



## **Problem Statement: Cyclic Peaking and Starting Factors**

### ***Issue:***

Cyclic peaking and starting factors are values derived from Manual 15 used to modify incremental maintenance dollars on combustion turbine units based on incremental starts. Currently, this is 5.0 for aircraft-type CTs, 10.0 for industrial-type CTs, and an additional 3.0 for all CTs. These factors are used as multipliers to determine incremental maintenance costs attributable to start costs and to peaking MWh.

Some newly built combustion turbines, however, do not require additional maintenance per start, and therefore these factors would appear to be unnecessary. Additionally, there is no clear source or history for these values, and they may be out of date, inaccurate, or no longer relevant for certain combustion turbine models.

### ***Issue Source:***

The MMU is bringing this issue forward for consideration by the Cost Development Subcommittee (CDS). After reviewing Manual 15, it became clear that cyclic peaking and starting factors were possibly out of date for new combustion turbine units, and possibly inaccurate for current units in PJM.

### ***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, as referenced in Schedule 1, Section 6 of the Operating Agreement of PJM Interconnection, L.L.C. Generation Owners use Manual 15 to develop their cost based offers. The values of cyclic peaking factor and starting factor were decided some time ago, and may have no basis in current cost development.

### ***Assignment of Responsibility:***

Governance of Manual 15 is the primary scope of responsibility for the CDS and is therefore the appropriate stakeholder body to address this issue. This lies directly within the existing CDS charter and no charter modifications are needed. Further as CDS is a standing Subcommittee, no charge is required from the Markets and Reliability Committee (MRC).

### ***Objectives and Expected Activity:***

1. To ensure that cost development guidelines are adequately reviewed, defined, consistent and up to date.

2. Using the proposal matrix developed by the CDS members (Appendix 1, Proposal Matrix), the CDS will evaluate the accuracy and relevance of cyclic peaking and starting factor values.
3. The CDS will use the proposal matrix to develop appropriate manual language for Manual 15 reflecting this definition.

***Areas defined as out-of-scope:***

This problem statement is only intended to address cyclic peaking and starting factor issues in Manual 15.

***Expected Deliverables:***

A proposal with the CDS preferred modifications to Manual 15 that address cyclic peaking and starting factor value issues will be presented to the MRC and the MC.

***Expected Milestones and Deadlines:***

Meeting	Activity
CDS: January 31, 2011	Review Problem Statement
CDS: February 28, 2011	Education and Fact Finding
CDS: March 21, 2011	Identify and Explore Interest
CDS: April 25, 2011	Develop Options for Each Component
CDS: May 23, 2011	Develop Comprehensive Changes
CDS: June 20, 2011	Develop Recommendations (including consensus and multiple options)
MRC: June 22, 2011	Report to Senior Committee
MRC: July 20, 2011	Endorsement vote at MRC
MC: August 25, 2011	Endorsement vote by MC

Approval by the PJM Board of Managers will follow the endorsement of the MC.