Project Note

Project Name : Proposed construction of 220 KV DC Karad – Koyana (KDPH) transmission line in same right of way of existing 220 KV LILO on 220 KV Karad – Pophali DC Tr. line for KDPH, A/P. Hambarali & Koyananagar-Gokul, Tal. Patan. Dist. Satara.

Ref: Letter no.RPP-2006/Cno.440/Urja-3 dt. 18.05.2007 from Addl. Secretary, Ministry of Industry Labour & Energy (IL & E) Govt. of Maharashtra, Mumbai.

General Brief description of nature of the project

The Koyna dam has been constructed across Koyna river for irrigation in many area of Maharashtra also for generation of electricity from water head available at reservoir of dam. Presently, installed capacity of Koyna Hydro power station is 1992 MW. The Govt. of Maharashtra, Water Resource Department (WRD) proposed installation of 2x40 MW Hydro Power station on left bank of Koyna river near Koyna dam at Koynanagar to utilize left bank water. Accordingly, MSETCL proposed separate 220 KV S/C D/C line for evacuation of power from 220 KV KDPH S/s. to 400 KV Karad S/s. – line length 40 kms with end bays. The project were sanctioned vide MSETCL MBR no.34/4 dtd.18.10.2008. The proposed cost of the project is Rs.41.94 Cr. MSETCL notification of project was published in gazette of the Govt. of Maharashtra dtd.30 July – 5 Aug 2009.

MSETCL placed work order on M/s.Kalptaru Power Transmission Ltd. for construction of 220 KV Karad – Koyana (KDPH) S/C D/C line vide W.O. no. MSETCL/CO/CE/TR Proj/EPC/807/LL2-A/8998 dtd.11.06.2010. The work started by agency on 30.07.2010 & till date 96% of work is completed. However, the balance work is to be carried out in the same right of way of existing 220 KV KDPH line LILO to existing 220 KV Karad – Pophali line. The tower in this belt are worn out, as these were commissioned in 03.10.1980.

During the check survey work of balance work, it is observed that, the 5 nos. of towers line are falling in area of Sahyadri Tiger Reserve at village Hambarali & Koynanagar-Gokul, Tal. Patan, Dist. Satara covering area of 4.620 Hector. The above mentioned 5 nos. of towers are worn out, exhausted its useful life and the existing live line is passing on this towers. Hence, in order to avoid, falling of existing tower, snapping of conductor, which may result in financial loss / human causality / animal causality, etc., 220 KV double circuit towers need to be replaced by new 220 KV multi circuit towers. The existing transmission line is falling in buffer area of Sahyadri Tiger Reserve at village Hambarali & Koynanagar-Gokul, Tal. Patan, Dist. Satara.

Accordingly, EHV Projects Division, Sangli submitted online proposal for availing NOC for carrying out replacement work of existing towers of 220 KV Karad – Koyana (KDPH) transmission line vide proposal no.FP/MH/TRANS/3619/2018 dtd.05.12.2018.

Justification for the proposed project

Water Resource Department (WRD), Govt. of Maharashtra proposed installation of 2x40 MW Hydro Power station on left bank of Koyna river near Koyna dam at Koynanagar. Accordingly, MSETCL started construction of transmission line from KDPH S/s. to Karad S/s. for evacuation of power. The 96% of work is completed and balance work is pending due to NOC for carrying out replacement work of existing transmission line towers towards KDPH S/s. end i.e. in buffer area of Sahyadri Tiger Reserve at village Hambarali & Koyananagar-Gokul, Tal. Patan, Dist. Satara. Hence, it is necessary to complete the work for evacuation of Hydro Electrical Power.

Need for the project and its importance to the country and or region project

Need :- For evacuation of 2x40 MW Hydro Power station on left bank of Koyna river near Koyna dam at Koynanagar proposed by Water Resource Department (WRD), Govt. of Maharashtra.

Importance :-

- Utilization of left bank water of Koyna Hydro power plant.
- The Hydro power generation can be immediately picked up in case of peak load demand of State.
- Utilization of natural resources i.e. water head of Koyna dam used for generation of Hydro power.

Benefit to society

- Enhancement of 40 MW Hydro electric power to meet increasing electricity demand of State.
- Utilization of natural resources i.e. cost of generation will be low, as water head of Koyna dam used for generation of Hydro power.
- Increase in Line redundancy. Existing 220 KV Karad – Koyna line emanating from 400 KV Karad Substation reaches to Koyna through 220 KV Vankuswade, 220 KV Malharpeth S/s. Failure of line will back off the generation. Hence, separate line is constructed from KDPH end to Karad S/s.