

Regional Review Methodology

Introduction

In 2011 FERC issued Order No. 1000 (the Order). The Order included requirements for regional planning, regional cost allocation, removal of a federal right of first refusal, interregional coordination, and interregional cost allocation. Specifically regarding interregional coordination, the Order requires SPP to develop procedures for the joint evaluation of interregional projects that may be more efficient or cost-effective than regional projects. For the purposes of this methodology paper, an interregional project can be either a project that interconnects two planning regions or a project that is completely within one region but provides benefits to both regions. Additionally the order requires that an interregional cost allocation methodology be developed and agreed to between neighboring regions. More information regarding interregional coordination and interregional cost allocation can be found in Attachment O of the SPP Tariff.

The Order is clear that a region cannot force another region to approve for or pay for a project. The project must be approved by each planning region. The methodology described in this paper is meant to describe how SPP will regionally review, analyze, and approve an interregional transmission project.

Overview of the Interregional Compliance with Order 1000

The Order requires SPP to coordinate with the public utility providers in neighboring transmission planning regions. SPP has three Order 1000 neighboring planning regions: 1. Midcontinent Independent System Operator (MISO), 2. Mid-Continent Area Power Pool (MAPP), and 3. Southeastern Regional Transmission Planning region (SERTP).

MISO

The MISO region includes the MISO RTO members, including the transmission owners who are in the process of joining MISO such as Entergy and Cleco. More information regarding the MISO region is available on the MISO website.¹ SPP is interconnected with the following MISO members (or future members): Entergy, Cleco, Ameren Missouri, and MidAmerican Energy Company.

SPP and MISO filed interregional coordination and cost allocation procedures with FERC on July 10, 2013.² While SPP and MISO were not in complete agreement on what kind of projects can qualify as an interregional project or on the allocation of costs for an interregional project, there was agreement on interregional coordination and the evaluation of an interregional project.

Interregional coordination between SPP and MISO and the evaluation of interregional projects is defined in the draft SPP-MISO JOA contained in the SPP and MISO's filings.

¹ www.misoenergy.org

² SPP FERC filing docket numbers ER13-1939 & ER13-1937. MISO FERC filing docket numbers ER13-1945 & ER13-1938

MAPP

The MAPP region includes the transmission owners who are members of the MAPP Planning Authority. More information regarding the MAPP region can be found on MAPP's website.³ SPP is interconnected to MAPP through the Integrated System (IS)⁴ which is comprised of WAPA Upper Great Plains Region⁵, Basin Electric Power Cooperative⁶, and Heartland Consumers Power District⁷.

SPP and MAPP each filed for an extension of the compliance deadline for the interregional requirements of the Order. On July 8, 2013 FERC granted the request for an extension of time.⁸ However, SPP and MAPP have generally agreed to a coordination and evaluation of interregional projects process. This process is similar to what was agreed to between SPP and MISO. Since SPP and MAPP were granted an extension language governing this process has not yet been filed with FERC.

SERTP

The SERTP region includes the transmission owning sponsors of SERTP. More information on the SERTP region, including a full list of the sponsoring transmission owning sponsors can be found on the SERTP website.⁹ SPP is interconnected to the SERTP region through Associated Electric Cooperative, Inc. (AECI)¹⁰.

SPP and SERTP filed interregional coordination and cost allocation procedures on July 10, 2013.¹¹ SPP and SERTP are not in complete agreement on what projects can be considered as an interregional project.

Interregional Project Description

An approved interregional project is defined as a project that is evaluated through an Order 1000 compliant interregional process and is approved by both regions. SPP's agreement with each neighbor identifies the types of projects that can qualify as an interregional project.

With MISO, SPP has agreed that an interregional project can be both a project that interconnects the two planning regions, and also a project that is completely within one region but provides benefits to both regions. SPP and MISO disagree on additional criteria. MISO also requires that a transmission project be at a voltage greater than 300 kV. SPP does not have a voltage requirement. Additionally, MISO is limiting interregional transmission projects to those that address economic issues. SPP does not limit interregional transmission projects based on the types of transmission issues that are being addressed. These items are currently being reviewed by FERC in the compliance filings.

³ www.mappcor.org

⁴ http://www.basinelectric.com/Electricity/Transmission/Integrated_System/index.html

⁵ <http://www.wapa.gov/ugp/>

⁶ <http://www.basinelectric.com/>

⁷ <http://www.hcpd.com>

⁸ FERC docket number RM10-23-000

⁹ <http://www.southeasternrtp.com/>

¹⁰ <http://www.aeci.org/>

¹¹ SPP filing FERC docket number ER13-1939. SERTP filing FERC docket numbers ER13-1928, ER13-1930, ER13-1940, ER13-1941.

With MAPP, SPP and MAPP agree on what projects can be considered as an interregional project. Both projects that interconnect SPP and MAPP, and projects completely in one planning region but provide benefits to both regions, can qualify as an interregional project. Neither MAPP nor SPP have voltage criterion.

