UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 37

[Docket No. RM05-17-000]

Information Requirements for Available Transfer Capability

(May 27, 2005)

AGENCY: Federal Energy Regulatory Commission

ACTION: Notice of Inquiry

SUMMARY: The Federal Energy Regulatory Commission seeks comments on: (a) the North American Electric Reliability Council's recent Long-Term AFC/ATC Task Force Report; (b) the advisability of revising and standardizing available transfer capability calculations; and (c) the most expeditious way to obtain an industry-wide standard for available transfer capability calculations. This Notice of Inquiry is the result of a review conducted by the Commission's Information Assessment Team (FIAT), to propose: (a) new information the Commission needs to promote greater market transparency in electricity markets; and (b) ways to reduce the reporting burden on industry through the elimination, reduction, streamlining or reformatting of current information collections.

DATES: Comments on this Notice of Inquiry are due on [Insert date 60 days after publication in the FEDERAL REGISTER].

ADDRESSES: Comments may be filed electronically via the eFiling link on the Commission's web site at http://www.ferc.gov. Commenters unable to file comments electronically must send an original and 14 copies of their comments to: Federal Energy Regulatory Commission, Office of the Secretary, 888 First Street N.E., Washington, DC, 20426. Refer to the Comment Procedures section of the preamble for additional information on how to file comments.

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SUPPLEMENTARY INFORMATION:

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Information Requirements for Available Transfer Capability	Docket No. RM05-17-000

NOTICE OF INQUIRY

(May 27, 2005)

1. In Order No. 889,[1] the Commission required transmission providers[2] to offer unused transmission capacity to the market by posting available transfer capability (ATC) on their Open Access Same-Time Information Systems

[1] *Open Access Same-Time Information System and Standards of Conduct,* Order No. 889, 61 FR 21,737 (1996), FERC Stats. & Regs., Regulations Preambles July 1996-December 2000 31,035 (1996), *order on reh'g*, Order No. 889-A, 62 FR12,484 (1997), FERC Stats. & Regs., Regulations Preambles July 1996-December 2000 31,049 (1997), *reh'g denied*, Order No. 889-B, 81 FERC 61,253 (1997).

[2] A transmission provider is the public utility (or its Designated Agent) that owns, controls, or operates facilities used for the transmission of electric energy in interstate commerce and provides transmission service under the Tariff. *See Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities,* Order No. 888, 61 FR 21,540 (May 10, 1996), FERC Stats. & Regs., Regulations Preambles January 1991-June 1996 31,036 Appendix D (Pro Forma Tariff) at 1.46 (1996), *order on reh'g*, Order No. 888-A, 62 FR 12,274 (March 4, 1997), FERC Stats. & Regs., Regulations Preambles July 1996-December 2001 31,048 (1997), *order on reh'g*, Order No. 888-B, 81 FERC 61,248 (1997), *order on reh'g*, Order No. 888-C, 82 FERC 61,046 (1998), *aff'd in relevant part sub nom. Transmission Access Policy Study Group v. FERC,* 225 F.3d 667 (D.C. Cir. 2000), *aff'd sub nom. New York v. FERC,* 535 U.S. 1 (2002) (Order No. 888).

(OASIS).[3] In the years since the Commission issued Order No. 889, market participants have complained that variations in the way ATC is calculated provide opportunities for undue discrimination and create obstacles to doing business. The Commission believes that standardizing the way ATC is calculated will alleviate these obstacles. This Notice of Inquiry is the result of a review conducted by the Commission's Information Assessment Team (FIAT), to propose: (1) new information the Commission needs to promote greater market transparency in electricity markets; and (b) ways to reduce the reporting burden on industry through the elimination, reduction, streamlining or reformatting of current information collections.

