Combustion Turbine Start

For the purpose of calculating combustion turbine maintenance cost, only the number of successful starts to synchronization shall be used. Successful starts should include those for PJM, a company and for test.

Combined Cycle - Maintenance Adder

The dollars per unit of fuel (or heat) as derived from FERC Accounts 512, 513, and 553. If submitting as a simple cycle combustion turbine, use total dollars from FERC Account 553 divided by Equivalent Service Hours (ESH).

Maintenance Period

~~A rolling 20-year historical period based on calendar year.~~

A unit must choose a rolling historical period based on calendar year. A unit may choose a 10-year or 20-year period for maintenance cost. Once a unit has chosen the historical period length, the unit must stay with that period until a significant unit configuration change. Significant unit configuration change is defined any change to the physical unit's system that significantly affects the maintenance cost for a period greater than 10 years. Examples of a significant unit configuration may include but are not limited to:

- Flue Gas Desulfurization (FGD or scrubber)
- Activated Carbon Injection (ACI)
- Selective Catalytic NOx Reduction (SCR)
- Selective Non-Catalytic NOx Reduction (SNCR)
- Low-NOx burners
- Bag House addition
- Long term Fuel change (greater than 10 years)
- Water injection for NOx control
- Inlet Air Conditioning

A maintenance period choice may also be given in circumstances of change in ownership necessitating a new Interconnection Service Agreement (ISA). Change of ownership within the same holding company is not eligible to change the historical maintenance period.

Transition Plan:
This rule is a change in previous standards that required a 20-year period. Once this rule is approved and entered into M15 generation owners must submit their choice of 20 or 10-year maintenance period to the MMU by June 1, 2010.

Incremental Adjustment Parameter

Any variable cost incurred in the production of energy for PJM dispatch, not included in the CDTF guidelines for Total Fuel Related Costs or Maintenance Adder. This includes water injection costs, Title 5 emission fees, and any other variable cost which has been previously approved by the PJM MMU for inclusion.

Section 9: Regulation Cost Guidelines

Cost Development Task Force Regulation Cost Policy

Companies in the PJM RTO that request and receive reimbursement from PJM for the costs associated with operating a generating unit in the Regulating mode or for altering the output of a generator at the request of PJM in order to provide Regulation service must maintain records to document how these costs were calculated. These records shall be made available to PJM upon request.

Generation Unit Cost to Supply Regulation Service

Total costs to provide Regulation Service from a unit shall include the following components up to but not exceeding:

- The costs (in $/MW of Regulation) to provide regulation service from units shall not exceed the fuel cost increase due to operating the unit at lower loads than at the optimal economic dispatch level load and the unit specific heat rate degradation from operating at lower loads, resulting from operating the unit at lower MW output incurred from the provision of regulation over the entire generator MW range of providing regulation service.
- . Plus (+) the cost (in $/MW of Regulation) increase due to the heat rate increase resulting from operating the unit at a non steady-state condition. This heat rate loss factor rate shall not exceed 0.35% of the top regulation load MW heat rate value.
- Plus (+) the cost increase (in $/MW of Regulation) of variable operations and maintenance (VOM) cost resulting from operating the unit at lower MW output incurred from the provision of regulation. VOM costs shall be calculated by the following methods and shall not exceed those levels below:
  - For non-hydro units that have been providing regulation service for less than 10 years, or all hydro units regardless of the historical years of regulation service, the following variable operation and maintenance (VOM) costs can be applied by unit type up to the following:
    - Super-critical Steam: $10.00 per MW of Regulation
    - Sub-critical Steam: $3.50 per MW of Regulation
    - Combined Cycle: $2.50 per MW of Regulation
    - Combustion Turbine: $2.00 per MW of Regulation
    - Hydro: $1.00 per MW of Regulation
  - For non-hydro units that have been providing regulation service for more than 10 years, the VOM rates from c. i) above can be utilized only if the annual VOM dollar amounts resulting from those rates and included in regulation cost based offers, are subtracted from the escalated 10 or 20 year historical total VOM accounts (see Section 5: Operations and Maintenance Guidelines) and the regulation MWh based on the average of the last three years.