With SERTP only projects that interconnect the SPP and SERTP regions can qualify as an interregional project. Additionally, SERTP requires additional criteria with which SPP does not agree.¹²

Regional Review Objectives

The interregional transmission process developed with all of SPP's neighbors each contain a distinct interregional and regional evaluation phase. Each process also requires that both SPP and the applicable neighboring region approve the interregional transmission project in their regional process. This methodology paper reviews how SPP will evaluate and approve an interregional transmission project. The primary objectives of the regional review are as follows:

- Evaluate an interregional project using SPP developed assumptions and analyses
- SPP stakeholder review through the applicable stakeholder groups
- Provide for an approval process

Scope Development

A unique study scope will be developed for each evaluation of an interregional project or group of projects. The scope must include at a minimum the following sections:

- Assumptions: planning horizon, dispatch scenarios, load forecasts, capacity forecasts, modeling footprint, etc.
- Models
- Analyses
- Stakeholder process

The study scope will be approved by the Transmission Working Group (TWG) for the evaluation of interregional projects that address reliability issues. The study scope will be approved by the Economic Studies Working Group (ESWG) for interregional projects addressing economic issues. If an interregional project addresses public policy issues or addresses multiple issues, the scope shall be approved by both the TWG and the ESWG.

Determining Transmission Project Objective(s)

The interregional process starts with the identification of issues. Potential interregional transmission solutions are evaluated to determine whether the solution addresses the issue and provides benefit to SPP and the neighboring region. The nature of the initial issue being addressed by the interregional

¹² The SERTP limits an interregional project to those being over 100 miles and greater than 300 kV.

project will be used to identify if the interregional project is addressing reliability, economic, or public policy issue.

Projects Addressing Reliability Issues

Criteria

A project addressing a reliability issue will be evaluated using the criteria identified in the most recent ITPNT study scope. The criteria will be used to determine if the interregional project addresses the reliability issue and provides reliability benefit to SPP.

Analyses

The study scope will determine what types of analyses will be performed. These analyses will be based on the issue that is being addressed by the interregional transmission project. At a minimum a steady state N-1 analysis will be performed. If needed, the scope will also include directives to perform stability and/or dynamic analyses. Additional analyses can be performed if needed and directed by the TWG.

Study Assumptions

The model(s) and assumptions used for the evaluation of the interregional transmission project will be based off of either the current or most recent ITPNT or the current or most recent ITP10 as determined by the TWG taking into consideration the expected need date. If the expected need date is within six years the ITPNT should be used. If the expected need date is greater than six years the ITP10 should be used. The following assumptions will be based on the applicable ITP process: planning horizon, dispatch, load forecast, generation capacity, and modeling footprint.

Model Development

The latest ITPNT model will be the basis for the model used to evaluate the issue and the interregional transmission project, unless the dispatch scenario is based off of the most recent ITP10. Updates necessary to reasonably evaluate the interregional transmission project will be made on top of the ITPNT model. If the dispatch scenario is based off of the most recent ITP10 model, then the ITP10 model will be the basis. The transmission topology will be updated to include any additional projects which have been issued an NTC but are not yet reflected in the model.

Stability and dynamic models will be developed only if they are required to evaluate the interregional transmission project and determine whether it addresses the reliability issue being mitigated. If a stability and/or dynamic model is needed, the most recent model developed in either the ITPNT or ITP10 will be used as determined by the TWG.

Stakeholder Process

The TWG and the Seams Steering Committee (SSC) will be the primary stakeholder groups that will direct the regional review of interregional transmission projects which address a reliability issues. Both of these groups will receive updates at their normal stakeholder meetings. Additionally the TWG is responsible for approving the study scope. Both the TWG and SSC will be asked to make a

recommendation to the Markets and Operations Policy Committee (MOPC) on approval of the interregional transmission project.

The MOPC will be provided an update on the regional review as it is in progress. At the conclusion of the regional review analysis, the MOPC, giving consideration to the recommendation of the TWG and SSC, will determine whether or not to recommend approval of the interregional project(s) to the SPP Board of Directors (Board).

The Board also will be provided an update on the regional review as it is in progress. At the conclusion of the region review analysis the Board will determine whether or not to approve the interregional project(s).

Projects Addressing Economic Issues

Criteria

An interregional transmission project that addresses an economic issue will be evaluated on a benefit to cost basis with a benefit to cost ratio (B/C) requirement of 1.0. The benefits used for the benefits portion of the B/C will be based on the metrics used in the current or most recent ITP10. It is not necessary that all of the metrics used in the ITP10 be used in the evaluation of the interregional transmission projects; a subset may be used as determined by the ESWG. At a minimum Adjusted Production Cost (APC) savings will be used. The costs used for the B/C will only be the costs that will be assigned to the SPP region. The interregional process will determine how much of the cost is assigned to SPP and how much is assigned to the neighboring region.