2. The Commission has reviewed the final report of the North American Electric Reliability Council (NERC) on long-term available flowgate capability (AFC) and ATC,[4] which addresses the calculation and coordination of AFC/ATC to increase market liquidity and enhance reliability. As discussed more fully below, NERC's LTATF Report provides useful guidance on how to achieve an industry-wide methodology for calculating ATC. The Commission encourages the electricity industry to work toward standardization and coordination of ATC and

[3] 18 CFR Part 37.

[4] North American Electric Reliability Council, *Long-Term AFC/ATC Task Force Final Report* (2005) (LTATF Report).

related terms, and requests comments on the recommendations put forth in the LTATF Report.[5]

Background

A. Definitions

3. The calculation of ATC involves a number of variables that require definition. The Commission will use the LTATF Report definitions for purposes of the discussion in this Notice of Inquiry. The Commission requests, however, that the industry comment on these definitions, as these variables determine the calculation of ATC.

4. For market participants, ATC is essentially a measure of unused transmission that a transmission provider can offer for sale pursuant to Order Nos. 888 and 889. Transmission providers sell transmission service to customers in the form of transfer capability. Transfer capability is the measure of the ability of the interconnected electrical system to move electric energy reliably from one point to another and is limited by, among other things, the capacity either of equipment (such as transformers or transmission circuits) or interfaces (one or more circuits). ATC is the amount of transfer capability still available for sale after all existing uses are accounted for.[6] Transmission providers calculate ATC

[5] The Commission recognizes the common interest of the United States, Canada and Mexico in maintaining a safe and reliable interconnected North American bulk power system. Any standards promulgated by the Commission would apply only to jurisdictional entities.

[6] LTATF Report, Appendix A, page 4.

by subtracting existing transmission commitments, transmission reserve margin, and capacity benefit margin from total transfer capability.[7]

5. A flowgate is the name given to a transmission element(s) and associated contingencies that may limit ATC. AFC is a measure of the capability remaining on a flowgate for future uses, after considering the effect of prior sales. AFC is measured as a flow limit on a flowgate, while ATC is measured as a transaction limit from a source to a sink.[8]

6. There may be multiple flowgates between source and sink that can limit a transaction. If the assumptions that underlie AFC and ATC do not reasonably conform to real-time operations, the transmission system will either be artificially constrained, or it will be underused, leading to lost transmission opportunities.

7. Transmission providers use CBM and TRM in their ATC and AFC calculations to account for uncertainties or contingencies that are not explicitly modeled in the calculations. CBM is the amount of firm transmission transfer capability reserved by the transmission provider so that load serving entities, whose loads are located on that transmission provider's system, can access remote reserve generation from interconnected systems.[9] TRM is the amount of

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[7] ATC equals Total Transfer Capability (TTC) minus Existing Transmission Commitments (ETC) minus Transmission Reserve Margin (TRM) minus Capacity Benefit Margin (CBM), or ATC=TTC-ETC-TRM-CBM.

[8] "Source" and "sink" are points at which the transmission of electric energy begins (source) and ends (sink).

[9] LTATF Report, Appendix F, page 2.

transmission transfer capability necessary to ensure that the interconnected transmission network will be secure under a reasonable range of uncertainties in system conditions. The criteria used to determine TRM and CBM should be consistent with the transmission operator's planning and operating criteria.[10]

B. Evolution of Electricity Markets since Order Nos. 888 and 889

8. In Order Nos. 888 and 889, the Commission required transmission providers to sell unused transmission capacity and post their ATC on OASIS. Market transactions depend on this critical transmission information. As the electric industry has evolved, the nature of the calculations of ATC, TTC, TRM and CBM and the interaction between neighboring transmission providers has changed substantially. In the years since the Commission established OASIS, independent system operators (ISOs) and regional transmission organizations (RTOs) have developed organized markets. Agreements among neighboring ISOs/RTOs and transmission service providers have led to increased coordination of operation and requests for transmission service, and have resulted in fewer variations in the calculation of ATC for those regions. In regions without an ISO/RTO, however, this may not be the case.

