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Ms. Magalie Roman Salas
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Re: Docket No. RM05-17-000, Information Requirements For Available Transfer Capacity

Dear Madam Secretary:

Attached for electronic filing are Comments of Exelon Corporation.

Sincerely,

/s/ A. Karen Hill

A. Karen Hill
Vice President Federal Regulatory Affairs
Attorney for Exelon Corporation

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Information Requirements for)	
Available Transfer Capability)	RM05-17-000
)	

COMMENTS OF EXELON CORPORATION

Pursuant to the Commission's Notice of Inquiry issued in the above-captioned docket on May 27, 2005,¹ Exelon Corporation hereby submits its comments on the Commission's proposal to standardize the calculation of Available Transfer Capability (ATC), including its component values – Available Flowgate Capability (AFC), Transmission Reserve Margin (TRM), and Capacity Benefit Margin (CBM). NOI P 28. The Commission stated that it believes standardizing how AFC and ATC are calculated will help mitigate the potential for unduly discriminatory or preferential transmission service, and enhance system performance. P 25.

Exelon agrees and urges the Commission to focus on achieving a standard *calculation* methodology for these values, as well as their associated margins TRM and CBM, rather than allowing multiple calculation methodologies to be developed. Exelon actively participated in the NERC efforts to develop the report on long-term ATC and AFC calculations, and in general agrees with the recommendations there. Exelon will address here some recommendations that are not contained in that report.

¹ Information Requirements for Available Transfer Capability, Docket No. RM05-17, Notice of Inquiry (May 27, 2005).

Standardized Calculation Techniques

Exelon believes that it is essential to standardize the calculation methodology for AFC/ATC and the associated margins CBM and TRM. While the proposed NERC standard begins to achieve this goal, it does not propose a standardized *calculation* methodology and transmission providers therefore retain substantial discretion on how to implement the NERC proposed standard. Since AFC/ATC calculations are based upon transmission owners' planning and operating criteria it is appropriate that NERC work with the industry to develop a standardized calculation methodology for incorporation into the NERC standards to thereby become mandatory.

The definition of "standard calculation methodology" itself should be standardized to mean that the same appropriate calculation techniques are used by all ATC/AFC, CBM and TRM calculators, for the various types of limitations. There are thermal, voltage and stability limits to AFC/ATC. But regardless of the type of limit, the calculation techniques used to determine them should be standardized. Contingencies and margins used in various calculations will differ because the transmission system is designed to various planning and operating criteria across the interconnection. But the methodology used to do the calculations can and should be identical, regardless of the contingencies and margins that go into the calculations.

The thermal limitation can illustrate the distinction Exelon is drawing between standardizing the calculation methodology yet still respecting the different reliability criteria that may exist among the transmission owners. . All

transmission owners plan for single contingencies but some also plan for double contingencies. The same calculation technique can be used -- for some calculations only single contingencies will be studied while for others double contingencies will also apply.

Standardizing the methodology is crucial because there are several valid calculation techniques that a transmission provider may use to account for certain factors that are inputs to the AFC/ATC calculation. Engineers often differ vehemently as to which method is better. But this debate has been going on for nearly a decade and at this point NERC should step in and establish a single method to account for these inputs across the interconnect. Exelon urges the Commission to establish a date certain no more than one year out -- or two at the most -- by which all transmission providers in an interconnection must calculate AFC/ATC using the standardized methodology.²

Data That Requires Standardization

In addition to standardizing the calculation methodology, Exelon agrees that certain data inputs to the calculation also should be standardized. In this section, Exelon discusses examples of AFC/ATC inputs that should be standardized. This list is not meant to be all-inclusive but merely to provide some detailed examples.

² Exelon wishes to point out that there is no need to use the same program to calculate AFC/ATC. Who the vendor is should not matter, so long as the calculation technique and inputs are standardized.

Coordinating Basic Input Data for Model Building

The basic data that is used by the AFC/ATC calculators for any particular time frame must be identical. If the starting point is not the same, the results will be uncoordinated. Inputs that must be coordinated across all transmission providers in an interconnection are (1) load levels; (2) transmission outages; (3) generation outages; and (4) generation dispatch.³ The coordination of these inputs is the first step in standardizing the model used by all transmission providers in their ATC/AFC calculations for a particular study period.

