Jennifer L. Key 202 429 6746 jkey@steptoe.com Steptoe & JOHNSON LLP

1330 Connecticut Avenue, NW Washington, DC 20036-1795 202 429 3000 main www.steptoe.com

October 21, 2015

<u>Via eTariff</u> Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

Re: Duke Energy Progress, LLC, Duke Energy Carolinas, LLC Docket No. ER13-1928-00_

Dear Secretary Bose:

Pursuant to Section 206 of the Federal Power Act¹ ("FPA"), the Federal Energy Regulatory Commission's ("Commission" or "FERC") order issued in PJM Interconnection, L.L.C., et al., 152 FERC ¶ 61,222 (2015) (the "2nd PJM-SERTP Order" or "Order"), Duke Energy Progress, LLC ("DEP") and Duke Energy Carolinas, LLC ("DEC") (collectively, "Duke") hereby provide their compliance filing to the 2nd PJM-SERTP Order.

I. INTRODUCTION

A. Background

Duke, LG&E/KU, OVEC, and Southern Companies (collectively, the "Jurisdictional SERTP Sponsors") are all public utility transmission providers that sponsor the Southeastern Regional Transmission Planning process ("SERTP"). In addition to the Jurisdictional SERTP Sponsors, the SERTP also is supported by the following nonjurisdictional transmission owners and service providers: Associated Electric Cooperative Inc. ("AECI"), Dalton Utilities ("Dalton"), Georgia Transmission Corporation ("GTC"), the Municipal Electric Authority of Georgia ("MEAG"), PowerSouth Energy Cooperative ("PowerSouth"), and the Tennessee Valley Authority ("TVA") (collectively, the "Nonjurisdictional SERTP Sponsors") (the Jurisdictional SERTP Sponsors and Nonjurisdictional SERTP Sponsors are collectively referred to herein as the "SERTP Sponsors").

¹ 16 U.S.C. § 824e.

This filing involves the SERTP Sponsors' proposals to comply with Order No. 1000's² interregional transmission planning and cost allocation requirements with a neighboring transmission planning region – PJM Interconnection, L.L.C. ("PJM").³ By order issued on January 23, 2015, the Commission addressed the Jurisdictional SERTP Sponsors' and PJM's initial proposals to comply Order No. 1000's interregional requirements.⁴ In response to the 1st PJM-SERTP Order, on May 26, 2015, the Jurisdictional SERTP Sponsors and PJM coordinated to file largely parallel compliance proposals ("May 26th Filings"). In the 2nd PJM-SERTP Order, the Commission largely accepted those compliance proposals but did require a couple of minor modifications to the Open Access Transmission Tariffs ("OATTs") of PJM and of the Jurisdictional SERTP Sponsors' OATTs.

As with their earlier compliance proposals, the SERTP Sponsors have coordinated with PJM so as to provide parallel tariff language to implement this required change.

II. The Required OATT Change: the Definition of Interregional Transmission Facility

In the 1st PJM-SERTP Order, the Commission found that PJM's and the Jurisdictional SERTP Sponsors' proposed definition of interregional transmission facility was overly limited in its scope and required that definition to be revised.⁵ In their May 26th Compliance Filings, the Jurisdictional SERTP Sponsors and PJM proposed that in order for a transmission facility to constitute such an interregional transmission facility for purposes of interregional cost allocation, it must "'[i]nterconnnect to transmission facilities in both the SERTP and PJM regions', and '[t]he facilities to which the project is proposed to interconnect may be either existing transmission facilities or transmission projects included in the regional transmission plan that are currently under development."⁶

Upon review, the Commission held that these proposed changes to the proposed definition "are consistent with Order No. 1000."⁷ However, while the Jurisdictional SERTP Sponsors and PJM had revised the definition of such interregional transmission facilities in the body of their respective attachments to their OATTs, the Commission held that they had not revised the definition in the preambles to those documents. Accordingly, the 2nd PJM-SERTP Order requires the filing parties to revise their OATTs so that "all definitions of an interregional transmission facility are consistent with the language proposed above…".⁸

⁸ Id.

² Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, Order No. 1000, FERC Stats. & Regs. ¶ 31,323 (2011), order on reh'g and clarification, Order No. 1000-A, 139 FERC ¶ 61,132, order on reh'g and clarification, Order No. 1000-B, 141 FERC ¶ 61,044 (2012) ("Order No. 1000").

³ For ease of reference for purposes of this transmittal letter, both PJM and the PJM Transmission Owners may be referenced herein as PJM.

⁴ *PJM Interconnection, L.L.C.*, 150 FERC ¶ 61,046 (2015) (1st PJM-SERTP Order).

⁵ 1st PJM-SERTP Order, P 35.

⁶ *Id.*, P 9 (quoting the May 26 Filings).

⁷ *Id.*, P 10

The only other instance in which the term "interregional transmission project" is defined in the Jurisdictional SERTP Sponsors' interregional coordination procedures for the PJM-SERTP seam is in the preamble to those documents, as referenced in the 2^{nd} PJM-SERTP Order. In accordance with the Order, and using Southern Companies' Exhibit K-6 as an example, that definition is herein proposed to be revised as shown below:

For purposes of this Exhibit K-6, an "interregional transmission project" means a facility or set of facilities that would be physically located in both the SERTP and PJM regions and would interconnect to transmission facilities <u>in both the SERTP</u> and PJM regions. The facilities to which the project is proposed to interconnect may be either existing transmission facilities or transmission projects included in the regional transmission plan that are currently under development.⁹

Duke also is "completing" Section 1.4 to add the correct cross-reference (i.e., Attachment N-1). In discovering the need to correct Section 1.4, it discovered an issue with its pending compliance filing for the MISO-SERTP seam and is taking this opportunity to correct that issue as well, as that filing is pending in the same docket. Thus, this filing also includes a revised Attachment N-1 for the MISO-SERTP seam to correct an error with the footnote. The previously filed version was submitted in a format that did not permit the footnote from being viewed upon transmittal through eTariff.

III. Request for Waiver

Duke is making this filing in compliance with the Commission's directives in the Order. By making this filing in compliance with the Order, Duke understand that it has hereby satisfied any of the Commission's filing requirements that might apply. Should any of the Commission's regulations (including filing regulations) or requirements that we may not have addressed be found to apply, Duke respectfully requests waiver of any such regulation or requirement.

IV. Service

Duke is serving an electronic copy of this filing on the relevant Service List. In addition, this filing is being posted on the SERTP website, as well as the Duke OASIS website.

V. List of Documents

The following is a list of documents submitted with this filing:

- (a) This transmittal letter;
- (b) A Clean Tariff Attachment; and

⁹ As discussed above, the Jurisdictional SERTP Sponsors have coordinated with PJM and understand that PJM is adopting a similar definition in the preamble to Schedule 6-A of the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. ("Operating Agreement").

(c) A Marked Tariff Attachment.

VI. Communications

Communications concerning this filing should be directed to the undersigned attorney.

Respectfully submitted,

/s/

Jennifer L. Key Counsel for DEC and DEP

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person

designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, DC this 21st day of October, 2015.

/s/

Jennifer L. Key STEPTOE & JOHNSON LLP 1330 Connecticut Avenue, NW Washington, DC 20036 (202) 429-6746 jkey@steptoe.com

ATTACHMENT N-1 - PJM

Interregional Transmission Coordination Between the SERTP and PJM Regions

The Duke Transmission Provider, through its regional transmission planning process, coordinates with the PJM Interconnection, LLC ("PJM") as the transmission provider and planner for the PJM region to address transmission planning coordination issues related to interregional transmission projects. The interregional transmission coordination procedures include a detailed description of the process for coordination between public utility transmission providers in the SERTP and PJM to identify possible interregional transmission projects that could address transmission needs more efficiently or cost-effectively than transmission projects included in the respective regional transmission plans. The interregional transmission coordination procedures are hereby provided in this Attachment N-1 - PJM with additional materials provided on the Regional Planning website.

The Duke Transmission Provider and PJM shall:

- (1) Coordinate and share the results of the SERTP's and PJM's regional transmission plans to identify possible interregional transmission projects that could address transmission needs more efficiently or cost-effectively than separate regional transmission projects;
- Identify and jointly evaluate transmission projects that are proposed to be located in both transmission planning regions;
- (3) Exchange, at least annually, planning data and information; and
- (4) Maintain a website and e-mail list for the communication of information related to the coordinated planning process.

The Duke Transmission Provider and PJM developed a mutually agreeable method for allocating between the two transmission planning regions the costs of new interregional transmission projects that are located within both transmission planning regions. Such cost allocation method satisfies the six interregional cost allocation principles set forth in Order No. 1000 and are included in this Attachment N-1 - PJM.

For purposes of this Attachment N-1 - PJM, the SERTP's transmission planning process is the process described in Attachment N-1 of this Tariff; PJM's regional transmission planning process is the process described in Schedule 6 of PJM's OATT. References to the respective transmission planning processes in this Attachment N-1 - PJM are intended to identify the activities described in those tariff provisions. Likewise, references to the respective regional transmission plans in this Attachment N-1 - PJM are intended to identify, for PJM, the PJM Regional Transmission Expansion Plan ("RTEP"), as defined in applicable PJM documents and, for the Duke Transmission Provider, the SERTP regional transmission plan, which includes the Duke Transmission Provider's ten (10) year transmission expansion plan. Unless noted otherwise, Section references in this Attachment N-1 - PJM refer to Sections within this Attachment N-1 - PJM.

Nothing in this Attachment N-1 - PJM is intended to affect the terms of any bilateral planning or operating agreements between transmission owners and/or transmission service providers that exist as of the effective date of this Attachment N-1 - PJM or that are executed at some future date.

INTERREGIONAL TRANSMISSION PLANNING PRINCIPLES

Representatives of the SERTP and PJM will meet no less than once per year to facilitate the interregional coordination procedures described below (as applicable). Representatives of the SERTP and PJM may meet more frequently during the evaluation of project(s) proposed for purposes of interregional cost allocation between the SERTP and PJM. For purposes of this Attachment N-1 - PJM, an "interregional transmission project" means a facility or set of facilities that would be physically located in both the SERTP and PJM regions and would interconnect to transmission facilities in both the SERTP and PJM regions. The facilities to which the project is proposed to interconnect may be either existing transmission facilities or transmission projects included in the regional transmission plan that are currently under development. **1**.

Coordination

- **1.1 Review of Respective Regional Transmission Plans:** Biennially, the Duke Transmission Provider and PJM shall review each other's current regional transmission plan(s) and engage in the data exchange and joint evaluation described in Sections 2 and 3.
 - The review of each region's regional transmission plan(s), which plans include the transmission needs and planned upgrades of the transmission providers in each region, shall occur on a mutually agreeable timetable, taking into account each region's transmission planning process timeline.
- **1.2 Review of Proposed Interregional Transmission Projects:** The Duke Transmission Provider and PJM will also coordinate with regard to the evaluation of interregional transmission projects identified by the Duke Transmission Provider and PJM as well as interregional transmission projects proposed for

Interregional Cost Allocation Purposes ("Interregional CAP"), pursuant to Sections 3 and 5, below. Initial coordination activities regarding new interregional proposals will typically begin during the third calendar quarter. The Duke Transmission Provider and PJM will exchange status updates for new interregional transmission project proposals or proposals currently under consideration as needed. These status updates will generally include, if applicable: (i) an update of the region's evaluation of the proposal; (ii) the latest calculation of Regional Benefits (as defined in Section 5.2); (iii) the anticipated timeline for future assessments; and (iv) reevaluations related to the proposal.