Description of Analyses

The analyses that will be performed will be based on the benefit metrics that will be used as determined by the ESWG. At a minimum a security constrained unit commitment /security constrained economic dispatch analysis will be utilized for the calculation of APC. Additional analyses will be included in the scope based on the ESWG's decision on what metrics to utilize.

Assumptions Development

The latest or current ITP10 model(s) and assumptions from the business as usual future will be used unless the ESWG determines that adjustments are needed due to a significant change in expected conditions. These assumptions will include load forecast, generation plan (capacity forecast, retirements, public policy requirements, etc.), fuel prices, emission rates and prices, modeling footprints, constraints, and transmission topology. The transmission topology will be updated to include any additional projects which have been issued an NTC but are not yet reflected in the model.

The planning horizon for an interregional transmission project will not exceed 10 years. It is a Tariff requirement that an interregional transmission project have an in-service date within 10 years.

Stakeholder Process

The ESWG and the SSC will be the primary stakeholder groups that will direct the regional review of interregional transmission projects addressing economic issues. Both of these groups will receive updates at their normal stakeholder meetings. Additionally the ESWG is responsible for approving the study scope. Both the ESWG and SSC will be asked to make a recommendation to the Markets and Operations Policy Committee (MOPC) on approval of the interregional transmission project.

The MOPC will be provided an update on the regional review as it is in progress. At the conclusion of the regional review analysis, the MOPC, giving consideration to the recommendation of the ESWG and SSC, will determine whether or not to recommend approval of the interregional project(s) to the SPP Board of Directors (Board).

The Board also will be provided an update on the regional review as it is in progress. At the conclusion of the region review analysis the Board will determine whether or not to approve the interregional project(s).

Projects Addressing Public Policy Issues

Criteria

An interregional transmission project that addresses a public policy issue will be evaluated to determine whether the project is a cost effective solution to meeting the applicable public policy requirement(s). The specific criteria used to evaluate a public policy project will be based on criteria in the latest ITP10.

Description of Analyses

Public policy projects will be evaluated to determine whether or not the transmission project will aid in meeting the applicable public policy requirement, and if so, is it more cost effective than regional solutions. The analysis will use a security constrained economic dispatch and unit commitment model to perform a curtailment and dispatch study. Additional analyses performed in the latest ITP10 may also be utilized as determined by the ESWG and TWG.

Assumptions Development

As with the evaluation of economic projects, the latest or current ITP10 model(s) and assumptions from the business as usual future will be used unless the ESWG or TWG determines that adjustments are needed due to a significant change in expected conditions or as needed to model the public policy requirement(s). These assumptions will include load forecast, generation plan (capacity forecast, retirements, public policy requirements, etc.), fuel prices, emission rates and prices, modeling footprints, constraints, and transmission topology. The transmission topology will be updated to include any additional projects which have been issued an NTC but are not yet reflected in the model.

The planning horizon for an interregional transmission project will not exceed 10 years. It is a Tariff requirement that an interregional transmission project have an in-service date within 10 years.

Stakeholder Process

The ESWG, TWG, and the SSC will be the primary stakeholder groups that will direct the regional review of interregional transmission projects addressing public policy issues. These groups will receive updates at their normal stakeholder meetings. Additionally the ESWG and TWG are both responsible for approving the study scope. The ESWG, TWG, and SSC will be asked to make a recommendation to the Markets and Operations Policy Committee (MOPC) on approval of the interregional transmission project.

The MOPC will be provided an update on the regional review as it is in progress. At the conclusion of the regional review analysis, the MOPC, giving consideration to the recommendations of the ESWG, TWG, and SSC, will determine whether or not to recommend approval of the interregional project(s) to the SPP Board of Directors (Board).

The Board will also be provided an update on the regional review as it is in progress. At the conclusion of the region review analysis the Board will determine whether or not to approve the interregional project(s).

Projects Addressing Multiple Issues

Many proposed transmission projects are expected to provide multiple types of benefits. Studies will be performed based on the types of expected benefits. If a project is expected to provide both economic and reliability benefits, the study scope would include the necessary evaluations as described in each respective section of this methodology document. For projects addressing multiple issues (economic, reliability, and/or public policy) both the ESWG and TWG, in addition to the SSC will guide the study.

Timing

For an interregional project to be an approved interregional project both regions (SPP and the applicable neighboring region) must approve the project within six months of the completion of the interregional evaluation. The Joint Planning Committee (JPC) can provide an extension to allow for additional time. This extension may be utilized to allow for SPP's quarterly Board of Directors cycle.

Deliverable

The regional review will conclude with a report being developed which reviews the study assumptions, analyses, results, and benefit calculations. The report will include a recommendation on whether or not the SPP Board should approve the interregional project(s).