

**United States of America
Before The
Federal Energy Regulatory Commission**

Managing Transmission Line Ratings) Docket No. AD19-15-000

ADAM R. ROUSSELLE Sr. COMMENTS

- I thank the Commission for convening this conference and inviting me to be a presenter. Circuit ratings are important to this Commission's consumer protection mandate. I am Adam Rousselle. I have focused much of my professional career on getting transmission circuit ratings right.
- The purpose of this conference (as I understand it) is to understand and possibly have this Commission prescribe best practices for rating electric transmission circuits, with particular focus on incorporating ambient-adjusted and dynamic ratings as opposed to continuing to rely only on static ratings into energy management systems.
- As the Commission has learned from other presenters, there are different ways to measure and determine ambient-adjusted and dynamic ratings. Each of these approaches likely will help us better understand congestion, help us optimize use of existing circuits and thereby reduce pricing in the day-ahead and real-time energy markets. In short, each has merits. One or more may capture the best practice or practices
- So, should ambient-adjusted and dynamic ratings be incorporated into energy management systems? The answer is a resounding *yes*. Measuring the physical capacity and loading of circuits as they change over time and over seasons will allow operators to respond to those changes to make better and more efficient use of the existing grid and induce investment in more economical upgrades and expansions.
- But there is another pregnant question before this Commission in regard to many if not most of the organized ISO and RTO markets that the Commission oversees. How this question is answered will determine how effectively ambient-adjusted and dynamic rating can be implemented and benefit consumers.
- This additional question recognizes that organized markets routinely adjust and report ratings *not based* on actual physical capacity (however measured), but instead based on the needs of the financial markets that they host. These market models very often depart significantly from the physical reality that ambient-adjusted and dynamic ratings seek to capture with ever increasing accuracy.

- And of greatest concern, unlike physical measures of circuit ratings, these market models too often are completely opaque to all but a few incumbent market participants.
- Indeed, in a recent proceeding before this Commission in which I testified representative from four major transmission-owning utilities testified that they do not even verify the ratings that they, under oath, reported to the Commission.
- So, in addition to issues surrounding best practices for ambient-adjusted and dynamic rating, the use by organized markets of these financial models raises a host of issues that the Commission should address concurrently.
- The threshold question is whether circuit ratings should be set for any purpose to fulfill the financial needs of certain market participants as opposed to reflecting accurately the physical reality of the circuits. Should circuit ratings be changed to support financial transmission rights or alter clearing prices in the day-ahead or real-time energy markets? I think not.
- What purposes, if any, warrant use of market models as opposed to physical measures? I urge the Commission to delve deeply into this question: If market models are used for any purpose to change physical measures of real capacity existing on circuits, then how can this Commission ensure that the models are transparently known and easy for market participants to replicate?
- Let me conclude with this hopeful recommendation, but with a caution. Yes, ambient-adjusted and dynamic rating of circuits hold great promise to improve grid operations and inform smart investment decisions. But just as market models currently distort static ratings, much, if not all of the promise of the rating innovations we are discussing will **not** be realized if they continue to be distorted by market models that are run and implemented behind closed doors.

Respectfully,

Adam R. Rousselle

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