- **1.3 Coordination of Assumptions Used in Joint Evaluation:** The Duke Transmission Provider and PJM will coordinate assumptions used in joint evaluations, as necessary, which includes items such as:
 - o Expected timelines/milestones associated with the joint evaluation
 - Study assumptions
 - Regional benefit calculations.
- 1.4 Posting of Materials on Regional Planning Websites: The Duke Transmission Provider and PJM will coordinate with respect to the posting of materials related to the interregional coordination procedures described in this Attachment N-1 on each region's regional planning website.

2. Data Exchange

2.1 At least annually, the Duke Transmission Provider and PJM shall exchange power-flow models and associated data used in the regional transmission planning processes to develop their respective then-current regional transmission plan(s).

This exchange will occur when such data is available in each of the transmission planning processes, typically during the first calendar quarter. Additional transmission-based models and data may be exchanged between the Duke Transmission Provider and PJM as necessary and if requested. For purposes of the interregional coordination activities outlined in this Attachment N-1 - PJM, only data and models used in the development of the Duke Transmission Provider's and PJM's then-current regional transmission plans and used in their respective regional transmission planning processes will be exchanged. This data will be posted on the pertinent regional transmission planning process' websites, consistent with the posting requirements of the respective regional transmission planning processes, and is considered CEII. The Duke Transmission Provider shall notify PJM of such posting.

2.2 The SERTP regional transmission plans will be posted on the Regional Planning website pursuant to the Duke Transmission Provider's regional transmission planning process. The Duke Transmission Provider will also notify PJM of such posting so PJM may retrieve these transmission plans. PJM will exchange its then-current regional plan(s) in a similar manner according to its regional transmission planning process.

3. Joint Evaluation

3.1 Identification of Interregional Transmission Projects: The Duke Transmission Provider and PJM shall exchange planning models and data and current regional transmission plans as described in Section 2. The Duke Transmission Provider and PJM will review one another's then-current regional transmission plan(s) in

accordance with the coordination procedures described in Section 1 and their respective regional transmission planning processes. If through this review, the Duke Transmission Provider and PJM identify a potential interregional transmission project that could be more efficient or cost effective than projects included in the respective regional plans, the Duke Transmission Provider and PJM will jointly evaluate the potential project pursuant to Section 3.3.

- **3.2** Identification of Interregional Transmission Projects by Stakeholders: Stakeholders may propose projects that may be more efficient or cost-effective than projects included in the Duke Transmission Provider's and PJM's regional transmission plans pursuant to the procedures in each region's regional transmission planning processes. The Duke Transmission Provider and PJM will evaluate interregional transmission projects proposed by stakeholders pursuant to Section 3.3.
- **3.3** Evaluation of Interregional Transmission Projects: The Duke Transmission Provider and PJM shall act through their respective regional transmission planning processes to evaluate potential interregional transmission projects and to determine whether the inclusion of any potential interregional transmission projects in each region's regional transmission plan would be more efficient or cost-effective than projects included in the respective then-current regional transmission plans. Such analysis shall be consistent with accepted planning practices of the respective regions and the methods utilized to produce each region's respective regional transmission plan(s). The Duke Transmission Provider will evaluate potential interregional transmission projects consistent with

Sections 4, 5, and 20 of Attachment N-1. To the extent possible and as needed, assumptions and models will be coordinated between the Duke Transmission Provider and PJM, as described in Section 1. Data shall be exchanged to facilitate this evaluation using the procedures described in Section 2.

3.4 Evaluation of Interregional Transmission Projects Proposed for Interregional Cost Allocation Purposes:

Interregional transmission projects proposed for Interregional CAP must be submitted in both the SERTP and PJM regional transmission planning processes. The project submittals must satisfy the applicable requirements for submittal of interregional transmission projects, including those in Sections 5.1(A) and 5.1(B). The submittals in the respective regional transmission planning processes must identify the project proposal as interregional in scope and identify SERTP and PJM as the regions in which the project is proposed to interconnect. The Duke Transmission Provider will determine whether the submittal for the proposed interregional transmission project satisfies all applicable requirements. Upon finding that the project submittal satisfies all such applicable requirements, the Duke Transmission Provider will notify PJM. Upon both regions so notifying one another that the project is eligible for consideration pursuant to their respective regional transmission planning processes, the Duke Transmission Provider and PJM will jointly evaluate the proposed interregional projects.

3.4.1 If an interregional transmission project is proposed in the SERTP and PJM for Interregional CAP, the initial evaluation of the project will typically begin during the third calendar quarter, with analysis conducted in the

same manner as analysis of interregional projects identified pursuant to Sections 3.1 and 3.2. Further evaluation shall also be performed pursuant to this Section 3.4. Projects proposed for Interregional CAP shall also be subject to the requirements of Section 5.

- **3.4.2** Each region, acting through its regional transmission planning process, will evaluate proposals to determine whether the interregional transmission project(s) proposed for Interregional CAP addresses transmission needs that are currently being addressed with projects in its regional transmission plan(s) and, if so, which projects in the regional transmission plan(s) could be displaced by the proposed project(s).
- **3.4.3** Based upon its evaluation, each region will quantify a Regional Benefit based upon the transmission costs that each region is projected to avoid due to its transmission projects being displaced by the proposed project. For purposes of this Attachment N-1 PJM, "Regional Benefit" means: (i) for the Duke Transmission Provider, the total avoided costs of projects included in the then-current regional transmission plan that would be displaced if the proposed interregional transmission project was included and (ii) for PJM, the total avoided costs of projects included in the then-current regional transmission project included in the then-current regional transmission project included in the then-current regional transmission project included in the then-current regional transmission projects included in the then-current regional transmission project was included in the then-current regional transmission plan that would be displaced if the proposed interregional transmission project was included. The Regional Benefit is not necessarily the same as the benefits used for purposes of *regional* cost allocation.

- **3.5** Inclusion of Interregional Projects Proposed for Interregional CAP in Regional Transmission Plans: An interregional transmission project proposed for Interregional CAP in the SERTP and PJM will be included in the respective regional plans for purposes of cost allocation only after it has been selected by both the SERTP and PJM regional processes to be included in their respective regional plans for purposes of cost allocation.
 - **3.5.1** To be selected in both the SERTP and PJM regional plans for purposes of cost allocation means that each region has performed all evaluations, as prescribed in its regional transmission planning processes, necessary for a project to be included in its regional transmission plans for purposes of cost allocation.
 - For the SERTP: All requisite approvals are obtained, as prescribed in the SERTP regional transmission planning process, necessary for a project to be included in the SERTP regional transmission plan for purposes of cost allocation. This includes any requisite regional benefit to cost ("BTC") ratio calculations performed pursuant to the respective regional transmission planning processes. For purposes of the SERTP, the anticipated allocation of costs of the interregional transmission project for use in the regional BTC ratio calculation shall be based upon the ratio of the SERTP's Regional Benefit to the sum of the Regional Benefits identified for both the SERTP and PJM; and

- For PJM: All requisite approvals are obtained, as prescribed in the respective regional transmission planning processes, necessary for a project to be included in the regional transmission plans for purposes of cost allocation.
- 3.6 Removal from Regional Plans: An interregional transmission project may be removed from the SERTP's or PJM's regional plan for purposes of cost allocation:
 (i) if the developer fails to meet developmental milestones; (ii) pursuant to the reevaluation procedures specified in the respective regional transmission planning processes; or (iii) if the project is removed from one of the region's regional transmission plan(s) pursuant to the requirements of its regional transmission planning processes.
 - **3.6.1** The Duke Transmission Provider shall notify PJM if an interregional project or a portion thereof is likely to be removed from its regional transmission plan.

4. Transparency

- **4.1** The Duke Transmission Provider shall post procedures for coordination and joint evaluation on the Regional Planning website.
- **4.2** Access to the data utilized will be made available through the Regional Planning website subject to the appropriate clearance, as applicable (such as CEII and confidential non-CEII). Both planning regions will make available, on their respective regional websites, links to where stakeholders can register (if applicable/available) for the stakeholder committees or distribution lists of the other planning region.

4.3 At the fourth quarter SERTP Summit, or as necessary due to current activity of proposed interregional transmission projects, the SERTP will provide status updates of interregional activities including:

o Facilities to be evaluated

o Analysis performed

o Determinations/results.

4.4 Stakeholders will have an opportunity to provide input and feedback within the respective regional planning processes of SERTP and PJM related to interregional facilities identified, analysis performed, and any determination/results.

Stakeholders may participate in either or both regions' regional planning processes to provide their input and feedback regarding the interregional coordination between the SERTP and PJM.

4.5 The Duke Transmission Provider will post a list on the Regional Planning Website of interregional transmission projects proposed for purposes of cost allocation in both the SERTP and PJM that are not eligible for consideration because they do not satisfy the regional project threshold criteria of one or both of the regions as well as post an explanation of the thresholds the proposed interregional project failed to satisfy.

5. Cost Allocation

5.1 Proposal of Interregional Transmission Projects for Interregional CAP: For an interregional transmission project to be eligible for Interregional CAP within the SERTP and PJM regions, all of the following criteria must be met:

- A. The interregional transmission project must be interregional in nature, which requires that it must:
 - Be physically located in both the SERTP region and the PJM region;
 - Interconnect to transmission facilities in both the SERTP and PJM regions. The facilities to which the project is proposed to interconnect may be either existing facilities or transmission projects included in the regional transmission plan that are currently under development; and
 - Meet the threshold criteria for transmission projects potentially eligible to be included in the regional transmission plans for purposes of cost allocation in both the SERTP and PJM regions, pursuant to their respective regional transmission planning processes.
- B. The interregional transmission project must be proposed for purposes of cost allocation in both the SERTP and PJM regions.
 - The transmission developer and project submittal must satisfy all criteria specified in the respective regional transmission processes; and
 - The proposal should be submitted in the timeframes outlined in the respective regional transmission planning processes.
- C. The interregional transmission project must be selected in the regional transmission plans of both the SERTP and PJM regions.
 - The costs of the interregional transmission project eligible for interregional cost allocation shall only be allocated to a region if that

region has selected the interregional transmission project in its regional transmission plan for purposes of cost allocation; and

- No cost shall be allocated to a region that has not selected the interregional transmission project in its regional transmission plan for purposes of cost allocation.
- 5.2 Allocation of Costs for Interregional Transmission Projects Between the SERTP and PJM Regions: The cost of an interregional transmission project selected for purposes of cost allocation in the regional transmission plans of both the SERTP and PJM regions shall be allocated for Interregional CAP to those regions as provided below:
 - A. The share of the costs of an interregional transmission project allocated to a region will be determined by the ratio of the present value(s) of the estimated costs of such region's displaced regional transmission project(s) to the total of the present values of the estimated costs of the displaced regional transmission projects in all regions that have selected the interregional transmission project in their regional transmission plans for purposes of cost allocation. The present values used in the cost allocation shall be based on a common date, comparable cost components, and the latest cost estimates used in the determination to include the interregional transmission project in their regional plans for purposes of cost allocation. The applicable discount rate(s) used for the SERTP region for interregional cost allocation purposes will be based upon the after-tax weighted average cost of capital of the SERTP transmission owners whose

projects would be displaced by the proposed interregional transmission project. The applicable discount rate for the PJM region shall be the discount rate included in the assumptions that are reviewed with the PJM Board of Managers each year for use in the economic planning process.