9. While the electric industry uses OASIS for posting ATC, there is as yet no industry-wide standard for calculating ATC. The Commission's OASIS II Advanced Notice of Proposed Rulemaking, issued in July 2000, contemplated

[10] *Id.* at Appendix A, page 5.

detailed, standard communication protocols and associated business practices for ATC, TTC, and CBM[11] but these standards and protocols are not yet in place.

C. Problems with ATC Calculations

10. Transmission providers have incentives to understate ATC on those paths valuable to power sellers that are competitors to a transmission provider's own (or its affiliate's) power sales. The lack of clear and consistent methodologies for calculating ATC can allow transmission providers the discretion to control the transmission system to favor their own power sales or those of their affiliates. ATC can vary considerably depending on the criteria they use to calculate it and the order in which the calculations are made. Although the Commission has required transmission providers to post the formula for calculating ATC,[12] the transmission provider has sole responsibility for, and a great deal of discretion in, its calculation. More rigorous and consistent standards and procedures for ATC calculations would help ensure that transmission providers' exercise of discretion in their calculation of ATC does not result in undue discrimination with respect to interstate transmission.

11. Complainants have alleged that transmission providers misrepresent ATC, often using ATC calculations to inflate transmission needed to serve native load or to set aside capacity for their affiliates. In one instance, a transmission provider

[11] *Open Access Same-Time Information System Phase II*, 92 FERC 61,047 at 61,126-27 (2000).

[12] 18 CFR 37.6.

reserved capacity on behalf of native load but failed to designate network resources as required by the open access transmission tariff. The company thus improperly increased the existing transmission commitment component of the ATC calculation, artificially reducing posted ATC.[13] It is thus important that the ATC component (TRM and CBM) assumptions are stated and posted so that recalculated ATC values are transparent and not devised to produce an unduly discriminatory result.

12. The lack of standardization and coordination of ATC can not only result in unduly discriminatory behavior, but can also on occasion affect reliability. As the LTATF recognized, inaccurate ATC values can lead to Transmission Loading Relief actions [or curtailments in the Western Electricity Coordinating Council (WECC)] if they result in transmission flows that exceed line limits.[14] In this regard, preceding the August 14, 2003 blackout, transmission operators calculated ATC values approximately seven days ahead using forecasted system conditions. This lag in real-time ATC values contributed to the blackout. The Final Blackout Report indicated that transmission operators should update ATC/TTC values as the forecast of system conditions changes.[15]

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[13] *See Aquila Power Corporation v. Entergy Services, Inc.*, 90 FERC 61,260 at 61,859-60 (2000).

[14] LTATF Report, page 1.

[15] U.S.-Canada Power System Outage Task Force, *Final Report on the August 14th Blackout in the United States and Canada: Causes and Recommendations* 31 (April 2004) (Final Blackout Report).

D. The LTATF Report

13. NERC created the LTATF to develop a report and specific recommendations for the calculation and coordination of AFC/ATC to increase market liquidity and enhance reliability. NERC's Market Committee directed the LTATF efforts and the LTATF also coordinated its efforts with representatives from the North American Energy Standards Board (NAESB). The LTATF Report builds upon NERC's "Version 0" reliability standards, which the Commission incorporated into its Policy Statement on Matters Related to Bulk Power System Reliability in February 2005.[16] The Version 0 reliability standards attempt to state reliability goals clearly and provide a means by which to measure the progress toward their attainment. The Commission's Supplement to the Policy Statement makes clear that the term Good Utility Practice as used in the open access transmission tariff (OATT) includes compliance with NERC's Version 0 reliability standards.[17]

14. The LTATF Report outlines existing ATC practices in the Eastern Interconnection and the WECC. It also proposes a method of exchanging AFC/ATC data between entities and summarizes the minimum requirements of

[16] *Supplement to Policy Statement on Matters Related to Bulk Power System Reliability*, 110 FERC 61,096 (2005) (*Supplement); see Policy Statement on Matters Related to Bulk Power System Reliability*, 107 FERC 61,052 *(Policy Statement), clarified,* 108 FERC 61,288 (2004).

