

Articles

"Can an RTO's Performance Be Measured?"

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On March 5th, over 53 parties filed initial comments with the Federal Energy Regulatory Commission ("FERC") regarding a set of proposed metrics for measuring the performance of Regional Transmission Organizations/Independent System Operators ("RTOs"). These comments revealed a wide range of opinions and demonstrated the challenges in developing RTO performance metrics that will satisfy all parties.

Since 1996, FERC has encouraged the formation of RTOs, which are independent entities that operate large electric wholesale transmission grids (and associated competitive wholesale energy markets) in a non-discriminatory manner. There are currently six FERC-jurisdictional RTOs, which serve much more than half of the nation's electricity consumers.

For many years, parties have requested that FERC establish a set of performance standards ("metrics") that can be used to measure the operational and market performance of RTOs and to evaluate, among other things, whether RTOs add net value after consideration of the costs to operate such independent entities. In September 2008, the General Accounting Office issued a report recommending that FERC "develop standardized measures that track the performance of [RTO] operations and markets and report the performance results to Congress and the public annually..." On February 3, 2010, FERC responded to this recommendation by issuing an outline of potential RTO performance metrics. FERC requested comments on the outline by March 5, 2010; reply comments were due on March 19, 2010.

It is difficult to develop meaningful criteria for evaluating the performance of a not-for-profit entity, such as an RTO. Although the performance of a for-profit entity can be evaluated based, in part, upon how much money it makes for its shareholders, it is more reasonable to evaluate a non-profit entity based upon how well it achieves its goals. If so, meaningful FERC metrics should directly relate to the reasons that RTOs were developed.

RTOs arose out of FERC's Order Nos. 888 and 2000, which concluded, in part, that incumbent electric utilities would more likely provide transmission service on a non-discriminatory basis to third parties (such as providing transmission service to independent power producers) if the transmission owners appointed an independent entity (i.e., an RTO) to coordinate operation of all of the wholesale transmission facilities in a region in a non-discriminatory manner. Generators in an RTO's region are centrally dispatched by the RTO, based upon a security-constrained, unit commitment algorithm. RTOs later developed competitive wholesale power markets to complement such independent transmission services.

Some of the metrics that FERC has proposed appear to be flawed and would be ineffective in tracking the performance of an RTO's operations and markets, in part, because the metrics are unrelated to the goals of RTOs. For example, some of the proposed metrics: (1) may discourage an RTO from complying with its obligations to act in an independent and nondiscriminatory manner; (2) may be outside of the ability of the RTO to control; (3) may discourage an RTO from taking appropriate actions; and/or (4) may encourage an RTO to take actions that are not beneficial to customers and stakeholders. Meaningful RTO metrics should evaluate whether an RTO is properly and independently performing all of the functions specified in its Commission-approved Tariff in an efficient and effective manner.

For example, one of FERC's proposed metrics is to measure whether wholesale electricity prices (e.g., load-weighted locational marginal prices) in an RTO are higher or lower over time. This would not be a particularly meaningful metric, however, because the price components for energy are primarily the result of supply and demand forces in competitive energy markets, which depend largely upon the often volatile prices for the fuels that are used to generate electricity. Moreover, if this metric was used to encourage an RTO, for example, to take actions that would encourage generators in its region to decrease their electricity price offers, then such a metric would inappropriately discourage the RTO from acting in a non-discriminatory basis, as required by Order Nos. 888 and 2000. If an RTO energy market is not competitive, then an independent market monitor, not the RTO, would be primarily responsible for detecting and mitigating the exercise of market power.

Articles

Another questionable metric would be to measure the amount of wholesale transmission system network upgrades that are constructed within an RTO. The alleged justification for this metric is that additional network upgrades would reduce transmission congestion and thus would lead to lower energy prices for consumers. The construction of network upgrades, however, is largely outside the control of RTOs, because their Tariffs only enable them to coordinate regional transmission planning. RTOs have limited authority to require construction of non-reliability network upgrades. Assuming that an RTO is complying with its FERC Tariff planning procedures, the number of reliability studies or economic studies that an RTO annually completes also would primarily be a function of the efforts of transmission owners to propose projects and to submit supporting information to the RTO in a timely manner. RTOs have little or no role in either the number of projects that transmission owners propose or the transmission owners' construction schedules, therefore, it is questionable how such a metric would be meaningful in evaluating an RTO's performance.

On the other hand, RTOs are responsible for meeting national and regional reliability standards, such as those promulgated by the North American Electricity Reliability Corporation ("NERC"). If RTOs annually reported the number of NERC reliability violations in their Region and the severity of each violation, then the RTOs' stakeholders would have a better understanding of whether an RTO was meeting its NERC reliability obligations and such information would be a meaningful measure of RTO performance.

Similarly, RTOs are responsible for operating the wholesale transmission system in a reliable manner so that electricity flows are balanced and voltage levels in the Region are maintained within NERC-specified operational tolerances (known as CPS1 and CPS2). It would therefore also be a meaningful RTO metric to evaluate the operational performance of an RTO by monitoring whether an RTO complies with such NERC voltage standards.

RTOs also should perform their FERC and NERC operations as efficiently as possible. Although RTOs do not have identical Tariff obligations (e.g., some RTOs currently provide ancillary services and others only operate energy balancing markets), the costs that RTOs charge their customers could be another meaningful method of measuring the efficiency of an RTO. Such a metric would be most useful if it measured efficiency of a particular RTO over time, rather than attempted to compare the relative efficiency of multiple RTOs that perform much different functions or that are much different in size.

It is worthwhile to study proposed RTO metrics and to evaluate whether a particular metric is reasonably related to the goals and functions that led FERC to establish RTOs. In developing RTO metrics, FERC should ensure that all approved RTO metrics: (1) are reasonably related to RTO performance; (2) are within the control of an RTO; and (3) encourage an RTO to strictly comply with its Tariff.

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