- B. When all or a portion of an interregional transmission project is to be located within a region in which there is no displaced regional transmission project, such region may, at its sole discretion, select the interregional transmission project for inclusion in its regional transmission plan; provided, however, that no portion of the costs of the interregional transmission project shall be allocated to such region pursuant to Section 5.2.A.
- C. Nothing in this Section 5 shall govern the further allocation of costs allocated to a region pursuant to this Section 5.2 within such region.
- D. The following example illustrates the cost allocation provisions in Section 5.2.A:
 - Regions A and B, through the joint evaluation process prescribed in Section 3.4 of this Attachment N-1 - PJM have included Transmission Project Z in their respective regional plans for purposes of cost allocation. Transmission Project Z was determined to address both regions' needs more efficiently or cost effectively than Transmission Project X in Region A and Transmission Project Y in Region B.

- The estimated cost of Transmission Projects X and Y are Cost (X) and Cost (Y) respectively. As described in Section 5.2.A, these costs shall be based upon common cost components.
- The number of years from the common present value date to the year associated with the cost estimates of Transmission Projects X and Y are N(X) and N(Y) respectively.
- \circ Recognizing that the regions may have different discount rates, for purposes of this example D_A is the discount rate used for Transmission Project X and D_B is the discount rate used for Transmission Project Y.
- Based on the foregoing assumptions and the allocation of costs based upon displaced regional transmission projects as prescribed in Section 5.2.A, the following illustrative formulas would be used:
 - Present Value of Cost (X) = PV Cost (X) = Cost (X) / $(1+D_A)^{N(X)}$
 - Present Value of Cost (Y) = PV Cost (Y) = Cost (Y) / $(1+D_B)^{N(Y)}$
 - Cost Allocation to Region A = PV Cost (X) / [PV Cost (X) + PV Cost (Y)]
 - Cost Allocation to Region B = PV Cost (Y) / [PV Cost (X) + PV Cost (Y)]
- Applying the above formulas, if:
 - Cost (X) =\$60 Million and N(X) =8.25 years

- Cost (Y) = \$40 Million and N(Y) = 4.50 years
- $D_A = 7.5\%$ per year
- $D_B = 7.4\%$ per year
- Then:
 - PV Cost (X) = $\frac{60}{(1+0.075)8.25} = 33.0$ Million
 - PV Cost (Y) = 40/(1+0.074)4.50 = 29.0. Million
 - Cost Allocation to Region A = 33.0 / (33.0 + 29.0) = 53.2% of the cost of Transmission Project Z
 - Cost Allocation to Region B = 29.0 / (33.0 + 29.0) = 46.8% of the cost of Transmission Project Z
- **5.3** Merchant Transmission and Transmission Owner Projects: Nothing in this Section 5 shall preclude the development of interregional transmission projects that are funded by merchant transmission developers or by individual transmission owners.
- 5.4 Exclusivity with Respect to Interregional Transmission Projects Selected for Interregional CAP: The following provisions shall apply regarding other cost allocation arrangements:
 - A. Except as provided in Section 5.4.B, the provisions in this Section 5 are the exclusive means by which any costs of an interregional transmission project selected for Interregional CAP between the SERTP and PJM regions may be allocated between or among those regions.
 - B. A transmission owner(s) or transmission developer(s) may propose to fund or allocate, on a voluntary basis, the cost of an interregional transmission

project selected for Interregional CAP using an allocation other than the allocation that results from the methodology set forth in Section 5.2, provided that, should the allocation of cost of such interregional transmission project be subject to the Federal Energy Regulatory Commission's ("FERC") jurisdiction, such allocation proposal is accepted for filing by FERC in accordance with the filing rights with respect to cost allocation set forth in Section 5.5 of this Attachment N-1 - PJM and provided further that no allocation shall be made to any region that has not agreed to that allocation.

- 5.5 Section 205 Filing Rights with Respect to Interregional Transmission Projects Selected for Interregional CAP: Solely with respect to interregional transmission projects evaluated under this Attachment N-1 - PJM and selected by the SERTP and PJM regional transmission planning processes for purposes of Interregional CAP, the following provisions shall apply:
 - A. Except as provided in Sections 5.4 and 5.5.B of this Attachment N-1 -PJM, nothing in this Section 5 will convey, expand, limit or otherwise alter any rights of the transmission owners, transmission developers or other market participants to submit filings under Section 205 of the Federal Power Act ("FPA") regarding cost allocation or any other matter.
 - B. The cost allocation provisions in this Section 5 shall not be modified under Section 205 of the FPA without the mutual consent of the holders of the FPA Section 205 rights with respect to interregional cost allocation in the SERTP and PJM regions.

5.6 Consequences to Other Regions from Interregional Transmission Projects: Except as provided in this Section 5, or in other documents, agreements or tariffs on file with FERC, neither the SERTP region nor the PJM region shall be responsible for compensating another planning region for required upgrades or for any other consequences in another planning region associated with interregional transmission projects identified pursuant to this Attachment N-1 – PJM.

ATTACHMENT N-1 - PJM

Interregional Transmission Coordination Between the SERTP and PJM Regions

The Duke Transmission Provider, through its regional transmission planning process, coordinates with the PJM Interconnection, LLC ("PJM") as the transmission provider and planner for the PJM region to address transmission planning coordination issues related to interregional transmission projects. The interregional transmission coordination procedures include a detailed description of the process for coordination between public utility transmission providers in the SERTP and PJM to identify possible interregional transmission projects that could address transmission needs more efficiently or cost-effectively than transmission projects included in the respective regional transmission plans. The interregional transmission coordination procedures are hereby provided in this Attachment N-1 - PJM with additional materials provided on the Regional Planning website.

The Duke Transmission Provider and PJM shall:

- (1) Coordinate and share the results of the SERTP's and PJM's regional transmission plans to identify possible interregional transmission projects that could address transmission needs more efficiently or cost-effectively than separate regional transmission projects;
- Identify and jointly evaluate transmission projects that are proposed to be located in both transmission planning regions;
- (3) Exchange, at least annually, planning data and information; and
- (4) Maintain a website and e-mail list for the communication of information related to the coordinated planning process.

The Duke Transmission Provider and PJM developed a mutually agreeable method for allocating between the two transmission planning regions the costs of new interregional transmission projects that are located within both transmission planning regions. Such cost allocation method satisfies the six interregional cost allocation principles set forth in Order No. 1000 and are included in this Attachment N-1 - PJM.

For purposes of this Attachment N-1 - PJM, the SERTP's transmission planning process is the process described in Attachment N-1 of this Tariff; PJM's regional transmission planning process is the process described in Schedule 6 of PJM's OATT. References to the respective transmission planning processes in this Attachment N-1 - PJM are intended to identify the activities described in those tariff provisions. Likewise, references to the respective regional transmission plans in this Attachment N-1 - PJM are intended to identify, for PJM, the PJM Regional Transmission Expansion Plan ("RTEP"), as defined in applicable PJM documents and, for the Duke Transmission Provider, the SERTP regional transmission plan, which includes the Duke Transmission Provider's ten (10) year transmission expansion plan. Unless noted otherwise, Section references in this Attachment N-1 - PJM refer to Sections within this Attachment N-1 - PJM.

Nothing in this Attachment N-1 - PJM is intended to affect the terms of any bilateral planning or operating agreements between transmission owners and/or transmission service providers that exist as of the effective date of this Attachment N-1 - PJM or that are executed at some future date.

INTERREGIONAL TRANSMISSION PLANNING PRINCIPLES

Representatives of the SERTP and PJM will meet no less than once per year to facilitate the interregional coordination procedures described below (as applicable). Representatives of the SERTP and PJM may meet more frequently during the evaluation of project(s) proposed for purposes of interregional cost allocation between the SERTP and PJM. For purposes of this Attachment N-1 - PJM, an "interregional transmission project" means a facility or set of facilities that would be physically located in both the SERTP and PJM regions and would interconnect to the transmission facilities in both the SERTP and PJM regions. The facilities to which the project is proposed to interconnect may be either existing transmission facilities or transmission projects included in the regional transmission plan that are currently under development. of one or more SERTP transmission owners and one or more PJM transmission owners

1. Coordination

- **1.1 Review of Respective Regional Transmission Plans:** Biennially, the Duke Transmission Provider and PJM shall review each other's current regional transmission plan(s) and engage in the data exchange and joint evaluation described in Sections 2 and 3.
 - The review of each region's regional transmission plan(s), which plans include the transmission needs and planned upgrades of the transmission providers in each region, shall occur on a mutually agreeable timetable, taking into account each region's transmission planning process timeline.
- **1.2 Review of Proposed Interregional Transmission Projects:** The Duke Transmission Provider and PJM will also coordinate with regard to the evaluation of interregional transmission projects identified by the Duke Transmission

Provider and PJM as well as interregional transmission projects proposed for Interregional Cost Allocation Purposes ("Interregional CAP"), pursuant to Sections 3 and 5, below. Initial coordination activities regarding new interregional proposals will typically begin during the third calendar quarter. The Duke Transmission Provider and PJM will exchange status updates for new interregional transmission project proposals or proposals currently under consideration as needed. These status updates will generally include, if applicable: (i) an update of the region's evaluation of the proposal; (ii) the latest calculation of Regional Benefits (as defined in Section 5.2); (iii) the anticipated timeline for future assessments; and (iv) reevaluations related to the proposal.

- **1.3 Coordination of Assumptions Used in Joint Evaluation:** The Duke Transmission Provider and PJM will coordinate assumptions used in joint evaluations, as necessary, which includes items such as:
 - Expected timelines/milestones associated with the joint evaluation
 - Study assumptions
 - Regional benefit calculations.

1.4 Posting of Materials on Regional Planning Websites: The Duke Transmission Provider and PJM will coordinate with respect to the posting of materials related to the interregional coordination procedures described in this Attachment N-1[K___] on each region's regional planning website.

2. Data Exchange

2.1 At least annually, the Duke Transmission Provider and PJM shall exchange power-flow models and associated data used in the regional transmission planning

processes to develop their respective then-current regional transmission plan(s). This exchange will occur when such data is available in each of the transmission planning processes, typically during the first calendar quarter. Additional transmission-based models and data may be exchanged between the Duke Transmission Provider and PJM as necessary and if requested. For purposes of the interregional coordination activities outlined in this Attachment N-1 - PJM, only data and models used in the development of the Duke Transmission Provider's and PJM's then-current regional transmission plans and used in their respective regional transmission planning processes will be exchanged. This data will be posted on the pertinent regional transmission planning process' websites, consistent with the posting requirements of the respective regional transmission provider Set CEII. The Duke Transmission Provider shall notify PJM of such posting.

2.2 The SERTP regional transmission plans will be posted on the Regional Planning website pursuant to the Duke Transmission Provider's regional transmission planning process. The Duke Transmission Provider will also notify PJM of such posting so PJM may retrieve these transmission plans. PJM will exchange its then-current regional plan(s) in a similar manner according to its regional transmission planning process.

3. Joint Evaluation

3.1 Identification of Interregional Transmission Projects: The Duke Transmission Provider and PJM shall exchange planning models and data and current regional transmission plans as described in Section 2. The Duke Transmission Provider

and PJM will review one another's then-current regional transmission plan(s) in accordance with the coordination procedures described in Section 1 and their respective regional transmission planning processes. If through this review, the Duke Transmission Provider and PJM identify a potential interregional transmission project that could be more efficient or cost effective than projects included in the respective regional plans, the Duke Transmission Provider and PJM will jointly evaluate the potential project pursuant to Section 3.3.