[17] *Supplement* at P 23. Version 0 Standards MOD 001-0 through 009-0 are specifically relevant here.

modeling techniques to facilitate proper calculation and coordination of AFC/ATC.

15. The LTATF Report details three groups of issues: (1) communication and coordination of AFC/ATC; (2) calculation process for AFC/ATC; and (3) consistency between planning criteria and the attributes of AFC/ATC calculations (over both planning and operating horizons).

Communication and coordination of AFC/ATC—respecting third party constraints

16. The objective of AFC/ATC coordination is to ensure that neighboring entities exchange relevant information to facilitate: (a) a reasonable representation of external entities for modeling purposes; (b) the ability of each calculator[18] to adequately represent the values of flowgates on third party transmission systems; and (c) the ability of each calculator to translate data from neighboring entities and make meaningful use of the data in its calculations.

17. The LTATF documented the existing coordination processes for the major regions in the Eastern Interconnection and the WECC. The report proposes a method of exchanging AFC/ATC data between entities and provides the minimum requirements for flowgate exchange and modeling techniques needed to ensure proper calculation and coordination of transfer capability.

[18] The calculator prepares and updates ATC values for the transmission provider.

Calculation process for AFC/ATC

18. The LTATF agreed that transmission service providers need to provide better documentation and greater transparency for their AFC/ATC calculation processes. The LTATF Report contains a number of recommendations to achieve more consistency among AFC/ATC calculations.

19. The LTATF proposed a Standard Authorization Request (SAR) that contains recommendations to achieve more consistency among AFC/ATC calculations. The SAR would change the existing modeling standard(s) by adding a requirement for transmission providers to coordinate the calculation of ATC and incorporate specific reliability practices into the ATC calculation and coordination methodologies.[19]

20. The LTATF found that the way in which various regions calculate and use ATC, TTC, TRM and CBM varies widely.[20] As the LTATF Report explains, some transmission providers first calculate TTC, and then derive ATC. Others first calculate ATC, and then derive TTC. Some transmission providers first calculate AFC, and then derive ATC. Some only calculate TTC. Some transmission providers use CBM; some do not use CBM. The scope of CBM varies by footprint. Nearly all transmission providers use TRM.[21]

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[19] LTATF Report, Attachment A, SAR-1.

[20] LTATF Report at page 3.

[21] *Id.* at page 2. The LTATF reviewed ATC methodologies and found that the numerous ATC calculators in the Midwest have been replaced by the Midwest Independent Transmission System Operator and the PJM Interconnection, LLC.

21. The LTATF noted that consistency is important in the calculation of CBM and TRM and recommended revising applicable standards. The LTATF proposed a SAR to modify the current methodology for calculating CBM and TRM.[22]

22. The LTATF also used the LTATF Report and recommendations to develop a proposed NAESB business practice standard. The LTATF Report proposes that a single business practice standard be developed related to both: (a) the processing and evaluation of transmission service requests which use TTC/ATC/AFC and CBM/TRM; and (b) the processing and evaluation of requests to schedule against approved transmission service reservations.[23]

Consistency between planning criteria and the attributes of the AFC/ATC calculations (over both planning and operating horizons)

23. The LTATF emphasized that the assumptions used in the calculation of AFC/ATC and CBM/TRM should be consistent with those used in the planning and operating horizons. The LTATF noted that transmission service providers should document these calculations and make them transparent to all who use the transmission network.[24]

24. The LTATF suggested that transmission providers ensure consistency between their ATC calculations and their internal planning processes. For

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The LTATF found 50 to 60 ATC calculators nationwide, with most of those in the West (30 to 40). *Id.* at page 3.

[22] *Id.* at Attachment B, SAR-1.

[23] *Id.* at Attachment C, page 2.