Consistently Accounting for Transmission Reservations

How transmission reservations are accounted for in an AFC/ATC calculation can also have an impact on the model building process. Transmission Providers use different techniques to account for the impact on the transmission system of existing reservations. Two such techniques are prevalent. In the first technique transmission providers model all appropriate reservations⁴ in the power flow base case model. In the other commonly used technique, transmission providers model only those reservations that the calculator believes actually will be scheduled. The remaining reservations that are not modeled in the base case are accounted for by decrementing flowgate AFC. These calculation techniques may appear to yield the same result, but they do not because they use different source and sink points to determine the impact

³ There are various techniques used by transmission providers to model generation dispatch. One is to use an economic dispatch within the control area. Another is to either scale up all on-line generation in a study model or to scale down load. But if different providers assume different dispatch scenarios, they will arrive at different AFC/ATC results and either undersell or oversell AFC and ATC.

⁴ "Appropriate reservations" takes into account the time frame (e.g., yearly, monthly) and ATC product (e.g., firm, non-firm) being calculated.

of the reservation on the transmission system. The two techniques also yield different base case power flow models because of the inconsistency in the number of reservations modeled and the generation modeled to serve those reservations. While there are pluses and minuses to each of these calculation techniques, the two techniques can result in different AFC and ATC values for the same flowgate or path for a particular timeframe, even with the same data inputs (reservations and generator dispatch order).

Another variance in deriving the impact of reservations on AFC/ATC calculations is how the source (injection) and sink (withdrawal) points are specified. Which generators are assumed to increase or decrease to model particular reservations will affect the impact those reservations will have on the limiting element's AFC or any associated path ATC. The source/sink point selection will influence the transfer direction distribution factor on limiting elements that are being calculated and thus will affect the AFC /ATC. Therefore, whether the expected sales are modeled from specified generators or from a group of generators that are economically dispatched also is a factor that can create inconsistent results in the AFC/ATC calculation. Thus, all transmission providers should use the same technique to select source and sink points to determine the impact of existing reservations or results will continue to vary.

A third example of reservation inputs that must be standardized is *which* reservations to model. A customer may have two reservations from a specific 400 MW generator – one 400 MW reservation going to the east and a second going to the west. Obviously the customer cannot schedule both reservations at

once for a total exceeding 400 MW, sourced from the same 400 MW generator. But the customer is entitled to use either or a combination of the two for a total of 400 MW from the one generator. Should both reservations be modeled, possibly resulting in some longer-term transmission service going unsold? Or should the transmission provider model the reservations based on which one has the greater impact on the transmission system? In this case, transmission may be oversold. There may be no correct answer but it is important for consistency between AFC/ATC calculators, to use the same calculation technique when handling these types of reservations.⁵

Standardizing Processes Critical To AFC/ATC Calculations

Frequency of Calculations

To facilitate reasonably accurate AFC/ATC calculation and promote coordination of results and data, calculators need to be on the same calculation frequency schedule.

Calculation of AFC vs. ATC

For good reasons, some transmission providers calculate AFC, others calculate ATC. While such calculations may suit the circumstances of each provider, this makes coordination between transmission providers difficult, although not impossible. But using a single method of calculation would enable transmission providers to fully respect third-party constraints.⁶ The use of

⁵ Exelon believes that both reservations should be modeled for the time frames for which the customer has the right to use the reservations; otherwise the system could be oversold because a possible reservation is not accounted for. Once the customer has to commit to one or the other reservation, the modeling should change to reflect the actual expected flow.

⁶ See NOI at P 16: The objective of AFC/ATC coordination is to facilitate "(b) the ability of each calculator to adequately represent the value of flowgates on third-party transmission systems."

flowgates and an associated AFC value allows calculators to easily exchange and implement information on the availability of flowgate transmission capacity, once all existing uses and margins have been accounted for. The calculation entity responsible for a particular flowgate can provide the AFC to other calculators so that all calculators can observe the same limitation.

