Transmission Planning Advisory Subcommittee
Meeting Minutes
December 1, 2021
Conference Call
10:00 a.m. – 11:30 a.m.

1. Administrative Matters

Mr. Scott Leuthauser (HQUS, TPAS Chair) called the meeting to order at 10:00 a.m.

2. Chairman's report

Mr. Leuthauser said that he did not receive correspondence from the Operating Committee (OC).

3. Dynamic Line Ratings

Mr. Aaron Markham (NYISO) provided an explanation of how the NYISO utilizes dynamic line ratings. He explained that FERC issued a NOPR a year ago about dynamic line ratings and the NYISO filed comments on that docket on March 21, 2021. He further explained that the NYISO has seasonal ratings and the NYISO uses those ratings for all forward-looking analysis, whether they are planning studies, TCC markets, day ahead market, real time market, etc. To the extent the ambient conditions are different from the seasonal ratings, the NYISO has the ability to accept and use dynamic line ratings from the Transmission Owners via ICCP for real time use. The NYISO also has a subset of TOs that have dynamic line ratings for underground cables and utilize them in real time as well. As far as implementing dynamic line ratings with sensors out in the field providing data to the TOs and the NYISO via ICCP data, work would need to be completed to implement them.

In response to a comment, Mr. Markham agreed that the NYISO deals with dynamic ratings on a limited and infrequent basis. Mr. Markham added that the dynamic line ratings generally increase and not decrease. Mr. Younger said it could become more prevalent and expressed a concern that if the ratings are based on a 90-degree day and there is a 60-degree day, there could be a mismatch with the day ahead market and the real time market. Mr. Markham said that such changes would require discussions with stakeholders to spec out a project for dynamic line ratings in the day ahead market (cost allocation, reliability concerns with inaccurate forecasts, etc.) Mr. Younger agreed that those considerations would be important.

In response to a question, Mr. Markham explained that there is a percentage range within which the dynamic rating can increase/decrease. For example, if a 345 kV circuit is limited based on conductor, it could have a 5-10% increase if ambient conditions change. However, that would be an extreme case. Typically, it is in the 2-3% percent range.

4. Study Scopes Under Consideration for Recommendation for OC Approval

<u>Q#1130 Hoffman Falls Wind SRIS Scope</u>

The developer provided a brief description of the project. Ms. Supriya Tawde (NYISO) reviewed the study scope included with the meeting material.

TPAS recommended OC approval.

Q#1139 Seventy-Seven Solar SRIS Scope
The developer provided a brief description of the project. In response to a question, the developer said there are 27 inverters in the project. In response to a question, the developer said the Synchronization date should be June 2024 and not 2025. Mr. Thinh Nguyen (NYISO) said the NYISO would update the document for the OC. Ms. Tawde reviewed the study scope included with the meeting material.

TPAS recommended OC approval.

Q#1140 Taproot Solar SRIS Scope
The developer provided a brief description of the project. Ms. Tawde reviewed the study scope included with the meeting material.

In response to a question from Mr. Mark Reeder (ACE-NY), Mr. Nguyen said that when the NYISO uses the Class Year 2021 base case in its studies, it means it is using the ATBA base case.

TPAS recommended OC approval.

Q#1185 El Empire ESS I SRIS Scope
The developer provided a brief description of the project. In response to a question, Mr. Nguyen said the NYISO could leverage some of the study results from Q#958/Q#959 for this study.

Ms. Tawde reviewed the study scope included with the meeting material. She noted that the in-service date, synchronization date, and commercial operation dates would be revised for the OC.

TPAS recommended OC approval.

Q#1188 North Seneca Solar SRIS Scope
The developer provided a brief description of the project. The developer noted that the in-service date, synchronization date, and commercial operation dates would be revised for the OC.

Ms. Tawde reviewed the study scope included with the meeting material.

TPAS recommended OC approval.

Q#1199 El Steinway 1.1 SRIS Scope
The developer provided a brief description of the project. In response to a question, the developer said the maximum capability will be 1,600 MW. Mr. Wentlent asked how would this impact operating reserve requirements. Mr. Nguyen said the market design team was examining those impacts, but it was not part of the study scope. Mr. Leuthauser said the current reserve requirement was 1,310 MW and the NYISO was

discussing the topic with stakeholders at the ICAP Working Group in the context of dynamic reserves.

