

# Draft

## **The Inclusion of Steam and Electric Generator Major Inspection and Overhaul Costs in CDTF Incremental Operations and Maintenance Expenses**

The purpose of this draft is to propose a modified approach to the major inspection and overhaul costs that are currently not included in the definition of Cost Based Offers (CDTF costs) under Section 6.4.2 (a) (ii) of the PJM OATT.

It is recognized that many generation owners made the decision to classify and charge these variable costs as capital items and that, as a result, these costs cannot be included in variable maintenance and operations expenses as currently defined in Section 5 of PJM Manual M-15 Cost Development Guidelines and FERC Accounts 512, 513, 530, 531 and 553 as identified in the noted section.

The purpose of the proposed changes to the CDTF Manual is to ensure that costs are defined as variable based on the nature of the costs and the reason they were incurred, rather than the accounting treatment of those costs by generation owners.

In order to be included in CDTF costs, the identified operation and maintenance costs must represent actual expenditures that are due to incremental degradation of generating equipment directly related to the generation of MWh, starts or a combination of both. Expenditures that are not directly related to these operations are not variable costs and are therefore not CDTF costs.

In order to be included in CDTF costs, it must be demonstrated that these costs would have been includable under the current Cost Development Guidelines allowable FERC accounts had they had been booked as variable expenses instead of capitalized. The CDTF Manual will be modified in order to provide the rules under which these expenses must be filed and approved by the PJM MMU prior to inclusion into cost based offer calculations.

Regardless of the method of accounting practiced by the owner, these major inspection and overhaul costs may represent a variable expense and may be allowable for inclusion as CDTF costs. As an example, expenses such as Combustion Chamber and Hot Gas Path inspections for Combustion Turbines and Steam Generator and Turbine inspections for steam units may be includable in CDTF costs. These expenses include spare parts, tools, technical contractor and consultant work, incremental maintenance and operating personnel, specialized vendor inspection equipment and expertise and other incremental expenses only as they directly relate to major inspection and overhaul work. A detailed listing of requested expenses must be itemized with both written descriptions and expense dollars must be filed with the PJM MMU for approval, consistent with the revised CDTF rules.

Combustion Turbine and Combined Cycle Plant major inspection and overhaul costs include:

1. Combustion Turbine Generator Inlet Air System
  - a. Inlet Air Filter Replacement
  - b. Evaporative cooling system media replacement
  - c. Mechanical inlet air cooling chiller and pump inspection and overhaul
2. Fuel System
  - a. Fuel Gas Compressors Inspection and Overhaul
  - b. Distillate Fuel Pumps Inspection and Overhaul
3. Water Treatment
  - a. Resin Replacement
  - b. RO Cartridges Replacement
4. Environmental
  - a. SCR and/or CO Reduction Catalyst Replacement
5. Combustion Turbine Generator ("CTG")
  - a. Combustion Inspections
    - i. Parts
    - ii. Labor
    - iii. Rentals
    - iv. Specialized technical expertise and support
  - b. Hot Gas Path Inspect

- i. Parts
      - ii. Labor
      - iii. Rentals
      - iv. Specialized technical expertise and support
    - c. Major Overhaul
      - i. Parts
      - ii. Labor
      - iii. Rentals
      - iv. Specialized technical expertise and support
    - d. Electric Generator Inspection and Overhaul
      - i. Parts
      - ii. Labor
      - iii. Rentals
      - iv. Specialized technical expertise and support
- 6. Heat Recovery Steam Generator ("HRSG")
  - a. Chemical Cleaning or Hydro-Blasting of Heat Transfer Surfaces
  - b. BFW Pump Inspection and Overhaul
  - c. Heat Transfer Surface Replacements
  - d. Casing Repair and Replacements
- 7. Steam Turbine Generator ("STG")
  - a. Major Overhaul
    - i. Parts
    - ii. Labor
    - iii. Rentals
    - iv. Specialized technical expertise and support
  - b. Electric Generator Inspection and Overhaul
    - i. Parts
    - ii. Labor
    - iii. Rentals
    - iv. Specialized technical expertise and support
- 8. Surface Condenser
  - a. Chemical Cleaning or Hydro-Blasting of Heat Transfer Surfaces
  - b. Condensate Pump Inspection and Overhaul
  - c. Heat Transfer Surface Replacements

9. Cooling Tower

- a. Circulation Pump Inspection and Overhaul
- b. Cooling Tower Fan Motor and Gearbox Inspection and Overhaul
- c. Replacement of Cooling Tower Fill and Drift Eliminators