- **3.2** Identification of Interregional Transmission Projects by Stakeholders: Stakeholders may propose projects that may be more efficient or cost-effective than projects included in the Duke Transmission Provider's and PJM's regional transmission plans pursuant to the procedures in each region's regional transmission planning processes. The Duke Transmission Provider and PJM will evaluate interregional transmission projects proposed by stakeholders pursuant to Section 3.3.
- **3.3** Evaluation of Interregional Transmission Projects: The Duke Transmission Provider and PJM shall act through their respective regional transmission planning processes to evaluate potential interregional transmission projects and to determine whether the inclusion of any potential interregional transmission projects in each region's regional transmission plan would be more efficient or cost-effective than projects included in the respective then-current regional transmission plans. Such analysis shall be consistent with accepted planning practices of the respective regions and the methods utilized to produce each region's respective regional transmission plan(s). The Duke Transmission

Provider will evaluate potential interregional transmission projects consistent with Sections 4, 5, and 20 of Attachment N-1. To the extent possible and as needed, assumptions and models will be coordinated between the Duke Transmission Provider and PJM, as described in Section 1. Data shall be exchanged to facilitate this evaluation using the procedures described in Section 2.

3.4 Evaluation of Interregional Transmission Projects Proposed for Interregional Cost Allocation Purposes:

Interregional transmission projects proposed for Interregional CAP must be submitted in both the SERTP and PJM regional transmission planning processes. The project submittals must satisfy the applicable requirements for submittal of interregional transmission projects, including those in Sections 5.1(A) and 5.1(B). The submittals in the respective regional transmission planning processes must identify the project proposal as interregional in scope and identify SERTP and PJM as the regions in which the project is proposed to interconnect. The Duke Transmission Provider will determine whether the submittal for the proposed interregional transmission project satisfies all applicable requirements. Upon finding that the project submittal satisfies all such applicable requirements, the Duke Transmission Provider will notify PJM. Upon both regions so notifying one another that the project is eligible for consideration pursuant to their respective regional transmission planning processes, the Duke Transmission Provider and PJM will jointly evaluate the proposed interregional projects.

3.4.1 If an interregional transmission project is proposed in the SERTP and PJM for Interregional CAP, the initial evaluation of the project will typically

begin during the third calendar quarter, with analysis conducted in the same manner as analysis of interregional projects identified pursuant to Sections 3.1 and 3.2. Further evaluation shall also be performed pursuant to this Section 3.4. Projects proposed for Interregional CAP shall also be subject to the requirements of Section 5.

- **3.4.2** Each region, acting through its regional transmission planning process, will evaluate proposals to determine whether the interregional transmission project(s) proposed for Interregional CAP addresses transmission needs that are currently being addressed with projects in its regional transmission plan(s) and, if so, which projects in the regional transmission plan(s) could be displaced by the proposed project(s).
- **3.4.3** Based upon its evaluation, each region will quantify a Regional Benefit based upon the transmission costs that each region is projected to avoid due to its transmission projects being displaced by the proposed project. For purposes of this Attachment N-1 PJM, "Regional Benefit" means: (i) for the Duke Transmission Provider, the total avoided costs of projects included in the then-current regional transmission plan that would be displaced if the proposed interregional transmission project was included and (ii) for PJM, the total avoided costs of projects included in the then-current regional transmission project included in the then-current regional transmission project is included in the then-current regional transmission project is included in the then-current regional transmission projects included in the then-current regional transmission project is included in the then-current regional transmission project is included in the then-current regional transmission project was included in the then-current regional transmission project was included in the then-current regional transmission project was included. The Regional Benefit is not necessarily the same as the benefits used for purposes of *regional* cost allocation.

- **3.5** Inclusion of Interregional Projects Proposed for Interregional CAP in Regional Transmission Plans: An interregional transmission project proposed for Interregional CAP in the SERTP and PJM will be included in the respective regional plans for purposes of cost allocation only after it has been selected by both the SERTP and PJM regional processes to be included in their respective regional plans for purposes of cost allocation.
 - **3.5.1** To be selected in both the SERTP and PJM regional plans for purposes of cost allocation means that each region has performed all evaluations, as prescribed in its regional transmission planning processes, necessary for a project to be included in its regional transmission plans for purposes of cost allocation.
 - For the SERTP: All requisite approvals are obtained, as prescribed in the SERTP regional transmission planning process, necessary for a project to be included in the SERTP regional transmission plan for purposes of cost allocation. This includes any requisite regional benefit to cost ("BTC") ratio calculations performed pursuant to the respective regional transmission planning processes. For purposes of the SERTP, the anticipated allocation of costs of the interregional transmission project for use in the regional BTC ratio calculation shall be based upon the ratio of the SERTP's Regional Benefit to the sum of the Regional Benefits identified for both the SERTP and PJM; and

- For PJM: All requisite approvals are obtained, as prescribed in the respective regional transmission planning processes, necessary for a project to be included in the regional transmission plans for purposes of cost allocation.
- 3.6 Removal from Regional Plans: An interregional transmission project may be removed from the SERTP's or PJM's regional plan for purposes of cost allocation:
 (i) if the developer fails to meet developmental milestones; (ii) pursuant to the reevaluation procedures specified in the respective regional transmission planning processes; or (iii) if the project is removed from one of the region's regional transmission plan(s) pursuant to the requirements of its regional transmission planning processes.
 - **3.6.1** The Duke Transmission Provider shall notify PJM if an interregional project or a portion thereof is likely to be removed from its regional transmission plan.

4. Transparency

- **4.1** The Duke Transmission Provider shall post procedures for coordination and joint evaluation on the Regional Planning website.
- **4.2** Access to the data utilized will be made available through the Regional Planning website subject to the appropriate clearance, as applicable (such as CEII and confidential non-CEII). Both planning regions will make available, on their respective regional websites, links to where stakeholders can register (if applicable/available) for the stakeholder committees or distribution lists of the other planning region.

4.3 At the fourth quarter SERTP Summit, or as necessary due to current activity of proposed interregional transmission projects, the SERTP will provide status updates of interregional activities including:

o Facilities to be evaluated

o Analysis performed

o Determinations/results.

4.4 Stakeholders will have an opportunity to provide input and feedback within the respective regional planning processes of SERTP and PJM related to interregional facilities identified, analysis performed, and any determination/results.

Stakeholders may participate in either or both regions' regional planning processes to provide their input and feedback regarding the interregional coordination between the SERTP and PJM.

4.5 The Duke Transmission Provider will post a list on the Regional Planning Website of interregional transmission projects proposed for purposes of cost allocation in both the SERTP and PJM that are not eligible for consideration because they do not satisfy the regional project threshold criteria of one or both of the regions as well as post an explanation of the thresholds the proposed interregional project failed to satisfy.

5. Cost Allocation

5.1 Proposal of Interregional Transmission Projects for Interregional CAP: For an interregional transmission project to be eligible for Interregional CAP within the SERTP and PJM regions, all of the following criteria must be met:

- A. The interregional transmission project must be interregional in nature, which requires that it must:
 - Be physically located in both the SERTP region and the PJM region;
 - Interconnect to transmission facilities in both the SERTP and PJM regions. The facilities to which the project is proposed to interconnect may be either existing facilities or transmission projects included in the regional transmission plan that are currently under development; and
 - Meet the threshold criteria for transmission projects potentially eligible to be included in the regional transmission plans for purposes of cost allocation in both the SERTP and PJM regions, pursuant to their respective regional transmission planning processes.
- B. The interregional transmission project must be proposed for purposes of cost allocation in both the SERTP and PJM regions.
 - The transmission developer and project submittal must satisfy all criteria specified in the respective regional transmission processes; and
 - The proposal should be submitted in the timeframes outlined in the respective regional transmission planning processes.
- C. The interregional transmission project must be selected in the regional transmission plans of both the SERTP and PJM regions.
 - The costs of the interregional transmission project eligible for interregional cost allocation shall only be allocated to a region if that

region has selected the interregional transmission project in its regional transmission plan for purposes of cost allocation; and

- No cost shall be allocated to a region that has not selected the interregional transmission project in its regional transmission plan for purposes of cost allocation.
- 5.2 Allocation of Costs for Interregional Transmission Projects Between the SERTP and PJM Regions: The cost of an interregional transmission project selected for purposes of cost allocation in the regional transmission plans of both the SERTP and PJM regions shall be allocated for Interregional CAP to those regions as provided below:
 - A. The share of the costs of an interregional transmission project allocated to a region will be determined by the ratio of the present value(s) of the estimated costs of such region's displaced regional transmission project(s) to the total of the present values of the estimated costs of the displaced regional transmission projects in all regions that have selected the interregional transmission project in their regional transmission plans for purposes of cost allocation. The present values used in the cost allocation shall be based on a common date, comparable cost components, and the latest cost estimates used in the determination to include the interregional transmission project in their regional plans for purposes of cost allocation. The applicable discount rate(s) used for the SERTP region for interregional cost allocation purposes will be based upon the after-tax weighted average cost of capital of the SERTP transmission owners whose

projects would be displaced by the proposed interregional transmission project. The applicable discount rate for the PJM region shall be the discount rate included in the assumptions that are reviewed with the PJM Board of Managers each year for use in the economic planning process.

- B. When all or a portion of an interregional transmission project is to be located within a region in which there is no displaced regional transmission project, such region may, at its sole discretion, select the interregional transmission project for inclusion in its regional transmission plan; provided, however, that no portion of the costs of the interregional transmission project shall be allocated to such region pursuant to Section 5.2.A.
- C. Nothing in this Section 5 shall govern the further allocation of costs allocated to a region pursuant to this Section 5.2 within such region.
- D. The following example illustrates the cost allocation provisions in Section 5.2.A:
 - Regions A and B, through the joint evaluation process prescribed in Section 3.4 of this Attachment N-1 - PJM have included Transmission Project Z in their respective regional plans for purposes of cost allocation. Transmission Project Z was determined to address both regions' needs more efficiently or cost effectively than Transmission Project X in Region A and Transmission Project Y in Region B.

