CDS Problem Statement

Eliminate Conflicting Language Manual 15's Treatment of Capital Expenses for CT's and ACR Eligibility 10/17/11

Issue:

Currently, costs that are included in offers to the PJM Energy Market cannot be included in the RPM Avoidable Cost Rate per PJM Tariff Attachment DD. This leads to a conflict over the interpretation of the intent under certain provisions contained in the Cost Development Guide (CDG) - Manual 15 regarding costs that may in some circumstances be eligible for VOM expensing within the energy offer. This ambiguity has been used in some cases to prevent generators from putting overhaul expenses into RPM and forcing them, if they wish to recover costs within the VOM component of their energy offer while others are allowed to include overhaul costs in RPM. This task will eliminate those ambiguities and ensure consistent treatment for all generators in offering units into both the capacity and energy markets.

Background:

Manual 15 details the standards recognized by PJM for determining cost components for markets where products or services are provided to PJM at cost-based rates. This manuals provisions regarding maintenance adders was written prior to the establishment of the RPM Capacity Market. In the case of Combustion Turbines language in the current CDG manual suggests that overhaul costs incurred by a generation owner can be included in the generators cost based offer under certain specific circumstances, but the language is easily misinterpreted and results in a disparate treatment of similar costs between generation owners in the energy and capacity markets.

In manual 15, section 6.6 describes costs allowed as a Maintenance Adder ...

Combustion Turbine - Maintenance Adder – The total dollars from FERC Account 553 divided by Equivalent Service Hours (ESH).

The manual goes on to describe Long Term Maintenance Expenses as ...

Long Term Maintenance Expenses – Combustion Turbine and Combined Cycle Plant major inspection and overhaul expenses may be included in variable maintenance expenses regardless of accounting methodology if they meet specific criteria.

In order to be included in variable maintenance expenses, these costs must represent actual expenditures that are due to incremental degradation of generating equipment directly related to generation, starts or a combination of both. Expenditures that are not directly related to such operation may not be included in variable maintenance expense. It must be clear that these costs would have been included in the appropriate FERC Accounts as described in this section. A

detailed listing of all proposed long-term maintenance costs must be submitted to the PJM MMU for evaluation and final approval pursuant to the Cost and Methodology Approval Process.

Combustion Turbine and Combined Cycle Plant major inspection and overhaul costs categories include but are not limited to the following:

- Combustion Turbine Generator Inlet Air System
- Inlet Air Filter Replacement
- Evaporative cooling system media replacement
- Mechanical inlet air cooling chiller and pump inspection and overhaul
- Fuel System
- Fuel Gas Compressors Inspection and Overhaul
- Distillate Fuel Pumps Inspection and Overhaul
- Water Treatment
- Resin Replacement
- RO Cartridges Replacement
- Environmental
- SCR and/or CO Reduction Catalyst Replacement
- Combustion Turbine Generator ("CTG")
- Combustion Inspections including Parts, Labor, Rentals and Specialized technical expertise and support
- Hot Gas Path Inspection
- Major Overhaul
- Electric Generator Inspection and Overhaul
- Cooling Tower
- Circulation Pump Inspection and Overhaul
- Cooling Tower Fan Motor and Gearbox Inspection and Overhaul
- Replacement of Cooling Tower Fill and Drift Eliminators

These rules suggest that certain overhaul costs may be recoverable as Maintenance expenses in the energy offer. However the requirements are being loosely interpreted. Under the CDG manual rules the overhaul costs in question must "have been included in the appropriate FERC Accounts as described in this section" which are FERC 553 and "must represent actual expenditures that are due to incremental degradation of generating equipment directly related to generation, starts or a combination of both".

A sister set of rules with the same issues outlined above are included in section 5.6 of M-15 addressing combined cycle configurations.

In general practice if one of these components were replaced under normal life and operational experience they typically would not be a FERC 553 maintenance expenditure but would be a capitalized expense. If the component fails outside of its overhaul cycle and normal life it may be expensed as short term maintenance and therefore it would be in FERC 553 and would typically fall under VOM. It should be noted that FERC accounting is not a requirement and the interpretation and actual use of FERC accounts to group charges are used as a guideline.

In 2010 CDTF developed manual language to address the conflict between M15 and the tariff rules so that capitalized costs would fall under ACR in the capacity market and expensed maintenance items are recoverable through the maintenance adder. However final approval and adoption of that language was placed on hold when the MMU wanted to conduct a review of the definition and restructuring of VOM expense rules. Since the CDS has not completed that work and will not have it completed in time for the next BRA the current CDS group should examine and include the proposed manual changes developed in 2010 to eliminate the ambiguity between the tariff provisions for RPM's ACR treatment and the eligibility for costs to be expensed under the maintenance adder component within the energy offer. This ambiguity in the CDG manual is only brought about due to the language in section 5.6 and 6.6 of M-15 regarding CT's and Combined Cycles specifically.

Objectives and Expected Activity:

- 1. To examine and propose revisions to M15 to make it consistent with the RPM tariff provisions such that generators costs on Combustion Turbines is not disqualified in the capacity market as ACR.
- 2. To complete this change to M-15 in time to become effective for the next BRA in the spring 2012.

Expected Deliverables:

A proposal with the CDS preferred modifications to Manual 15 that address the ACR issue will be presented to the MRC and the MC. No changes to the tariff are expected, the changes required can be addressed through Manual 15. Approval by the PJM Board of Managers will follow the endorsement of the MC.

Reference Material

• Original CDTF language from 2010. (Note that M-15 has been updated since then and this language will need some adjustment.)