

Overview

This paper will provide an overview of the current state of affairs in the area of data postings and confidentiality issues, with an eye towards identifying opportunities for increased information transparency related to PJM Markets or Operations and clarifications on current confidentiality rules.

Development of Current Manual Language

FERC Order 719 was a wide-ranging order with many different mandates. One of the less significant requirements included in this order was for all RTOs to justify their data posting policies. At the time, PJM had no written policies for data postings in the governing documents, manuals, policies, etc. PJM in its compliance filing responded with information on PJM's practices in this area, but the FERC found this answer insufficient and ordered further response. In 2010 PJM created language that was included in Manual 33 to formalize the data posting policies. These rules have been altered only once since they were implemented during a stakeholder process in 2016.

Current Rules and Policies

Summary of Rules

A very high level summary of the rules surrounding the designation and treatment of confidential data is as follows:

- 1. "Confidential data" is data that PJM has designated as confidential. The rules contain no strict definition of what types of data are or are not confidential.
- Confidential data may only be disclosed under certain circumstances (such as due to a subpoena, to the FERC, NERC or CFTC, other RTO/ISOs, to an authorized State Commission, to PJM contractors or consultants, or with the permission of the owner of the data.)
- 3. Aggregate market data that is publicly posted must be comprised of data from four or more market participants, and cover a geographic area no smaller than a transmission zone.
- 4. Several defined exceptions exist in the rules, designating certain types of information as non-confidential and therefore eligible to be published.

In general, the PJM Operating Agreement contains rules describing what may or may not be done with confidential data, while Manual 33 contains rules regarding the classification of whether data is or is not confidential.

Operating Agreement

Section 18.17 of the Operating Agreement provides most of the high level guidance for the treatment of confidential data.

Operating Section 18.17.1 states:

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(a) No Member shall have a right hereunder to receive or review any documents, data or other information of another Member, including documents, data or other information provided to the Office of the Interconnection, to the extent such documents, data or information have been designated as confidential pursuant to the procedures adopted by the Office of the Interconnection and/or the PJM Market Monitor or to the extent that they have been designated as confidential by such other Member; provided, however, a Member may receive and review any composite documents, data and other information that may be developed based on such confidential documents, data or information.

(b) Except as may be provided in this Agreement or in the PJM Open Access Transmission Tariff, the Office of the Interconnection shall not disclose to its Members or to third parties, any documents, data, or other information of a Member or entity applying for Membership, to the extent such documents, data, or other information has been designated confidential pursuant to the procedures adopted by the Office of the Interconnection or by such Member or entity applying for membership..."

Under the Operating Agreement, certain information designated by a Member as confidential remains so without regard to the passage of time. The same is true with respect to information designated by PJM as confidential pursuant to PJM's procedures unless otherwise provided in the Operating Agreement or Tariff. For example, Operating Agreement, Section 18.17.1 (b) (iii) specifically makes e-Tag data confidential and the passage of time will not change the status. Similarly, Section 18.17.6 specifically says EMS data is "confidential and/or commercially sensitive" and states PJM shall not release "any generator cost, prices or other market information without written authorization pursuant to Section 18.17.1 (c)."

Conversely, Section 18.17.1 (a) says information that would otherwise be confidential may be disclosed by PJM in composite or aggregated provided the composite does not disclose any individual Member's confidential data or information.

Manual 33

The following language was included in Manual 33 as a result of FERC directives stemming from Order 719 in 2010.

To the extent PJM deems information relative to the operation of its electricity markets valuable for public dissemination, or upon request by one or more PJM stakeholders, PJM will post aggregated market data on its public web site. In order to ensure that market sensitive data is not revealed and to prevent potential misuse of such data, PJM will only post aggregated market data to the extent that it meets the following criteria:

A. More than three (3) market participants' data in a particular category is being aggregated for posting. For example, if the data being considered for posting is load data, more than three (3) Load-Serving Entities' data must be aggregated; and

B. The data to be posted is aggregated over a geographic area no smaller than a PJM transmission zone.

The data to be posted may not violate these criteria both on its own or when used in combination with other previously posted data.

Data that was posted before the creation of this guideline is assumed to be appropriate and acceptable.



Data that does not meet these guidelines may still be posted if such disclosure is deemed acceptable by PJM, the PJM Independent Market Monitor, and the members whose data will be posted.

