Short-Term Available Transfer Capability (ST ATC) Metrics

September 23, 2020
Agenda

1. Problem Statement
2. Proposed Approach for ST ATC Metrics
3. Questions on Total Transfer Capability (TTC)
4. Questions on Base Existing Transmission Commitments (ETC)
5. Questions on ST ETC Adjustments
6. Questions on ST ATC Values
7. Wrap up
Problem Statement

1. BPA does not have formal metrics around the ST ATC calculations across its flow-based ATC Paths

2. Staff has been collecting and analyzing data as needed to inform decisions on ST ATC (i.e. Pending ETC analysis)

3. A more structured approach to ST ATC data collection and analysis is needed
Proposed Approach for ST ATC Metrics

1. BPA would like to address this gap in the following manner:
   a. Identify specific questions on ST ATC of interest to BPA and customers
   b. Identify the data needed to answer the questions
   c. Identify the data sources and begin collecting the data
   d. Analyze the data, present findings to customers and make adjustments to ST ATC assumptions if needed

2. The ST ATC team has focused on the first step of this process to date, and is presenting the initial ST ATC questions that have been identified
   a. The questions focus on individual components of the ST ATC formula as well as overall ST ATC values
Proposed Approach for ST ATC Metrics (cont.)

3. The team is looking for feedback on this approach and the questions presented

4. BPA intends to work with customers on its effort to increase the use of data to make ST ATC methodology improvements
Questions on TTC

1. The ST ATC team proposes collecting and analyzing TTC data across BPA’s flow-based paths to determine whether the commercial TTC that BPA is selecting is appropriate
   a. Is BPA choosing the appropriate commercial TTC when a range of TTCs is possible from a nomogram for a path?
   b. Should BPA be setting TTC based on an all lines in service seasonal limit assumption for beyond 2 - 3 weeks out on the flow-based paths?
      i. BPA has started to include outages in the TTCs across a few key paths (North of Echo Lake and South of Custer) beyond the 2 - 3 weeks time frame in a pilot program
      ii. The ST ATC team proposes evaluating whether this is sufficient or if this should be expanded to more paths
Questions on Base ETC

1. The ST ATC team proposes collecting and analyzing base ETC data from the power flow studies to ensure consistency of studies across months, to inform which scenarios are valuable in setting base ETC, and to enable BPA to more easily quantify the impacts of proposed changes to ST ATC assumptions

   a. How do the base ETCs compare with last year's? By month? By flow-based path? By scenario?

   b. How frequently do we use the numbers from given scenarios?

       i. Do any ETC scenarios always provide a max/min for an individual path?

       ii. Do any ETC scenarios never provide a max/min for an individual path?
Questions on ST ETC Adjustments

1. The ST ATC team proposes collecting and analyzing data related to ST ETC adjustments to determine whether the adjustments are still appropriate or whether modifications are warranted
   a. What is the full list of ETC adjustments and what are the values associated with each individual adjustment per month?
   b. Are the adjustments accurate based on a data analysis of what the adjustment is meant to represent?
Questions on ST ATC Values

1. The ST ATC team proposes collecting and analyzing data related to overall ST ATC values to spot obvious errors in firm and non-firm ST ATC for each flow-based path

2. The team proposes to do this by comparing the following two calculations:

   a. ST ATC as calculated by using the posted commercial TTC minus the predicted flows across each path from iCRS

   b. ST ATC as calculated by BPA’s OATI system

   b. The ST ATC team has already used this comparison to find several issues within the ST ATC calculation over the last year
Wrap up

1. BPA is seeking input on the metrics approach proposed today plus any other questions that customers have regarding ST ATC that BPA should add to our list

2. Please submit comments on the information discussed today by COB on October 7th, 2020
   a. BPA will review comments and reply by October 21st, 2020

3. Please send Questions/Comments to techforum@bpa.gov, with a copy to your Account Executive