanu section carried out on 27.02.2019. There is strong opposition in vasai and Bhiwandi areas as the area is likely to be affected due to development of multiple infrastructure project such as Bullet train, DFCCIL, Transmission lines, Highways. The work has been stopped due to heavy rain and ROW issues. The progress of line is as under:

Line Length	116.76 ckm
Total tower locations	117 nos.
Foundation completed	37 nos.
Tower erected	0 nos.
Stringing completed	0 ckm

The line is expected to be completed in Dec'20.

H. GETCO

30. & 31. Vadinar - Amreli 400 kV D/C line & Amreli – Kasor 400 kV D/C line

No representative from GETCO attended the meeting.

PRIVATE SECTOR

The representative of following private transmission utilities gave the status of physical progress and bottlenecks in execution of transmission projects.

I. STERLITE

32. Kadarpur-Sohna road 400 kV D/C line & 2x500 MVA & 400/220 kV GIS at Sohna Road

Sterlite representative informed that the issue of power line crossing Kadarpur-Sohna road 400 kV D/C line with HVPNL has been resolved. HVPNL had raised difficulty in finalizing the route of 220 kV D/C line for termination at 2x500 MVA,400/220 kV GIS substation at Sohna Road. Technical Committee comprising officers from CEA, HVPNL and GPTL was constituted to resolve the issue. M/s GPTL had conveyed to the committee that construction of 220kV line up to and including dead end tower is not in the scope of TBCB work. However, M/s GPTL would provide technical support (if required by HVPNL) for termination of 220 kV lines at Sohna Road substation.

The progress of Kadarpur-Sohna road 400 kV D/C line is as under:

Line Length	20.56 Ckm
Total tower locations	29 nos.
Foundation completed	23 nos
Tower erected	21 nos
Stringing completed	0 Ckm

The progress of 400/220 kV GIS substation at Sohna Road substation is as under:

Land Acquired	100%
Civil Work	51%
Equipment Received	99%
Equipment Erected	15%

Kadarpur-Sohna road 400 kV D/C line along with 400/220 kV GIS substation at Sohna Road is expected to be completed in Jan'20.

33. Khandwa Pool – Dhule 765 kV D/C line

The objection was raised by D.C., Dhule for traversing of line through submergence area of proposed Jamphal Dam in Maharashtra. Now construction work of this line has been stopped. A meeting of CEA officers was held in the office of District Collector, Dhule in July, 2019. DC, Dhule stated that considering a location specific project, construction of line through submergence area cannot be allowed. Based on site visit and meeting with DC, Dhule, CEA had advised M/s KTL for diversion of the route of transmission line. Now re-

routing work of line has been started and the Forest Diversion proposal for the re-routing has been submitted to MoEF&CC. The progress of this line is as under:

Line Length	379 ckm
Total tower locations	486 nos.
Foundation completed	483 nos.
Tower erected	480 nos.
Stringing completed	350 ckm

Khandwa Pool – Dhule 765 kV D/C line is expected to be completed in May'20.

34. Khargone TPP – Khandwa pool 400 kV D/C (Quad) line

M/s KTL stated that construction of line was delayed due to diversion of the route of Khargone TPP – Khandwa pool line to avoid crossing NTPC's Railway line. M/s KTL is trying to get administration support for early resolution of ROW issue at two locations. The progress of this line is as under:

Line Length	50 ckm
Total tower locations	66 nos.
Foundation completed	62 nos.
Tower erected	62 nos.
Stringing completed	24 ckm

Khargone TPP – Khandwa pool 400 kV D/C line is expected to be completed in Oct'19.

35. 2x1500 MVA, 765/400 kV Khandwa Pooling station

The construction progress of this substation has been obstructed due to agitation from farmers for land acquisition. The progress of this substation is as under:

Land Acquired	100%
Civil work	78%
Equipment received	90%
Equipment erection	35%

2x1500 MVA, 765/400 kV Khandwa Pooling station is expected to be completed in Oct'19. M/s KTL was asked to expedite the progress of this substation and associated lines as it is important for evacuating power from NTPC's 1320MW (2x660MW) thermal power project at Khandwa in the state of Madhya Pradesh.