Data Confidentiality Initiative

The following language was added to Manual 33 in 2016 as a result of PJM's effort to increase data transparency.

- A. Individual resource outages: PJM may release information on specific outages of resources in any report or publication of sequence of events and/or lessons learned relative to an event, disturbance, or unusual operating condition on the transmission system (for example, a severe weather event or an event that required the shedding of firm load).
- B. Demand response: PJM may release information on the amount of Demand response available in localized areas (i.e. the amount of MW in a defined area such as a set of zip codes) in order to supply information or report on events or describe situations. Such circumstances include but are not limited to a severe event on the transmission system, a severe weather event, the formation of a closed loop interface, or the need for a transmission system upgrade.
- C. Cleared and Offered Capacity Resources: PJM may release the total amount of offered and cleared Capacity Resources when reporting on RPM Capacity Market results. Such information must be aggregated by transmission zone.
- D. Information regarding uplift payments may be released provided that such information represents generation in an area no smaller than a transmission zone, and a time period no shorter than a single operating day.
- E. Three Pivotal Supplier Test Results: PJM may release aggregated statistics related to the execution and results of the Three Pivotal Supplier Test. Such statistics may not identify individual resource owners.
- F. Member data that has been publicly made available by that PJM Member or by a state or federal regulator shall not be considered confidential by PJM.

Operational Practices

PJM internally has established practices to help clarify what is or is not considered to be confidential. These practices have largely focused on extending historical precedents and avoiding potential market harm. There have been instances where information would be beneficial and pose no risk of market harm but the release of that information is not consistent with historical practice or the rules in Manual 33.

Issues Related to Transparency and Confidentiality

"Transparency" versus the risk of market manipulation

There is an argument that "transparency" is a virtue, and it is sometimes used as a justification for information disclosures. Transparency is often a good thing, but too much transparency can undermine competitive market outcomes. Transparency



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is often discussed as a core virtue with no other explanation needed, but it should not be accepted without scrutiny. Good reasons for transparency include things like informing market participant activity in the market (a high price signals a need for energy, and the transparency of that price allows participants to react) and when transparency supports confidence in the market results. However, transparency becomes a problem when too much information allows market participants to undermine competitive results. PJM does not post all offers into the capacity market as that information could potentially be used by some participants to adjust their offers and undermine competitive market outcomes.

In any discussion of whether a particular piece of information should be posted, there should always be a consideration of the opposed concerns of transparency versus the risk of market manipulation. Reasonable people will differ on their valuation of each of these elements, and therefore on whether the information should be posted. Therefore it is critical to have robust stakeholder discussion so that the stakeholders may come to consensus on where the balance lies for any given piece of information. These elements should be evaluated explicitly in stakeholder discussions.

Age of Data

Age of data can play a role in determining the acceptability of data for posting. In general, PJM rules do not consider the age of the data as a factor and confidential data is forever confidential. There are some exceptions, such as generator offer data which is posted on a four month lag as mandated by the FERC.

In general, aged data is not valuable for the type of transparency that allows participants to inform their immediate actions. However it can be valuable for those who wish to do analysis to have confidence in the market outcomes.

While posting lagged data may seem to be a solution for market manipulation risks, it is often a tool of limited use. PJM's markets are a "repeated game" and information about one market result can give useful information about the next one. For instance, a full set of information about a given Base Residual Auction would reveal a great deal about the next one, as entry/exit and offers are constrained. Lagging the release of data is only valuable when the circumstances change frequently enough to lower the risk of market manipulation. For fairly static markets, lagging data has little impact on the risk of market manipulation.

Masking Data

In general, PJM does not use masking (where ID numbers, names, or identifiers are scrambled) in the posting of data. The notable exception is during the posting of lagged generator offers to the Energy Markets where making is used in accordance with FERC orders.

This masking is somewhat ineffective. PJM has been told that given the number of generators and the known characteristics of those generators, anyone wishing to spend the time can eventually determine which generator is which. This is not a failure of the masking system itself, but rather made possible by the nature of the data being posted. For instance, there are only so many 1,000MW or more generators in PJM's territory, and examination of the data will start to give clues as to which one is which.

Masking has proven somewhat ineffective in PJM's circumstances and while it could be beneficial in some cases, it is not likely to be a strong tool to prevent market manipulation.