- The estimated cost of Transmission Projects X and Y are Cost (X) and Cost (Y) respectively. As described in Section 5.2.A, these costs shall be based upon common cost components.
- The number of years from the common present value date to the year associated with the cost estimates of Transmission Projects X and Y are N(X) and N(Y) respectively.
- \circ Recognizing that the regions may have different discount rates, for purposes of this example D_A is the discount rate used for Transmission Project X and D_B is the discount rate used for Transmission Project Y.
- Based on the foregoing assumptions and the allocation of costs based upon displaced regional transmission projects as prescribed in Section 5.2.A, the following illustrative formulas would be used:
 - Present Value of Cost (X) = PV Cost (X) = Cost (X) / $(1+D_A)^{N(X)}$
 - Present Value of Cost (Y) = PV Cost (Y) = Cost (Y) / $(1+D_B)^{N(Y)}$
 - Cost Allocation to Region A = PV Cost (X) / [PV Cost (X) + PV Cost (Y)]
 - Cost Allocation to Region B = PV Cost (Y) / [PV Cost (X) + PV Cost (Y)]
- Applying the above formulas, if:
 - Cost (X) =\$60 Million and N(X) =8.25 years

- Cost (Y) = \$40 Million and N(Y) = 4.50 years
- $D_A = 7.5\%$ per year
- $D_B = 7.4\%$ per year
- Then:
 - PV Cost (X) = $\frac{60}{(1+0.075)8.25} = 33.0$ Million
 - PV Cost (Y) = 40/(1+0.074)4.50 = 29.0. Million
 - Cost Allocation to Region A = 33.0 / (33.0 + 29.0) = 53.2% of the cost of Transmission Project Z
 - Cost Allocation to Region B = 29.0 / (33.0 + 29.0) = 46.8% of the cost of Transmission Project Z
- **5.3** Merchant Transmission and Transmission Owner Projects: Nothing in this Section 5 shall preclude the development of interregional transmission projects that are funded by merchant transmission developers or by individual transmission owners.
- 5.4 Exclusivity with Respect to Interregional Transmission Projects Selected for Interregional CAP: The following provisions shall apply regarding other cost allocation arrangements:
 - A. Except as provided in Section 5.4.B, the provisions in this Section 5 are the exclusive means by which any costs of an interregional transmission project selected for Interregional CAP between the SERTP and PJM regions may be allocated between or among those regions.
 - B. A transmission owner(s) or transmission developer(s) may propose to fund or allocate, on a voluntary basis, the cost of an interregional transmission

project selected for Interregional CAP using an allocation other than the allocation that results from the methodology set forth in Section 5.2, provided that, should the allocation of cost of such interregional transmission project be subject to the Federal Energy Regulatory Commission's ("FERC") jurisdiction, such allocation proposal is accepted for filing by FERC in accordance with the filing rights with respect to cost allocation set forth in Section 5.5 of this Attachment N-1 - PJM and provided further that no allocation shall be made to any region that has not agreed to that allocation.

- 5.5 Section 205 Filing Rights with Respect to Interregional Transmission Projects Selected for Interregional CAP: Solely with respect to interregional transmission projects evaluated under this Attachment N-1 - PJM and selected by the SERTP and PJM regional transmission planning processes for purposes of Interregional CAP, the following provisions shall apply:
 - A. Except as provided in Sections 5.4 and 5.5.B of this Attachment N-1 -PJM, nothing in this Section 5 will convey, expand, limit or otherwise alter any rights of the transmission owners, transmission developers or other market participants to submit filings under Section 205 of the Federal Power Act ("FPA") regarding cost allocation or any other matter.
 - B. The cost allocation provisions in this Section 5 shall not be modified under Section 205 of the FPA without the mutual consent of the holders of the FPA Section 205 rights with respect to interregional cost allocation in the SERTP and PJM regions.

5.6 Consequences to Other Regions from Interregional Transmission Projects: Except as provided in this Section 5, or in other documents, agreements or tariffs on file with FERC, neither the SERTP region nor the PJM region shall be responsible for compensating another planning region for required upgrades or for any other consequences in another planning region associated with interregional transmission projects identified pursuant to this Attachment N-1 – PJM.

ATTACHMENT N-1 - MISO

Interregional Transmission Coordination Between the SERTP and MISO

The Duke Transmission Provider, through its regional transmission planning process, coordinates with the Midcontinent Independent System Operator region ("MISO") to address transmission planning coordination issues related to interregional transmission facilities. The interregional transmission coordination procedures include a detailed description of the process for coordination between public utility transmission providers in the SERTP and MISO (i) with respect to an interregional transmission facility that is proposed to be located in both transmission planning regions and (ii) to identify possible interregional transmission facilities that could address transmission needs more efficiently or cost-effectively than transmission facilities included in the respective regional transmission plans. The interregional transmission coordination procedures are hereby provided in this Attachment N-1 - MISO with additional materials provided on the Regional Planning website.

The Duke Transmission Provider ensures that the following requirements are included in these interregional transmission coordination procedures:

- (1) A commitment to coordinate and share the results of the SERTP's and MISO's regional transmission plans to identify possible interregional transmission projects that could address transmission needs more efficiently or cost-effectively than separate regional transmission facilities, as well as a procedure for doing so;
- (2) A formal procedure to identify and jointly evaluate transmission facilities that are proposed to be located in both transmission planning regions;
- (3) A duty to exchange, at least annually, planning data and information; and

(4) A commitment to maintain a website or e-mail list for the communication of information related to the coordinated planning process.

The Duke Transmission Provider has worked with MISO to develop a mutually agreeable method for allocating between the two transmission planning regions the costs of new interregional transmission facilities that are located within both transmission planning regions. Such cost allocation method satisfies the six interregional cost allocation principles set forth in Order No. 1000 and are included in this Attachment N-1 - MISO.

For purposes of this Attachment N-1 - MISO, the SERTP regional transmission planning process is the process described in Attachment N-1 of this Tariff; MISO's regional transmission planning process is the process described in section X of Attachment FF to MISO's OATT. References to the respective regional transmission planning processes in this Attachment N-1 - MISO are intended to identify the activities described in those tariff provisions. Unless noted otherwise, Section references in this Attachment N-1 - MISO refer to Sections within this Attachment N-1 - MISO.

1. Interregional Transmission Coordination

- **1.1 Annual Meeting:** Representatives of the SERTP and the staff of MISO will meet no less than once per year to facilitate the interregional coordination procedures described below (as applicable). Representatives of the SERTP and MISO staff may meet more frequently during the evaluation of interregional transmission project(s) proposed for purposes of interregional cost allocation between the SERTP and MISO transmission planning regions.
- **1.2 Website Posting of Information on Interregional Coordination:** The Duke Transmission Provider shall utilize the Regional Planning website for communication of

information related to these coordinated interregional transmission planning procedures. The Duke Transmission Provider shall coordinate with MISO with respect to the posting of materials to the regional planning website related to the interregional coordination procedures between the SERTP and MISO transmission planning regions. The Duke Transmission Provider shall, at a minimum, provide the following on the Regional Planning website:

- Interregional coordination and cost allocation procedures between the SERTP and MISO;
- Links to where stakeholders can register (if applicable/available) for the stakeholder committees or distribution lists of MISO;
- iii. Documents related to joint evaluation of interregional transmission projects; and
- iv. Status report on interregional transmission projects selected for purposes of interregional cost allocation between the SERTP and MISO.

2. Model and Data Exchange

At least annually, the Duke Transmission Provider and MISO shall exchange their thencurrent regional transmission plans including power-flow models and associated data used in the regional transmission planning processes to develop such transmission plan(s). This exchange will occur when such data is available in each of the regional transmission planning processes, typically during the first calendar quarter of each year. Additional transmissionbased models and data may be exchanged between the Duke Transmission Provider and MISO as necessary and if requested. For purposes of their interregional coordination activities, the Duke Transmission Provider and MISO will exchange only data and models used in the development of their then-current regional transmission process and plans. This data will be posted on the pertinent regional transmission planning process' websites, consistent with the posting requirements of the respective regional transmission planning processes, and subject to the applicable treatment of confidential data and Critical Energy Infrastructure Information (CEII). The Duke Transmission Provider shall notify MISO of such posting.

3. Identification and Joint Evaluation of Proposed Interregional Transmission Projects

- **3.1** Identification of Interregional Transmission Projects: At least biennially, the Duke Transmission Provider and MISO shall meet to review the respective regional transmission plans. Such plans include each region's transmission needs as prescribed by each region's planning process. This review shall occur on a mutually agreeable timetable, taking into account each region's regional transmission planning process timeline. If through this review, the Duke Transmission Provider and MISO identify a potential interregional transmission project that may be more efficient or cost-effective than regional transmission projects, the Duke Transmission Provider and MISO Provider and MISO shall jointly evaluate the potential interregional transmission project pursuant to Section 3.4.
- **3.2** Identification of Interregional Transmission Projects by Stakeholders: Stakeholders and transmission developers (pursuant to Section 4.1) may also propose interregional transmission projects that may be more efficient or costeffective than regional transmission projects pursuant to the procedures in each region's regional transmission planning processes.
- **3.3 Identification of Interregional Transmission Projects by Developers:** Interregional transmission projects proposed for interregional cost allocation

purposes ("Interregional CAP") must be submitted in both the SERTP and MISO regional transmission planning processes. The project submittal must satisfy the requirements of Section 4.1 except for the benefit-to-cost ratio requirements of Section 4.1.A.ii.¹ The submittal must identify the potential transmission project as interregional in scope and identify the SERTP and MISO as regions in which the project is proposed to interconnect. The Duke Transmission Provider will verify whether the submittal for the potential interregional transmission project satisfies all applicable requirements. Upon finding that the proposed interregional transmission project satisfies all such applicable requirements, the Duke Transmission Provider will notify MISO. Once the potential project has been proposed through the regional transmission planning processes in both regions, and upon both regions so notifying one another that the project is eligible for consideration pursuant to their respective regional transmission planning processes, the Duke Transmission Provider and MISO will jointly evaluate the proposed interregional projects pursuant to Sections 3 and 4.

3.4 Evaluation of Interregional Transmission Projects: The Duke Transmission Provider and MISO shall act through their respective regional transmission planning processes in the joint evaluation of potential interregional transmission projects identified pursuant to Sections 3.1 and 3.2 to determine whether the inclusion of any potential interregional transmission projects in each region's regional transmission plan would be more efficient or cost-effective than regional

¹ A transmission developer is not responsible for determining the benefit-to-cost ratio referenced in Section 4.1.A.ii. in a project submittal. However, an interregional transmission project proposed for Interregional CAP must ultimately satisfy the benefit-to-cost ratio requirements in accordance with the provisions of Sections 4.1.A.ii. and 4.3.

projects. Such analysis shall be consistent with accepted transmission planning practices of the respective regions and the methods utilized to produce each region's respective regional transmission plan(s). The Duke Transmission Provider will evaluate potential interregional transmission projects consistent with Sections 4, 5 and 20 of Attachment N-

1.

- **3.5 Review of Proposed Interregional Transmission Projects:** Initial coordination activities regarding potential interregional transmission projects will typically begin during the third quarter of each calendar year. The Duke Transmission Provider and MISO will exchange status updates regarding interregional transmission projects that are newly proposed or that are currently under consideration as needed. These status updates will generally include, if applicable: (i) an update of the region's evaluation of the proposal(s); (ii) the latest calculation of benefits (as identified pursuant to Section 4.2); and (iii) the anticipated timeline for future assessments.
- **3.6 Coordination of Assumptions Used in Joint Evaluation:** The Duke Transmission Provider and MISO will coordinate assumptions and data used in joint evaluations, as necessary, including items such as:
 - (i) Expected timelines and milestones associated with the joint evaluation;
 - (ii) Study assumptions;
 - (iii) Models; and
 - (iv) Benefit calculations (as identified pursuant to Section 4.2).
- 4. Interregional Cost Allocation: If an interregional transmission project is proposed for Interregional CAP in the SERTP and MISO transmission planning regions, then the

following cost allocation and benefits calculations, as identified pursuant to Section 4.2, shall apply to the project:

4.1 Interregional Transmission Projects Proposed for Interregional Cost Allocation Purposes:

- For a transmission project to be eligible for Interregional CAP within the SERTP and MISO, the project must:
 - Interconnect to transmission facilities in both the SERTP and MISO regions. The facilities to which the project is proposed to interconnect may be either existing facilities or transmission projects included in the regional transmission plan that are currently under development;
 - ii. Have a combined benefit-to-cost ratio of 1.25 or higher to the SERTP and MISO regions, as calculated in Section 4.3; and
 - iii. Meet the threshold and qualification criteria for transmission projects potentially eligible to be included in the respective regional transmission plans for purposes of cost allocation in MISO and the SERTP, pursuant to their respective regional transmission planning processes.
- B. On a case-by-case basis, the Duke Transmission Provider and MISO may consider an interregional transmission project that does not satisfy all of the criteria specified in this Section 4.1 but that: (i) meets the threshold criteria for a project proposed to be included in the regional transmission plan for purposes of cost allocation in only one of the two regions; and (ii) would be interconnected to transmission facilities in both the SERTP and MISO regions. The facilities to which the project is proposed to

interconnect may be either existing facilities or transmission projects included in the regional transmission plan that are currently under development.