J. ESSEL

36. Koteshwar – Rishikesh 400 kV D/C line

Indian Drugs and Pharmaceuticals Limited (IDPL), Rishikesh had issued NOC on 03.04.2019 conveying that Uttarakhand Government is planning to construct Convention Centre along with Hill Culture, Yoga and Wellness Centre on the said land. IDPL had further requested M/s NRSS XXXVI Transmission Ltd to approach Govt. of Uttarakhand for NOC. Accordingly, M/s NRSS XXXVI Transmission Ltd requested Secretary, Govt of Uttarakhand on 18.04.2019 and as per direction of Secretary (Tourism) Govt. of Uttarakhand, the

detailed proposal (along with route map of Line) was submitted to Uttarakhand Tourism Development Council (Govt. of Uttarakhand) for issue of NOC.

Chief Engineer (PSPM) informed that CEA, vide their letter dated 26.06.2019, had also requested Chief Executive Officer, Uttarakhand Tourism Development Council (Govt. of Uttarakhand) for issuing NOC to M/s NRSS XXXVI Transmission Ltd for construction of Koteshwar – Rishikesh 400 kV D/C line for traversing through IDPL's lease hold area so that processing of proposal of diversion of forest land can be initiated for clearance from Department of Forest. No response has been received in this regard so far. The progress of this line is as under:

Line Length	81 ckm
Total tower locations	106 nos.
Foundation completed	24 nos.
Tower erected	0 nos.
Stringing completed	0 ckm

Considering the progress of work, it would be difficult for M/s NRSS XXXVI Transmission Ltd to complete Koteshwar – Rishikesh 400 kV D/C line as per schedule commissioning date (i.e.) by Dec'19. M/s NRSS XXXVI Transmission Ltd was advised to expedite the process of forest approval for commissioning of the line.

37. Warora (Pool) – Warangal (New) 765 KV D/C line

The work is stopped due to farmer agitation demanding higher compensation for the construction of transmission line over their fields. He further stated that as per route identified by BPC (PFC) the line would traverse through coal bearing area of Western Coalfields Ltd (Maharatna) and Singareni Collieries Company Ltd, Telangana. Both WCL and SCCL wanted the diversion of the route of line to avoid coal bearing area as their mining activity are expected very soon. Matter was also discussed in various forums and a meeting was also taken by Chief Engineer (Trans.) in MoP on 03.06.2019 and subsequently a committee has been formed under chairmanship of Chief Engineer (CEA) with representatives from MoC, WCL, CMPDI, SCCL, CEA, Lead & alternative LTTCs and WKTL to examine the issue along with relevant notifications/guidelines and submit its options for resolution of the matter. 1st Meeting of committee was held on 19.07.2019. Site visits were conducted by the WKTL, WCL, CMPDI, CEA & SCCL teams to explore other possible options. 2nd meeting of the committee was held in CEA on 19.08.2019. In this meeting it is decided that coal bearing area of SCCL involving four (4) towers, would be completed along approved route without further delay as SCCL have no objection at present for construction of line as their mining activity will start in 7-10 years' time frame. However, cost of diversion of line / re-location of towers of line as and when required (in this Section) would be borne by WKTL/SCCL as decided by appropriate authority at that time and in the coal bearing area of WCL two alternative routes have been proposed. The final decision is pending with MoP. The progress of line is as under:

Line Length	646 ckm
Total tower locations	827 nos.
Foundation completed	774 nos.
Tower erected	425 nos.
Stringing completed	59 ckm

Considering the progress of work, it would be difficult for M/s WKTL to complete Warora (Pool) – Warangal (New) 765 KV D/C as per schedule commissioning date (i.e.) by Dec'19. M/s WKTL was advised to expedite the commissioning of the line.

K. ADANI

38. North Karanpura – Chandwa 400 kV D/C line and North Karanpura – Gaya 400 kV D/C line

Chief Engineer (PSPM), CEA enquired about that the status of Transmission System, being executed by NKTL, for evacuation of power from NTPC's North Karanpura (3x660 MW) generation project. Representative from NKTL informed that

- a) Proposal for approval under section 164 of Electricity Act has been submitted to CEA.
- b) Forest proposal for North Karanpura – Chandwa 400 kV D/C line has been submitted on 17.06.2019 and forest proposal for North Karanpura – Gaya 400 kV D/C line has been submitted on 20.07.2019 for Jharkhand portion & on 01.08.2019 for Bihar portion, well before the committed dates.
- c) The construction activities have already been started to avoid any further delay keeping in the view the evacuation of power from NKTPP of NTPC although NOC is yet to be received from CIL/MoC.

