

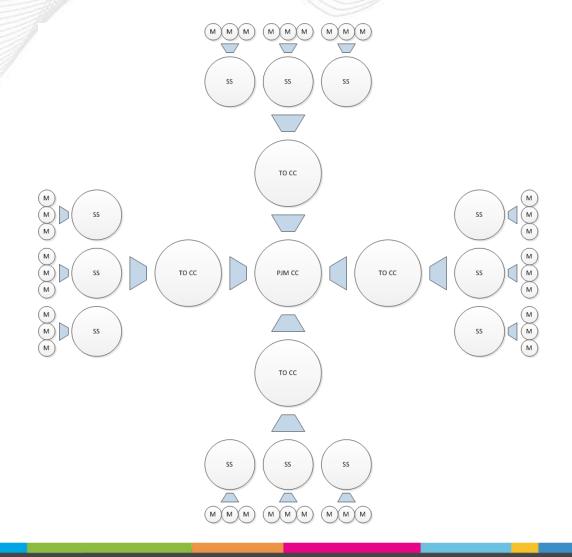
## The Purpose of MTF

Review of Problem Statement, Issue Charge, and overall vision for the Metering Task Force.

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Meter data accuracy, reliability, and availability is foundational to almost all electric utility operations – dispatch, protection, markets...





1927: Pennsylvania-New Jersey Interconnection formed, with companies PSEG, PECO and PP&L

1956: BGE and GPU join, becoming PJM

1995: Metering Group drafts Billing Meter Standards and hosts group meetings on metering where at least PSEG, PEPCO, DPL, and PJM are represented

1997: PJM becomes an ISO based on FERC orders that began deregulation

1997: First draft of PJM M01 Control Center Requirements

1997: M01 R0 includes grandfather clause for all metering before 12/1/1997.



1998: First revision of M01

2000: Second revision of M01

2002: AP is the first external control area to join the PJM RTO as a market

participant

2003: Third revision of M01 "Complete revision of manual to reflect PJM Standards and Systems"



2004: ComEd, AEP and DPL joins

2005: DLCO, Dominion Virginia Power joins

2011: FirstEnergy (ATSI and CPP) joins

2013: Duke (EKPC) joins

2013: 23<sup>rd</sup> revision of M01, Major changes to Tie Line telemetry requirements, and other reorganization

2015: 30<sup>th</sup> revision of M01, would have reorganized and updated metering requirements, but required TF to address concerns



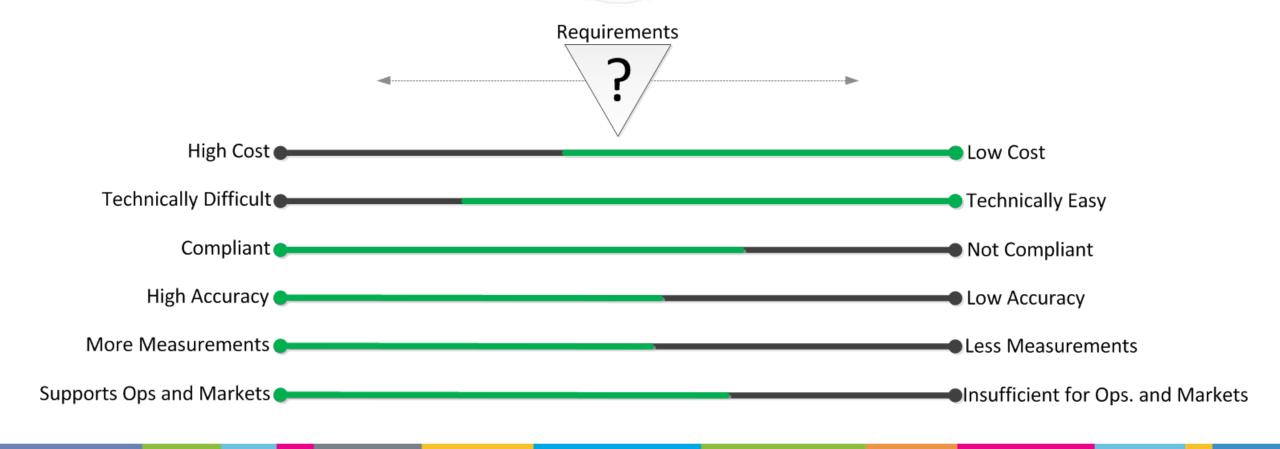
- Attempted to more clearly segregate "revenue metering" from "real-time metering" requirements.
- Addressed some 30 tracked comments/questions/suggestions from members.
- Sought to not actually alter requirements, but to clarify, and create at least one clear category for any given meter.
- Highlighted big gaps between PJM understanding/interpretation of M01 text and member understanding/interpretation as well as actual installed metering.



- PJM uses Manuals to specify, socialize and endorse standards, requirements and practices.
- Manuals 01, Section 5, is the main body of PJM metering requirements.
- In a vacuum, PJM would like completely accurate and reliable metering available everywhere.
- In reality there are costs, business limitations, and technical limitations for completely accurate and reliable metering available everywhere.



## What are the "right" requirements?





- The existing metering is "working".
  - Clearly identify and define the installed metering.
- Is there a better balance to strike?
  - Investigate the advantages of accurate/reliable metering.
  - Consider the costs of requirements.
  - Consider industry peer standards and NERC/FERC rules.
- Consider updates for any substantially new issues.
  - New Tie Line definitions
  - Etc.



PJM Task Force process to provide organization and structure to gather and assess information, and make consensus-based data-driven decisions.

PJM will use MTF outcomes to edit PJM Manuals accordingly.