The developer noted that the projects are not directly connected to each other at Astoria. They have separate interconnections. Mr. Nguyen agreed and said Astoria East and West substations are electrically isolated even though they are located close to each other.

Ms. Tawde reviewed the study scope included with the meeting material.

TPAS recommended OC approval.

Q#1200 El Steinway 2.1 SRIS Scope
The developer provided a brief description of the project. Ms. Tawde reviewed the study scope included with the meeting material.

TPAS recommended OC approval.

Q#1209 Battoria SRIS Scope
The developer provided a brief description of the project. Ms. Tawde reviewed the study scope included with the meeting material.

TPAS recommended OC approval.

5. Study Reports under Consideration for Recommendation for OC Approval
None

6. Status of NYISO Studies/Activities
Status of Class Year 2021
Ms. Wenjin Yan (NYISO) reviewed the document included with the meeting material.

Ms. Yan said the reason for the Part 1 study delay is primarily due to three reasons: (1) developers provided inaccurate modeling information to the NYISO and Transmission Owners, which resulted in many rounds of modeling review; (2) physical feasibility issues; and (3) projects that are electrically located near one another, requiring the scope of both Part 1 and Part 2 studies to be expanded to identify the interaction of these projects (and in some cases, the Part 1 studies need to be performed in sequential order to identify each project's contribution).

Mr. Reeder asked if developers were providing the data as requested by the NYISO and then the NYISO found inconsistencies. Ms. Yan said the data provided to the TO, and then to the NYISO led to inconsistent results that did not match, which resulted in returning to the developer for the accurate data. This caused a lot of back and forth which takes time amongst the parties to collect and verify the data. Mr. Nguyen said these instances happened more during this Class Year than in previous Class Years. It has happened before but not to the extent as in Class Year 2021.

Ms. Hogan asked if evaluating alternate physical options happened in the past. Ms. Yan said she was not sure. Mr. Wentlent asked if it is creating a new norm for the interconnection process and becoming more prevalent. Ms. Yan said the NYISO evaluates the projects as earliest as possible, during SRIS study scope phase. However, it's not the NYISO leading that effort. Mr. Liam Baker (Eastern Generation) agreed and said it wasn't the NYISO's problem to address the situation – it was the developer's problem.

In response to a question, Ms. Yan said a project could have been physically feasible when its SRIS report was completed years ago, but as it entered Class Year 2021, the system configuration changed, and it is no longer physically feasible. Mr. Baker asked how a project could enter Class Year 2021 if it wasn't physically feasible. Mr. Nguyen said projects at the SRIS stage are studied individually at a particular location and not collectively and the projects that entered Class Year 2021 are at the same or nearby points of interconnection.

In response to a question, Mr. Nguyen said the OC does not approve the interconnection of a project. Ms. Sara Keegan (NYISO) noted that the OC approves the study scope/assumptions and the report. If there is a feasibility issue, that would be identified in the report. In addition, the NYISO provides the option for a feasibility study; developers that forgo the feasibility study are at a risk in case there are feasibility issues that are not identified until later in the interconnection study process.

Mr. Younger asked if these instances occurred because the SRIS didn't look at feasibility or did the situation happen because the system changed after the project had its SRIS completed. Ms. Yan said it was the latter - system configuration changes between when the SRIS was completed and upon the project entering the Class Year.

Mr. Reeder asked if the NYISO could speed up the notification process for additional SDU study process for the projects triggering an SDU in the Thousand Island area. Ms. Yan said the NYISO doesn't bring preliminary results to stakeholders for approval; however, the NYISO was coordinating high level estimates from the TOs and sharing information with the impacted project developers.

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Ms. Yan reviewed the document included with the meeting material.

7. Review of Material Modification Determinations and Modification Requiring a New Interconnection Request/SIS Request

Q#580 STAMP Project

Mr. Nguyen reviewed the document included in the meeting material.

8. Status of Feasibility Studies in Progress

No updates.

9. New Business

None

The meeting adjourned at 11:30 a.m. The next meeting is on January 4, 2022.