- C. The transmission project must be proposed for purposes of cost allocation in both the SERTP and MISO. The project submittal must satisfy all criteria specified in the respective regional transmission processes, including the respective timeframes for submittals proposed for cost allocation purposes. If a project is proposed by a transmission developer, the transmission developer must also satisfy the qualification criteria specified by each region.
- **4.2** Calculation of Benefits for Interregional Transmission Projects Proposed for Interregional Cost Allocation Purposes: The benefits used to establish the allocation of costs of a transmission project proposed for Interregional CAP between the SERTP and MISO shall be determined as follows:
 - A. Each transmission planning region, acting through its regional transmission planning process, will evaluate proposals to determine whether the proposed project(s) addresses transmission needs that are currently being addressed with projects in its regional transmission plan and, if so, which projects in the regional transmission plan could be displaced by the proposed project(s).
 - B. Based upon its evaluation, each region will quantify its benefits based upon the transmission costs that each region is projected to avoid due to its

transmission projects being displaced by the proposed interregional transmission project as follows:

(i) for the SERTP, the total avoided costs of projects included in the then-current regional transmission plan that would be displaced if the proposed interregional transmission project was included; and

(ii) for MISO, the total avoided costs of projects identified, but not approved, in the then-current regional transmission plan that would be displaced if the proposed interregional transmission project was included.

The benefits calculated pursuant to this Section 4.2 are not necessarily the same as the benefits used for purposes of *regional* cost allocation.

4.3. Calculation of Benefit-to-Cost Ratio for an Interregional Transmission Project Proposed for Interregional CAP:

Prior to any regional benefit-to-cost ratio calculation pursuant to either regional transmission planning process, the combined interregional benefit-to-cost ratio, referenced in Section 4.1.A, shall be calculated for an interregional transmission project proposed for Interregional CAP. Such calculation shall be performed by dividing the sum of the present value of the avoided project cost determined in accordance with Section 4.2.B.i for the SERTP region and the present value of avoided project cost determined in accordance with Section 4.2.B.i for the proposed interregional transmission project's total project cost. The present values used in the cost calculation shall be based on

a common date, comparable cost components, and the latest cost estimates used in the evaluation of the interregional transmission project. The combined interregional benefit-to-cost ratio will be assessed in addition to, not in the place of, the SERTP's and MISO's respective regional benefit-to-cost ratio assessment(s) (if applicable) as specified in the respective regional processes.

- **4.4 Inclusion in Regional Transmission Plans:** An interregional transmission project proposed for Interregional CAP in the transmission planning regions of the SERTP and MISO will be included in the respective regional transmission plans for purposes of cost allocation after:
 - A. Each region has performed all evaluations, as prescribed in its regional transmission planning process, necessary for a project to be included in its regional transmission plan for purposes of cost allocation including any regional benefit-to-cost ratio calculations. Each region shall utilize the benefit calculation(s) as defined in such region's regional transmission planning process (for purposes of clarity, these benefits are not necessarily the same as the benefits determined pursuant to Section 4.2). Each region shall utilize the cost calculation(s) as defined in such region's regional transmission planning process. The anticipated percentage allocation of costs of the interregional transmission project to each region shall be based upon the ratio of the region's benefits to the sum of the benefits, both as determined pursuant to Section 4.2, identified for both the SERTP and MISO.

- B. Each region has obtained all approvals, as prescribed in its regional process, necessary for a project to be included in the regional transmission plan for purposes of regional cost allocation.
- **4.5** Allocation of Costs Between the SERTP and MISO Regions: The cost of an interregional transmission project, selected for purposes of cost allocation in the regional transmission plans of both the SERTP and MISO, will be allocated as follows:
 - A. Each region will be allocated a portion of the interregional transmission project's costs in proportion to such region's benefit as calculated pursuant to Section 4.2 to the sum of the benefits identified for both the SERTP and MISO calculated pursuant to Section 4.2.
 - The benefits used for this determination shall be based upon the benefit calculation most recently performed pursuant to the method described in Section 4.2 before each region included the project in its regional transmission plan for purposes of cost allocation and as approved by each region.
 - B. Costs allocated to each region shall be further allocated within each region pursuant to the cost allocation methodology contained in its regional transmission planning process.
- **4.6** Milestones of Required Steps Necessary to Maintain Status as Being Selected for Interregional Cost Allocation Purposes: Once selected in the respective regional transmission plans for purposes of cost allocation, the SERTP Sponsors that will be allocated costs of the transmission project, MISO, and the

transmission developer(s) must mutually agree upon an acceptable development schedule including milestones by which the necessary steps to develop and construct the interregional transmission project must occur. These milestones may include (to the extent not already accomplished) obtaining all necessary rights of way and requisite environmental, state, and other governmental approvals and executing a mutually-agreed upon contract(s) between the applicable SERTP Sponsors, MISO and the transmission developer. If such critical steps are not met by the specified milestones and then afterwards maintained, then the Duke Transmission Provider and MISO may remove the transmission project from the selected category in the regional transmission plans for purposes of cost allocation.

- **4.7 Interregional Transmission Project Contractual Arrangements:** The contracts referenced in Section 4.6 will address terms and conditions associated with the development of the proposed interregional transmission project included in the regional transmission plans for purposes of cost allocation, including but not limited to:
 - Engineering, procurement, construction, maintenance, and operation of the proposed transmission project, including coordination responsibilities of the parties;
 - (ii) Emergency restoration and repair;
 - (iii) The specific financial terms and specific total amounts to be charged by the transmission developer of the transmission project to each beneficiary, as agreed to by the parties;

- (iv) Creditworthiness and project security requirements;
- (v) Milestone reporting, including schedule of projected expenditures;
- (vi) Reevaluation of the transmission project; and
- (vii) Non-performance or abandonment.
- **4.8 Removal from Regional Transmission Plans:** An interregional transmission project may be removed from the Duke Transmission Provider's or MISO's regional transmission plan(s) for Interregional CAP: (i) if the transmission developer fails to meet developmental milestones; (ii) pursuant to the reevaluation procedures specified in the respective regional transmission planning processes; or (iii) if the project is removed from one of the region's regional transmission plans pursuant to the requirements of its regional transmission planning process.
 - A. The Duke Transmission Provider shall notify MISO if an interregional transmission project or a portion thereof is likely to be, and/or is actually removed from its regional transmission plan.

5. Transparency

5.1 Stakeholders will have an opportunity to provide input and feedback within the respective regional transmission planning processes of the SERTP and MISO related to interregional transmission projects identified, analysis performed, and any determination/results. Stakeholders may participate in either or both regions' regional transmission planning processes to provide their input and feedback regarding the interregional coordination between the SERTP and MISO.

- **5.2** At the fourth quarter SERTP Summit, or as necessary due to current activity of proposed interregional transmission projects, the Duke Transmission Provider will provide status updates of interregional activities including:
 - (i) Facilities to be evaluated;
 - (ii) Analysis performed; and
 - (iii) Determinations/results.
- 5.3 The Duke Transmission Provider will post a list on the Regional Planning Website of interregional transmission projects proposed for purposes of cost allocation in both the SERTP and MISO regions that are not eligible for consideration because they do not satisfy the regional project threshold criteria of one or both of the regions as well as post an explanation of the thresholds the proposed interregional projects failed to satisfy.

ATTACHMENT N-1 - MISO

Interregional Transmission Coordination Between the SERTP and MISO

The Duke Transmission Provider, through its regional transmission planning process, coordinates with the Midcontinent Independent System Operator region ("MISO") to address transmission planning coordination issues related to interregional transmission facilities. The interregional transmission coordination procedures include a detailed description of the process for coordination between public utility transmission providers in the SERTP and MISO (i) with respect to an interregional transmission facility that is proposed to be located in both transmission planning regions and (ii) to identify possible interregional transmission facilities that could address transmission needs more efficiently or cost-effectively than transmission facilities included in the respective regional transmission plans. The interregional transmission coordination procedures are hereby provided in this Attachment N-1 - MISO with additional materials provided on the Regional Planning website.

The Duke Transmission Provider ensures that the following requirements are included in these interregional transmission coordination procedures:

- (1) A commitment to coordinate and share the results of the SERTP's and MISO's regional transmission plans to identify possible interregional transmission projects that could address transmission needs more efficiently or cost-effectively than separate regional transmission facilities, as well as a procedure for doing so;
- (2) A formal procedure to identify and jointly evaluate transmission facilities that are proposed to be located in both transmission planning regions;
- (3) A duty to exchange, at least annually, planning data and information; and

(4) A commitment to maintain a website or e-mail list for the communication of information related to the coordinated planning process.

The Duke Transmission Provider has worked with MISO to develop a mutually agreeable method for allocating between the two transmission planning regions the costs of new interregional transmission facilities that are located within both transmission planning regions. Such cost allocation method satisfies the six interregional cost allocation principles set forth in Order No. 1000 and are included in this Attachment N-1 - MISO.

For purposes of this Attachment N-1 - MISO, the SERTP regional transmission planning process is the process described in Attachment N-1 of this Tariff; MISO's regional transmission planning process is the process described in section X of Attachment FF to MISO's OATT. References to the respective regional transmission planning processes in this Attachment N-1 - MISO are intended to identify the activities described in those tariff provisions. Unless noted otherwise, Section references in this Attachment N-1 - MISO refer to Sections within this Attachment N-1 - MISO.

1. Interregional Transmission Coordination

- **1.1 Annual Meeting:** Representatives of the SERTP and the staff of MISO will meet no less than once per year to facilitate the interregional coordination procedures described below (as applicable). Representatives of the SERTP and MISO staff may meet more frequently during the evaluation of interregional transmission project(s) proposed for purposes of interregional cost allocation between the SERTP and MISO transmission planning regions.
- **1.2 Website Posting of Information on Interregional Coordination:** The Duke Transmission Provider shall utilize the Regional Planning website for communication of

information related to these coordinated interregional transmission planning procedures. The Duke Transmission Provider shall coordinate with MISO with respect to the posting of materials to the regional planning website related to the interregional coordination procedures between the SERTP and MISO transmission planning regions. The Duke Transmission Provider shall, at a minimum, provide the following on the Regional Planning website:

- Interregional coordination and cost allocation procedures between the SERTP and MISO;
- Links to where stakeholders can register (if applicable/available) for the stakeholder committees or distribution lists of MISO;
- iii. Documents related to joint evaluation of interregional transmission projects; and
- iv. Status report on interregional transmission projects selected for purposes of interregional cost allocation between the SERTP and MISO.