[24] *Id.* at page 3.

example, the LTATF recommended that both the internal planning processes and the ATC calculations reflect the same counterflows and the same components of TRM. Discrepancies between the internal planning processes and ATC calculations can result in inaccurate calculations of transmission available to the market.[25]

Discussion

25. As noted above, problems in the way AFC and ATC are calculated can create and have created obstacles to ensuring that the provision of interstate transmission service is not unduly discriminatory or preferential. The Commission believes that standardizing the way AFC and ATC are calculated will help mitigate this potential, and enhance system performance.

26. The LTATF Report contains proposals that appear to go a long way toward refining and standardizing these calculations. By developing a business practice standard and revisions related to reliability standards, the LTATF Report would also take such calculations beyond NERC's Version 0 reliability standards.

27. NERC also has long encouraged regions to promote a common methodology for determining TRM and CBM.[26] Appendix C to the LTATF Report [27] recommends that the regions adopt written regional methodologies for

[25] *Id.* at, Appendix E, page 2.

[26] *See North American Electric Reliability Council, Transmission Capability Margins and Their Use in ATC Determination 3* (1999).

[27] Appendix C is entitled: Review of Current NERC Standards on CBM and TRM.

calculating CBM and TRM. The LTATF Report also sets forth areas in which CBM and TRM standards could be more specific. The Commission requests comments on these recommendations and whether they go far enough in promoting a common TRM and CBM methodology within each region. The Commission also invites comments on whether there should be common TRM and CBM methodologies among regions.

28. More specifically, the Commission seeks industry comment on: (a) the definitions of AFC, ATC, CBM and TRM used in this order; (b) the advisability of revising and standardizing AFC, ATC, TRM and CBM values; (c) the advisability of developing interconnection-wide standards for the Eastern Interconnection and the WECC; (d) the contents of the LTATF Report; and (e) the most expeditious way to obtain industry-wide standards for ATC calculations.

29. While the LTATF Report is a start, the Commission recognizes that more work is needed before there can be industry-standard AFC and ATC calculations. The Commission notes that the LTATF coordinated its efforts with NAESB and applauds NERC's efforts to work with NAESB in developing comprehensive business practice and reliability standards. The Commission urges that these efforts continue.

Comment Procedures

30. The Commission invites interested persons to submit comments on these matters and any related matters or alternative proposals that commenters may wish to discuss. Comments are due **[insert date 60 days after publication in the**

FEDERAL REGISTER]. Comments must refer to Docket No. RM05-17-000, and must include the commenter's name, the organization they represent, if applicable, and their address.

31. Comments may be filed electronically via the eFiling link on the Commission's web site at http://www.ferc.gov. The Commission accepts most standard word processing formats and commenters may attach additional files with supporting information in certain other file formats. Commenters filing electronically do not need to make a paper filing. Commenters that are not able to file comments electronically must send an original and 14 copies of their comments to: The Federal Energy Regulatory Commission, Office of the Secretary, 888 First Street N.E., Washington, DC, 20426.

32. All comments will be placed in the Commission's public files and may be viewed, printed, or downloaded remotely as described in the Document Availability section below. Commenters commenting on this proposal are not required to serve copies of their comments on other commenters.

Document Availability

33. In addition to publishing the full text of this document in the *Federal Register*, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through Commission's Home Page (http://www.ferc.gov) and in the Commission's Public Reference Room during normal business hours (8:30 a.m. to 5:00 p.m. Eastern time) at 888 First Street, N.E., Room 2A, Washington D.C. 20426.

34. From the Commission's Home Page on the Internet, this information is available in its eLibrary. The full text of this document is available in the eLibrary both in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number of this document, excluding the last three digits, in the docket number field.

35. User assistance is available for eLibrary and the Commission's website during normal business hours. For assistance contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll-free at (866)208-3676, or for TTY, contact (202) 502-8659. E-Mail the Public Reference Room at public.referenceroom@ferc.gov or (202) 502-8371.

By direction of the Commission.

Linda Mitry,
Deputy Secretary.