The progress of North Karanpura – Chandwa 400 kV D/C line is as under:

Line Length	102 ckm
Total tower locations	110 nos.
Foundation completed	20 nos.
Tower erected	9 nos.
Stringing completed	0 ckm

The progress of North Karanpura – Gaya 400 kV D/C line is as under:

Line Length	196 ckm
Total tower locations	289 nos.
Foundation completed	20 nos.
Tower erected	0 nos.
Stringing completed	0 ckm

North Karanpura – Chandwa 400 kV D/C line and North Karanpura – Gaya 400 kV D/C line is expected to be completed in Jun'20 as per revised schedule provided forest clearance is obtained within 200 days from the date of application and North Karanpura – Gaya 400 kV D/C line is expected by Mar'21 as per revised schedule provided forest clearance is obtained within 300 days from the date of application. Chief Engineer (PSPM) informed that CEA, vide their letter dated 22.07.2019, has requested Principal Chief Conservator of Forest, Ranchi for early clearance of the forest proposal for this line as a special case. The representative of NKTL requested the support of CEA for issue of NOC from MoC/CCL and approval under section 164 of Electricity Act on fast track.

L. KALPATARU

39. Alipurduar – Siliguri 400 kV D/C Line

Kalpataru representative stated that this line is facing severe ROW issues. Foundation of towers at two locations, erections of few towers and 22 km stringing could not be completed in West Bengal area. The owners of land are demanding high compensations. Few landowners have also filed case in the court. Project challenges have already been included

in Pragati Portal. MoP is also putting efforts to resolve the issues. The progress of this line is as under:

Line Length	232 ckm
Total tower locations	321 nos.
Foundation completed	319 nos.
Tower erected	314 nos.
Stringing completed	88 ckm

M. SKPPL

40. Dikchu HEP- Dikchu pool 132kV D/C line

No representative from SKPPL attended the meeting.

Other issues:

1. RoW/compensation issues associated with Kohima-Mariani Transmission System Ltd.(KMTL):

KMTL representative informed that they are facing difficulties in managing RoW issues due to change in legislation in the state of Manipur, Nagaland and Assam. Additional compensation is also to be paid to the inhabitants of forest land. He also stated that downstream system of Nagaland substation is yet to be constructed by Department of Power of Nagaland.

It was opined that the matter may be covered under change in law. KMTL may approach appropriate authority/CERC to resolve ROW/ compensation issues. Chief Engineer (PSPM) stated that regarding development of intra-state downstream network, the matter will be taken up with the Department of Power of Nagaland.

2. Construction of terminal bays by PGCIL for Silchar (PG)-Misa (PG) 400kV D/C line being executed by NER II Transmission Ltd.:

The representative of NER II Transmission Ltd. stated that above line is likely to be completed by Dec'19 and requested PGCIL to complete the bays at both ends matching with completion of line. He also stated that in 18th TCC & RPC of NERPC, the forum had requested POWERGRID to complete in time so as to match with M/s Sterlite. The representative of PGCIL informed that construction of bays will be completed as per the original schedule. POWERGRID was advised to look into the matter.

3. Re-conductoring of Rangpo – New Siliguri 400kV D/C line:

PGCIL informed that reconductoring of this line with HTLS conductor is required for enhancement in transfer of power from various hydro Electric projects in Sikkim. Number of times request have been made to ERPC & POSOCO for grant of shut down of this line on continuous basis, particularly during lean generation period, but the shutdown has not been granted, although an alternative route via Teesta III – Kishanganj 400kV D/C line is available and is in service since Feb'19. He requested CEA to intervene in the matter for allowing shut down of above line to take up reconductoring work with high capacity conductor. Chief Engineer (PSPM) stated that the matter will be taken up with ERPC.