2. Model and Data Exchange

At least annually, the Duke Transmission Provider and MISO shall exchange their thencurrent regional transmission plans including power-flow models and associated data used in the regional transmission planning processes to develop such transmission plan(s). This exchange will occur when such data is available in each of the regional transmission planning processes, typically during the first calendar quarter of each year. Additional transmissionbased models and data may be exchanged between the Duke Transmission Provider and MISO as necessary and if requested. For purposes of their interregional coordination activities, the Duke Transmission Provider and MISO will exchange only data and models used in the development of their then-current regional transmission process and plans. This data will be posted on the pertinent regional transmission planning process' websites, consistent with the posting requirements of the respective regional transmission planning processes, and subject to the applicable treatment of confidential data and Critical Energy Infrastructure Information (CEII). The Duke Transmission Provider shall notify MISO of such posting.

3. Identification and Joint Evaluation of Proposed Interregional Transmission Projects

- **3.1** Identification of Interregional Transmission Projects: At least biennially, the Duke Transmission Provider and MISO shall meet to review the respective regional transmission plans. Such plans include each region's transmission needs as prescribed by each region's planning process. This review shall occur on a mutually agreeable timetable, taking into account each region's regional transmission planning process timeline. If through this review, the Duke Transmission Provider and MISO identify a potential interregional transmission project that may be more efficient or cost-effective than regional transmission projects, the Duke Transmission Provider and MISO Provider and MISO shall jointly evaluate the potential interregional transmission project pursuant to Section 3.4.
- **3.2** Identification of Interregional Transmission Projects by Stakeholders: Stakeholders and transmission developers (pursuant to Section 4.1) may also propose interregional transmission projects that may be more efficient or costeffective than regional transmission projects pursuant to the procedures in each region's regional transmission planning processes.
- **3.3 Identification of Interregional Transmission Projects by Developers:** Interregional transmission projects proposed for interregional cost allocation

purposes ("Interregional CAP") must be submitted in both the SERTP and MISO regional transmission planning processes. The project submittal must satisfy the requirements of Section 4.1 except for the benefit-to-cost ratio requirements of Section 4.1.A.ii.⁴¹ The submittal must identify the potential transmission project as interregional in scope and identify the SERTP and MISO as regions in which the project is proposed to interconnect. The Duke Transmission Provider will verify whether the submittal for the potential interregional transmission project satisfies all applicable requirements. Upon finding that the proposed interregional transmission project satisfies all such applicable requirements, the Duke Transmission Provider will notify MISO. Once the potential project has been proposed through the regional transmission planning processes in both regions, and upon both regions so notifying one another that the project is eligible for consideration pursuant to their respective regional transmission planning processes, the Duke Transmission Provider and MISO will jointly evaluate the proposed interregional projects pursuant to Sections 3 and 4.

3.4 Evaluation of Interregional Transmission Projects: The Duke Transmission Provider and MISO shall act through their respective regional transmission planning processes in the joint evaluation of potential interregional transmission projects identified pursuant to Sections 3.1 and 3.2 to determine whether the

⁺A transmission developer is not responsible for determining the benefit to cost ratio referenced in Section 4.1.A.ii. in a project submittal. However, an interregional transmission project proposed for Interregional CAP must ultimately satisfy the benefit to cost ratio requirements in accordance with the provisions of Sections 4.1A.ii. and 4.3.

inclusion of any potential interregional transmission projects in each region's regional transmission plan would be more efficient or cost-effective than regional

projects. Such analysis shall be consistent with accepted transmission planning practices of the respective regions and the methods utilized to produce each region's respective regional transmission plan(s). The Duke Transmission Provider will evaluate potential interregional transmission projects consistent with Sections 4, 5 and 20 of Attachment N-

1.

- **3.5 Review of Proposed Interregional Transmission Projects:** Initial coordination activities regarding potential interregional transmission projects will typically begin during the third quarter of each calendar year. The Duke Transmission Provider and MISO will exchange status updates regarding interregional transmission projects that are newly proposed or that are currently under consideration as needed. These status updates will generally include, if applicable: (i) an update of the region's evaluation of the proposal(s); (ii) the latest calculation of benefits (as identified pursuant to Section 4.2); and (iii) the anticipated timeline for future assessments.
- **3.6 Coordination of Assumptions Used in Joint Evaluation:** The Duke Transmission Provider and MISO will coordinate assumptions and data used in joint evaluations, as necessary, including items such as:
 - (i) Expected timelines and milestones associated with the joint evaluation;
 - (ii) Study assumptions;

¹ A transmission developer is not responsible for determining the benefit-to-cost ratio referenced in Section 4.1.A.ii. in a project submittal. However, an interregional transmission project proposed for Interregional CAP must ultimately satisfy the benefit-to-cost ratio requirements in accordance with the provisions of Sections 4.1.A.ii. and 4.3.

- (iii) Models; and
- (iv) Benefit calculations (as identified pursuant to Section 4.2).
- **4. Interregional Cost Allocation:** If an interregional transmission project is proposed for Interregional CAP in the SERTP and MISO transmission planning regions, then the following cost allocation and benefits calculations, as identified pursuant to Section 4.2, shall apply to the project:
 - 4.1 Interregional Transmission Projects Proposed for Interregional Cost Allocation Purposes:
 - A. For a transmission project to be eligible for Interregional CAP within the SERTP and MISO, the project must:
 - Interconnect to transmission facilities in both the SERTP and MISO regions. The facilities to which the project is proposed to interconnect may be either existing facilities or transmission projects included in the regional transmission plan that are currently under development;
 - ii. Have a combined benefit-to-cost ratio of 1.25 or higher to the SERTP and MISO regions, as calculated in Section 4.3; and
 - iii. Meet the threshold and qualification criteria for transmission projects potentially eligible to be included in the respective regional transmission plans for purposes of cost allocation in MISO and the SERTP, pursuant to their respective regional transmission planning processes.
 - B. On a case-by-case basis, the Duke Transmission Provider and MISO may consider an interregional transmission project that does not satisfy all of the criteria specified in this Section 4.1 but that: (i) meets the threshold

criteria for a project proposed to be included in the regional transmission plan for purposes of cost allocation in only one of the two regions; and (ii) would be interconnected to transmission facilities in both the SERTP and MISO regions. The facilities to which the project is proposed to interconnect may be either existing facilities or transmission projects included in the regional transmission plan that are currently under development.

- C. The transmission project must be proposed for purposes of cost allocation in both the SERTP and MISO. The project submittal must satisfy all criteria specified in the respective regional transmission processes, including the respective timeframes for submittals proposed for cost allocation purposes. If a project is proposed by a transmission developer, the transmission developer must also satisfy the qualification criteria specified by each region.
- **4.2** Calculation of Benefits for Interregional Transmission Projects Proposed for Interregional Cost Allocation Purposes: The benefits used to establish the allocation of costs of a transmission project proposed for Interregional CAP between the SERTP and MISO shall be determined as follows:
 - A. Each transmission planning region, acting through its regional transmission planning process, will evaluate proposals to determine whether the proposed project(s) addresses transmission needs that are currently being addressed with projects in its regional transmission plan

and, if so, which projects in the regional transmission plan could be displaced by the proposed project(s).

B. Based upon its evaluation, each region will quantify its benefits based upon the transmission costs that each region is projected to avoid due to its transmission projects being displaced by the proposed interregional transmission project as follows:

> (i) for the SERTP, the total avoided costs of projects included in the then-current regional transmission plan that would be displaced if the proposed interregional transmission project was included; and

> (ii) for MISO, the total avoided costs of projects identified, but not approved, in the then-current regional transmission plan that would be displaced if the proposed interregional transmission project was included.

The benefits calculated pursuant to this Section 4.2 are not necessarily the same as the benefits used for purposes of *regional* cost allocation.

4.3. Calculation of Benefit-to-Cost Ratio for an Interregional Transmission Project Proposed for Interregional CAP:

Prior to any regional benefit-to-cost ratio calculation pursuant to either regional transmission planning process, the combined interregional benefit-to-cost ratio, referenced in Section 4.1.A, shall be calculated for an interregional transmission project proposed for Interregional CAP. Such calculation shall be performed by dividing the sum of the present value of the avoided project cost determined in

accordance with Section 4.2.B.i for the SERTP region and the present value of avoided project cost determined in accordance with Section 4.2.B.ii for the MISO region by the present value of the proposed interregional transmission project's total project cost. The present values used in the cost calculation shall be based on a common date, comparable cost components, and the latest cost estimates used in the evaluation of the interregional transmission project. The combined interregional benefit-to-cost ratio will be assessed in addition to, not in the place of, the SERTP's and MISO's respective regional benefit-to-cost ratio assessment(s) (if applicable) as specified in the respective regional processes.

- **4.4 Inclusion in Regional Transmission Plans:** An interregional transmission project proposed for Interregional CAP in the transmission planning regions of the SERTP and MISO will be included in the respective regional transmission plans for purposes of cost allocation after:
 - A. Each region has performed all evaluations, as prescribed in its regional transmission planning process, necessary for a project to be included in its regional transmission plan for purposes of cost allocation including any regional benefit-to-cost ratio calculations. Each region shall utilize the benefit calculation(s) as defined in such region's regional transmission planning process (for purposes of clarity, these benefits are not necessarily the same as the benefits determined pursuant to Section 4.2). Each region shall utilize the cost calculation(s) as defined in such region's regional transmission planning process. The anticipated percentage allocation of costs of the interregional transmission project to each region shall be

based upon the ratio of the region's benefits to the sum of the benefits, both as determined pursuant to Section 4.2, identified for both the SERTP and MISO.

- B. Each region has obtained all approvals, as prescribed in its regional process, necessary for a project to be included in the regional transmission plan for purposes of regional cost allocation.
- **4.5** Allocation of Costs Between the SERTP and MISO Regions: The cost of an interregional transmission project, selected for purposes of cost allocation in the regional transmission plans of both the SERTP and MISO, will be allocated as follows:
 - A. Each region will be allocated a portion of the interregional transmission project's costs in proportion to such region's benefit as calculated pursuant to Section 4.2 to the sum of the benefits identified for both the SERTP and MISO calculated pursuant to Section 4.2.
 - The benefits used for this determination shall be based upon the benefit calculation most recently performed – pursuant to the method described in Section 4.2 – before each region included the project in its regional transmission plan for purposes of cost allocation and as approved by each region.
 - B. Costs allocated to each region shall be further allocated within each region pursuant to the cost allocation methodology contained in its regional transmission planning process.

- 4.6 Milestones of Required Steps Necessary to Maintain Status as Being Selected for Interregional Cost Allocation Purposes: Once selected in the respective regional transmission plans for purposes of cost allocation, the SERTP Sponsors that will be allocated costs of the transmission project, MISO, and the transmission developer(s) must mutually agree upon an acceptable development schedule including milestones by which the necessary steps to develop and construct the interregional transmission project must occur. These milestones may include (to the extent not already accomplished) obtaining all necessary rights of way and requisite environmental, state, and other governmental approvals and executing a mutually-agreed upon contract(s) between the applicable SERTP Sponsors, MISO and the transmission developer. If such critical steps are not met by the specified milestones and then afterwards maintained, then the Duke Transmission Provider and MISO may remove the transmission project from the selected category in the regional transmission plans for purposes of cost allocation.
- **4.7 Interregional Transmission Project Contractual Arrangements:** The contracts referenced in Section 4.6 will address terms and conditions associated with the development of the proposed interregional transmission project included in the regional transmission plans for purposes of cost allocation, including but not limited to:
 - Engineering, procurement, construction, maintenance, and operation of the proposed transmission project, including coordination responsibilities of the parties;

- (ii) Emergency restoration and repair;
- (iii) The specific financial terms and specific total amounts to be charged by the transmission developer of the transmission project to each beneficiary, as agreed to by the parties;
- (iv) Creditworthiness and project security requirements;
- (v) Milestone reporting, including schedule of projected expenditures;
- (vi) Reevaluation of the transmission project; and
- (vii) Non-performance or abandonment.
- **4.8 Removal from Regional Transmission Plans:** An interregional transmission project may be removed from the Duke Transmission Provider's or MISO's regional transmission plan(s) for Interregional CAP: (i) if the transmission developer fails to meet developmental milestones; (ii) pursuant to the reevaluation procedures specified in the respective regional transmission planning processes; or (iii) if the project is removed from one of the region's regional transmission plans pursuant to the requirements of its regional transmission planning process.
 - A. The Duke Transmission Provider shall notify MISO if an interregional transmission project or a portion thereof is likely to be, and/or is actually removed from its regional transmission plan.

