

ADDITIONAL SUBMISSION

Before the Hon'ble Chhattisgarh State Electricity Regulatory Commission

In the Petition No. 84 of 2023

CSPGCL humbly submits that number of capital schemes were submitted for kind consideration of the Hon'ble Commission by way of filing of Additional Capital Investment plan petition for FY 24-25.

Leave is only craved for submission of two more urgent nature works / procurement which are required to be taken up on urgency for safe and smooth operation of the plants. These works are also expected to mitigate future threat to life and property.

It is humbly submitted that the instant submission is under Regulation 7.6 read with the Regulation 20 of the MYT Regulation 2021. The details of the brief about the proposed work, nature of the urgency and cost estimate is submitted hereunder. It is also submitted that at this instant no tariff revision for FY 24-25 is being prayed on account of these works and it is understood that the impact on account of such capital investment shall be dealt at the time of true up of FY 24-25 (expected during FY 25-26) or at the time of tariff determination for the next control period which is expected to start from 01/04/2025.

1. Repairing of HP Turbine Module of unit no. 1 DSPM TPS at M/s BHEL Haridwar Works.

Brief about the proposed work: - On 14th March 2023 the gland sealing pressure of HP turbine of Unit no. 1 increased abnormally. M/s BHEL (OEM) was called and as per advise the spare HPT module was put in service and unit was restored successfully on 09/04/2023. M/s BHEL engineers opined that the taken out HP module cannot be repaired at site and has to be sent to M/s BHEL Haridwar Works for inspection and repairing. Accordingly, the module was sent to BHEL Haridwar.

After dismantling at BHEL Haridwar joint inspection was carried out on 7th November 2023 and offer has been submitted by M/s BHEL on 13/12/2023. As per the report the repair work required for safe operation of the equipment is not of routine nature. Further, as per the technical circular of BHEL, the Residual Life Assessment (RLA) of turbine components of 210MW / 250MW / 270MW / 500MW

/ 525MW/ 600MW shall be conducted after 80,000 to 1,00,000 hours of operation. The taken out HP module has already completed around 76,000 running hours and as such is in the range of the RLA schedule. It will be only after RLA that the additional work involved may be fully assessed. As such, at this stage CSPGCL may not have an option other than to place an open order on M/s BHEL to carryout the RLA and the required repair works.

Nature of Urgency: It is submitted that sometimes the parameters show minor deviations and if spare arrangement is not available there remains a tendency / probability of continuing the operation with such deviation till alternate arrangement is made. However, with the pressure and temperature the HP turbine is subjected, non-availability of spare turbine may be risky for life and property. Hence to mitigate the future threat to life and property, it is essential that the capital nature repair work on the spare HP module (already sent to BHEL Works) is initiated at the earliest. As such the work satisfy the conditionality specified in regulation 7.6.

Cost Estimate: At this stage, based on the offer receive after the first joint inspection the cost is estimated to be around Rs. 10 Cr. however as submitted in the pre para the exact cost estimate shall be available only after completion of RLA. Further, though the work is expected to be completed within 12 months from zero date however it may be appreciated that depending upon the findings of RLA, the time estimate may change. Accordingly, the prayer is limited to approval under Regulation 20 of the CSERC MYT Regulation 2021.

2. Repairing / replacement of Generator Rotor for 500MW KWTPP.

Brief about the proposed work: - During the overhauling of 500MW KWTPP the generator rotor was dismantled for inspection. A 45mm deep radial cut of about 5mm width was noticed on rotor shaft which was probably due to loosening of a bolt on rear top half bearing deflector. It is important to mention that before the shutdown for the overhauling, the unit parameters such as vertical / horizontal vibration or temperature were under the permissible range and thus no abnormality was detected. Concerned with the cut, expert opinion was obtained from M/s BHEL. M/s BHEL advised that as the overall diameter or the journal is reduced by 90mm at 5mm width hence the rotor is not fit for use in this condition. Accordingly, the rotor was replaced with the spare one available at ABVTPS and the damaged generator rotor and baffle ring assembly has been sent to M/s BHEL Haridwar. M/s BHEL has recently

submitted offer for repair of TG rotor with new rotor shaft. However, the offer for repair is conditional and uncertain. Therefore, another option of procurement of a new rotor is also being explored. Further, possibility of buy back / swapping of the old one is also being considered.

Nature of Urgency: As submitted in the case related to the DSPM HP Module, non-availability of spare may induce a risky tendency / probability. Further, the generator rotor is a long gestation item and its non-availability may result in long outage which may deprive the state from cheap power. With the higher size unit, the risk to life of operating personal, property of CSPGCL and commercial interest of the end beneficiary all get extrapolated. Hence to mitigate the future threat to life and property, it is essential that the repair / replacement of the generator rotor is initiated early. As such the work satisfy the conditionality specified in regulation 7.6.

Cost Estimate: At this stage, different cost estimates are under consideration. As per the budgetary offer submitted by M/s BHEL on 28th December 2023 the cost of repair is expected to be in the range of about 37 Crs. Whereas the new rotor may cost about 50 Crs (excluding transportation, buy back etc.). As the estimate for repair has been received just 10 days back, different options are under active consideration. Accordingly, the prayer is limited to approval under Regulation 20 of the CSERC MYT Regulation 2021.

Prayer: Hon'ble Commission is humbly prayed for allowing inclusion of the above two proposals in the instant petition and grant in principle approval under Regulation 20 of the CSERC MYT Regulation 2021.