4. Construction of terminal bays at Aligarh substation for termination of Aligarh-Prithala 400kV D/C line:

Representative from M/s GPTL informed that Electrical Inspection of Aligarh - Prithala 400kV D/C line and 400/220kV GIS Substation at Prithala has been completed and approval for Energisation certificate from Electrical Inspector, CEA has been received on 29-07-2019 and 31-07-2019 respectively and the said elements has been declared as Deemed commissioned as per the subject provisions of Article 6 of TSA as the line couldn't be charged due to non-readiness of PGCIL bays at Aligarh end. PGCIL was asked to submit the status of bays at Aligarh end.

After detailed deliberation on various issues associated with execution of critical / important transmission projects, Member (PS) expressed his concern about delay in completion of transmission system. He hoped that the executing agencies would put all efforts to complete transmission system, which has exceeded the Scheduled completion time, as early as possible for the benefit of utilities. He also advised all STUs, particularly PTCUL and HPPTCL, and Private Transmission Licensees to expedite the construction activities to complete the transmission system matching with commissioning time frame of generation projects.

Member (PS), also requested Chief Engineer (PSPM) to take separate meetings for resolving specific issues associated with the transmission projects of central/state/private transmission utilities.

Meeting ends with thanks to the chair.

List of Participants

CEA

- | | |
|---------------------------|---------------------------|
| 1. SHRI P. S. MHASKE | MEMBER (PS)-----in chair |
| 2. SHRI S.K.RAY MOHAPATRA | CHIEF ENGINEER (PSPM) |
| 3. SHRI SANJAY JAIN | DIRECTOR (PSPM) |
| 4. SHRI AJITESH KUMAR | DEPUTY DIRECTOR (PSPM) |
| 5. SHRI R.K. TIWARI | DEPUTY DIRECTOR (PSPM) |
| 6. SHRI DHANESH KUMAR | ASSISTANT DIRECTOR (PSPM) |
| 7. SHRI YADAV MANOJ KUMAR | ASSISTANT DIRECTOR (PSPM) |
| 8. SHRI AVINASH PATHAK | ASSISTANT DIRECTOR (PSPM) |
| 9. SHRI NISHANT CHOHLA | ASSISTANT DIRECTOR (PSPM) |

ESSEL INFRA

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|-------------------------|-----|
| 1. SHRI RAJNISH MAHAJAN | AVP |
|-------------------------|-----|

POWERGRID

- | | |
|----------------------|------------|
| 1. SHRI ANOOP SINGH | GR. GM |
| 2. SHIR VIKAS NARWAL | SR. DGM |
| 3. SHRI A.K. VAISH | CONSULTANT |

PTCUL

- | | |
|--------------------------|----|
| 1. SHRI RAVI SHANKAR | SE |
| 2. SHRI A.K. AGARWAL | CE |
| 3. SHRI HIMANSHU BALIYAN | EE |

UPPTCL

- | | |
|-----------------------|----|
| 1. SHRI SANDEEP KUMAR | CE |
|-----------------------|----|

STERLITE POWER

- | | |
|--------------------|---------|
| 1. SHRI ROHIT GERA | MANAGER |
|--------------------|---------|

HPPTCL

- | | |
|--------------------------|--------------|
| 1. SHRI SANDEEP SHARMA | AGM(PLANING) |
| 2. SHRI PARIKSHIT PAL | DY. MANAGER |
| 3. SHRI HARMANJEET SINGH | DY. MANAGER |

WBSETCL

- | | |
|------------------------|-----|
| 1. SHRI A. BARDHAN ROY | ACE |
|------------------------|-----|

MSETCL

- | | |
|--------------------------|--------|
| 1. SHRI RAJENDRA GAIKWAD | CE C&M |
|--------------------------|--------|

JKKPDD

1. SHRI GURMEET SINGH
2. SHRI SANJEEV R.

CE SKO
XEN TCMD-II

KPTL

1. SHRI SAURABH GUPTA
2. SHRI VIPIN VARSHNEY
3. SHRI AJAY TRIPATHI

SVP
AVP
AVP

NKTL (ADANI)

1. SHRI SAMEER GANJU
2. SHRI PRAVEEN TAMAK

AVP
MANAGER