Recognition of Third-Party Flowgates

The Commission should require that all transmission providers recognize all third-party flowgates that are requested to be monitored. Transmission providers should not use local procedures (most often not filed with the Commission) to decide whether or not to recognize the flowgates of another transmission provider. Such discretion has no justification and can endanger reliability or result in preferential treatment. If a transmission provider believes that a flowgate of another transmission provider is not appropriate, it should initiate a dispute resolution procedure in its region or through NERC. In the meantime, however, the flowgate must be recognized until a final decision is made.

Exelon's preferred method to avoid such disputes is for NERC to establish clear rules for the establishment of valid flowgates. Specific items that need to be considered are (a) number of contingent elements; (b) number of monitored elements; (c) consistency of contingency and margins with transmission owner's planning and operating criteria; and (d) distribution factor or MW cutoff.⁷

⁷ There should be one standard for distribution factor cutoffs – i.e., there should be no minimum reservation that is exempted from the distribution factor. Otherwise transmission customers can break up reservations to ensure that they fall under the MW threshold to avoid being affected by the distribution factor.

Establishing these rules will result in consistent development of flowgates across the interconnection resulting in calculators being willing to monitor third-party flowgates without debating the flowgate's validity. Exelon realizes that there may be legitimate exceptions to the general policy on distribution factor cutoff. But NERC has shown that it can deal with specific situations that require deviation from the standard policy.⁸

Consistency with Planning Criteria

In the NOI, the Commission recognized that discrepancies between a transmission provider's planning process and its AFC/ATC calculations can "result in inaccurate calculations of transmission available to the market." P 24. Exelon agrees. By adopting rules that ensure consistency, the Commission and customers can ensure that transmission providers (1) use realistic values of such inputs as CBM, TRM, positive impacts and counterflow for transactions;⁹ (2) define flowgates appropriately and (3) use consistent inputs.

A recent review of a number of OASIS sites revealed approximately 150 flowgates with zero or negative AFC posted for long-term firm service. Notwithstanding these postings that indicate certain facilities are overloaded, transmission owners' planning studies indicate no such overload and therefore no reinforcement is planned to relieve the constraints. Such discrepancies imply that some transmission owners may not be planning for the same contingencies and scenarios that are implemented in an AFC/ATC calculation. If an assumption

⁸ NERC Transmission Line Loading Relief Procedure, ER00-1666 (filed April 3, 2004), reporting to the Commission NERC's intent to test a revision to its TLR Procedure on four Alliant West flowgates to determine whether a change in TLR procedures was appropriate.

⁹ For example, consistent with the standardized rules for modeling counterflow transactions, are such transactions modeled identically in both the planning and AFC/ATC processes?

is used for expanding a transmission provider's transmission, the same assumption should be used for AFC/ATC calculations, or there will be undue discrimination in providing transmission service. Assumptions in AFC/ATC calculations that go beyond what is used for expanding a transmission provider's transmission, must be eliminated from the AFC/ATC calculations. If CBM and TRM are used in AFC/ATC calculations and result in denial of transmission service requests, then a transmission provider should use the same assumptions in its planning process to determine when to reinforce its system. By the same token, Exelon opposes eliminating CBM from the calculation of AFC/ATC for those transmission owners that plan and reinforce their transmission systems for it.

Benchmarking Requirement

Testing and benchmarking are required to ensure a reliable transition from existing calculations and to ensure consistency among transmission providers. Prior to PJM performing the AFC/ATC calculation function for ComEd and AEP, PJM designed and implemented a formal benchmarking and test program to ensure the validity of its calculations. Using benchmarking and testing will provide confidence to all market participants that the calculations are both accurate and consistent.

Conclusion

Exelon fully supports the Commission's initiative to adopt standardized methods for calculating AFC and ATC, including the component inputs of TRM and CBM. Exelon urges the Commission to require NERC to decide by a date

certain on a single methodology for calculating AFC/ATC. Exelon also submits that the Commission should ensure that the inputs to that calculation discussed herein are standardized.

Respectfully submitted,

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