

19th February, 2019

Subject: Additional submission on O&M expenses for F Class Gas Turbine

The Hon'ble CERC has provided O&M expenses of Rs. 25 Lacs per MW for 2019-20 (reduced from Rs. 34.56 Lacs per MW for 2018-19). Further, the Hon'ble Commission has considered 3.2% pa escalation rate (reduced from 6.8% pa for 2018-19) for O&M expenses of subsequent period.

In view of the above, we hereby submit some additional aspects in continuation to our submission on O&M rate in the Draft Tariff Regulations 2019-24.

There are three additional aspects i.e. GST, Minimum wages revision and Pay Parity which are expected to have substantial impact on O&M expenses of 2019-24 vis-à-vis 2014-19 period.

(A) GST Impact

1. We submit that consumption of stores and spares (including chemicals and gases), Long Term Supply Agreement for F-class Turbines, Long Term Maintenance Agreement for servicing F-class Turbines, Civil upkeep, Horticulture & House Keeping, Insurance, etc are some of the major O & M Costs.
2. GST has substantially increased tax cost implication of above-mentioned O&M cost components due to electricity being outside the purview of GST (GST paid on input supply & services become cost and cannot be passed through output supply & services). Given below is a summary of GST implications on O&M costs.
 - a. 18% GST in place of 15% VAT on domestic material supply;
 - b. Incremental Custom Duty of 2% (levy of IGST in place of CVD & SAD) and additional 5% GST on ocean freight on import of material;
 - c. 18% GST in place of 15% ST on maintenance services;
 - d. 18% GST in place of 15% ST on all other services such as House Keeping, Horticulture & Other manpower services, etc;
 - e. Applicable effective service tax on civil contract for construction was 6% which has now increased to 18% GST;

- f. Levy of 18% GST on all unregistered purchase including services;
- 3. Based on the same, it is reasonably assessed that GST implementation would have substantial impact on O&M expenses of 2019-24 (vis-à-vis 2014-19) and its impact needs to be appropriately considered i.e. minimum 5% escalation on overall O&M Cost.**

(B) Revision in minimum wages & Revision in Gratuity Limit

1. It is mandatory that all industry need to adhere to the minimum wages norms prescribed by the Government. Further, the majority of manpower (specifically security, housekeeping, horticulture, drivers, estate management, canteen, semi-skilled maintenance services etc.) are driven by such norms.
2. Further, it is also to be noted that skilled / specialized services manpower rates are also decided with reference to such minimum wages.
3. The Government revises such minimum wages twice every year.
4. It is to be noted that there is increase of 58% in minimum wages over last three years ie a 17% CAGR increase;
5. Recently Government has revised the Gratuity limit from Rs.10 lacs to Rs. 20 lacs and similar revision for PF limit is under discussion. Revision in statutory retirement benefits will have major impact on employee cost due to cascading impact on entire past period liability.
6. **As the service component forms substantial part of O&M expense, the above-mentioned revision in minimum wages and gratuity limit needs to be factored in while providing norms of O&M expenses.**

(C) Performance Pay & Pay parity

1. Critical success factor for performance of F class machines are dependent on the availability skilled manpower with specialized technical knowledge and experience.
2. There are very few plants in India with F class machines. Hence, there is limited pool of experienced manpower available in India. However, there are many installation of gas turbine (including F Class) in Middle East and it has increased substantially in last few years (including requirement of Petrochemical Sector).

3. It is known that Middle East offers very high pay packages (minimum 3 times over the Indian pay package) with tax & other benefits. Further, the performance pay is also substantial which are linked to plant availability.
4. In view of the above, the F class generators in India have to offer comparable remuneration. We observed that almost ~50% (of total attrition in last few years) has migrated to Middle East due to better pay packages.
5. Further, the overall pay package (specifically government plants) has increased substantially due to implementation of recent pay revisions and there is substantial rise in overall pay package across the country and industry in particular. This would lead to substantial increase in employee cost.
6. **In view of the above, there would be substantial increase in O & M Cost due to performance pay & pay parity issue specifically for F class machines in the Tariff Period 2019-24. Based on the same, we request the Hon'ble Commission to factor such aspects while considering norms of O&M expenses.**

(D) Obsolescence of Systems & Spares

1. From Tariff Regulations 2009-14, the operating life of gas based power plant has been revised from 15 years to 25 years. Hence, the support of OEM is also required to be extended.
2. Further, such extended operating life would lead to higher risk of change in technology causing obsolescence of parts / technology upgradation.
3. F-class turbines are part of an automated control system for the whole plant. Such automations become obsolete from time to time as new control systems are developed and need to be replaced due to stoppage of support from OEM. For example, OEM has already indicated Rs. 60 Cr for up gradation of DCS system and it has stopped support for BOP.
4. Such additional costs need to be factored into while considering norms of O & M expenses.

Thus to provide for impact of GST, minimum wages revision, Performance pay & pay parity and obsolescence, there should be

additional provision in O&M expenses. Hence, we request to provide O&M expenses of Rs. 32 Lacs per MW for 2019-20

(E) Escalation Factor

1. Further, an escalation rate of 3.2% is considered which is also very low. In this context, we would like to submit that the O&M expenses primarily consist of employee expenses, repair and maintenance expenses and admin & general expenses.
2. It is known that the employees expenses cannot just increase by 3.2% (it increases minimum by 10% - please refer report of well known HR consultancy firm KPMG report on India's Annual Compensation Trends survey 2018-19 attached herewith), the service and supply contract (even if the ARC is placed) increase by 10% on year on year basis.
3. The exchange rate has also increased by ~6.50% in last year. Further, the cost of Petro/Diesel (which is also major sub cost/cost driver in Admin & General expenses) has been increasing and very erratic (i.e. highest Rs. 84/liter to Rs. 70/liter) in last year. In this context, all major heads of O&M expenses are expected to increase much more than 3.2%.

Hence, balanced escalation rate of 7% in O&M expenses is to be provided.