5. Transparency

5.1 Stakeholders will have an opportunity to provide input and feedback within the respective regional transmission planning processes of the SERTP and MISO related to interregional transmission projects identified, analysis performed, and any determination/results. Stakeholders may participate in either or both regions'

regional transmission planning processes to provide their input and feedback regarding the interregional coordination between the SERTP and MISO.

- **5.2** At the fourth quarter SERTP Summit, or as necessary due to current activity of proposed interregional transmission projects, the Duke Transmission Provider will provide status updates of interregional activities including:
 - (i) Facilities to be evaluated;
 - (ii) Analysis performed; and
 - (iii) Determinations/results.
- 5.3 The Duke Transmission Provider will post a list on the Regional Planning Website of interregional transmission projects proposed for purposes of cost allocation in both the SERTP and MISO regions that are not eligible for consideration because they do not satisfy the regional project threshold criteria of one or both of the regions as well as post an explanation of the thresholds the proposed interregional projects failed to satisfy.

20151021-5065 FERC PDF (Unofficial) 10/21/2015 10:23:55 AM

FERC rendition of the electronically filed tariff records in Docket No. ER13-01928-007 Filing Data: CID: C000290 Filing Title: Order No. 1000 Interregional SERTP PJM and MISO Company Filing Identifier: 216 Type of Filing Code: 80 Associated Filing Identifier: 182 Tariff Title: Tariffs, Rate Schedules and Service Agreements Tariff ID: 23 Payment Confirmation: Suspension Motion:

Tariff Record Data: Record Content Description, Tariff Record Title, Record Version Number, Option Code: Attachment N-1 - MISO, Transmission Planning Process (SERTP-MISO Seam), 2.0.0, A Record Narative Name: Tariff Record ID: 175 Tariff Record Collation Value: 35553664 Tariff Record Parent Identifier: 8 Proposed Date: 2015-01-01 Priority Order: 150000000 Record Change Type: CHANGE Record Content Type: 1 Associated Filing Identifier: 183

ATTACHMENT N-1 - MISO

Interregional Transmission Coordination Between the SERTP and MISO

The Duke Transmission Provider, through its regional transmission planning process, coordinates with the Midcontinent Independent System Operator region ("MISO") to address transmission planning coordination issues related to interregional transmission facilities. The interregional transmission coordination procedures include a detailed description of the process for coordination between public utility transmission providers in the SERTP and MISO (i) with respect to an interregional transmission facility that is proposed to be located in both transmission planning regions and (ii) to identify possible interregional transmission facilities that could address transmission needs more efficiently or cost-effectively than transmission facilities included in the respective regional transmission plans. The interregional transmission coordination procedures are hereby provided in this Attachment N-1 - MISO with additional materials provided on the Regional Planning website.

The Duke Transmission Provider ensures that the following requirements are included in these interregional transmission coordination procedures:

- (1) A commitment to coordinate and share the results of the SERTP's and MISO's regional transmission plans to identify possible interregional transmission projects that could address transmission needs more efficiently or cost-effectively than separate regional transmission facilities, as well as a procedure for doing so;
- A formal procedure to identify and jointly evaluate transmission facilities that are proposed to be located in both transmission planning regions;
- (3) A duty to exchange, at least annually, planning data and information; and
- (4) A commitment to maintain a website or e-mail list for the communication of information related to the coordinated planning process.

The Duke Transmission Provider has worked with MISO to develop a mutually agreeable method for allocating between the two transmission planning regions the costs of new interregional transmission facilities that are located within both transmission planning regions. Such cost allocation method satisfies the six interregional cost allocation principles set forth in Order No. 1000 and are included in this Attachment N-1 - MISO.

For purposes of this Attachment N-1 - MISO, the SERTP regional transmission planning process is the process described in Attachment N-1 of this Tariff; MISO's regional transmission planning process is the process described in section X of Attachment FF to MISO's OATT. References to the respective regional transmission planning processes in this Attachment N-1 - MISO are intended to identify the activities described in those tariff provisions. Unless noted otherwise, Section references in this Attachment N-1 - MISO refer to Sections within this Attachment N-1 - MISO.

1. Interregional Transmission Coordination

1.1 Annual Meeting: Representatives of the SERTP and the staff of MISO will meet no less

than once per year to facilitate the interregional coordination procedures described below (as applicable). Representatives of the SERTP and MISO staff may meet more frequently during the evaluation of interregional transmission project(s) proposed for purposes of interregional cost allocation between the SERTP and MISO transmission planning regions.

- 1.2 Website Posting of Information on Interregional Coordination: The Duke Transmission Provider shall utilize the Regional Planning website for communication of information related to these coordinated interregional transmission planning procedures. The Duke Transmission Provider shall coordinate with MISO with respect to the posting of materials to the regional planning website related to the interregional coordination procedures between the SERTP and MISO transmission planning regions. The Duke Transmission Provider shall, at a minimum, provide the following on the Regional Planning website:
 - Interregional coordination and cost allocation procedures between the SERTP and MISO;
 - ii. Links to where stakeholders can register (if applicable/available) for the stakeholder committees or distribution lists of MISO;
 - iii. Documents related to joint evaluation of interregional transmission projects; and
 - iv. Status report on interregional transmission projects selected for purposes of interregional cost allocation between the SERTP and MISO.

2. Model and Data Exchange

At least annually, the Duke Transmission Provider and MISO shall exchange their then-current regional transmission plans including power-flow models and associated data used in the regional transmission planning processes to develop such transmission plan(s). This exchange will occur when such data is available in each of the regional transmission planning processes, typically during the first calendar quarter of each year. Additional transmission-based models and data may be exchanged between the Duke Transmission Provider and MISO as necessary and if requested. For purposes of their interregional coordination activities, the Duke Transmission Provider and MISO will exchange only data and models used in the development of their then-current regional transmission process and plans. This data will be posted on the pertinent regional transmission planning processes, and subject to the applicable treatment of confidential data and Critical Energy Infrastructure Information (CEII). The Duke Transmission Provider shall notify MISO of such posting.

3. Identification and Joint Evaluation of Proposed Interregional Transmission Projects

3.1 Identification of Interregional Transmission Projects: At least biennially, the Duke Transmission Provider and MISO shall meet to review the respective regional transmission plans. Such plans include each region's transmission needs as prescribed by each region's planning process. This review shall occur on a mutually agreeable timetable, taking into account each region's regional transmission planning process timeline. If through this review, the Duke Transmission Provider and MISO identify a potential interregional transmission project that may be more efficient or cost-effective than regional transmission projects, the Duke Transmission Provider and MISO Provider and MISO shall jointly evaluate the potential interregional transmission project pursuant to Section 3.4.

- **3.2 Identification of Interregional Transmission Projects by Stakeholders:** Stakeholders and transmission developers (pursuant to Section 4.1) may also propose interregional transmission projects that may be more efficient or cost-effective than regional transmission projects pursuant to the procedures in each region's regional transmission planning processes.
- 3.3 Identification of Interregional Transmission Projects by Developers: Interregional transmission projects proposed for interregional cost allocation purposes ("Interregional CAP") must be submitted in both the SERTP and MISO regional transmission planning processes. The project submittal must satisfy the requirements of Section 4.1 except for the benefit-to-cost ratio requirements of Section 4.1.A.ii.¹ The submittal must identify the potential transmission project as interregional in scope and identify the SERTP and MISO as regions in which the project is proposed to interconnect. The Duke Transmission Provider will verify whether the submittal for the potential interregional transmission project satisfies all applicable requirements. Upon finding that the proposed interregional transmission project satisfies all such applicable requirements, the Duke Transmission Provider will notify MISO. Once the potential project has been proposed through the regional transmission planning processes in both regions, and upon both regions so notifying one another that the project is eligible for consideration pursuant to their respective regional transmission planning processes, the Duke Transmission Provider and MISO will jointly evaluate the proposed interregional projects pursuant to Sections 3 and 4.

3.4 Evaluation of Interregional Transmission Projects: The Duke Transmission

Provider and MISO shall act through their respective regional transmission planning processes in the joint evaluation of potential interregional transmission projects identified pursuant to Sections 3.1 and 3.2 to determine whether the inclusion of any potential interregional transmission projects in each region's regional transmission plan would be more efficient or cost-effective than regional

of the respective regions and the methods utilized to produce each region's respective regional transmission plan(s). The Duke Transmission Provider will evaluate potential interregional transmission projects consistent with Sections 4, 5 and 20 of Attachment N-1.

projects. Such analysis shall be consistent with accepted transmission planning practices

- **3.5 Review of Proposed Interregional Transmission Projects:** Initial coordination activities regarding potential interregional transmission projects will typically begin during the third quarter of each calendar year. The Duke Transmission Provider and MISO will exchange status updates regarding interregional transmission projects that are newly proposed or that are currently under consideration as needed. These status updates will generally include, if applicable: (i) an update of the region's evaluation of the proposal(s); (ii) the latest calculation of benefits (as identified pursuant to Section 4.2); and (iii) the anticipated timeline for future assessments.
- **3.6 Coordination of Assumptions Used in Joint Evaluation:** The Duke Transmission Provider and MISO will coordinate assumptions and data used in

¹ A transmission developer is not responsible for determining the benefit-to-cost ratio referenced in Section 4.1.A.ii. in a project submittal. However, an interregional transmission project proposed for Interregional CAP must ultimately satisfy the benefit-to-cost ratio requirements in accordance with the provisions of Sections 4.1.A.ii. and 4.3.

joint evaluations, as necessary, including items such as:

- (i) Expected timelines and milestones associated with the joint evaluation;
- (ii) Study assumptions;
- (iii) Models; and
- (iv) Benefit calculations (as identified pursuant to Section 4.2).
- 4. Interregional Cost Allocation: If an interregional transmission project is proposed for Interregional CAP in the SERTP and MISO transmission planning regions, then the following cost allocation and benefits calculations, as identified pursuant to Section 4.2, shall apply to the project:
 - 4.1 Interregional Transmission Projects Proposed for Interregional Cost Allocation Purposes:
 - For a transmission project to be eligible for Interregional CAP within the SERTP and MISO, the project must:
 - i. Interconnect to transmission facilities in both the SERTP and MISO regions. The facilities to which the project is proposed to interconnect may be either existing facilities or transmission projects included in the regional transmission plan that are currently under development;
 - ii. Have a combined benefit-to-cost ratio of 1.25 or higher to the SERTP and MISO regions, as calculated in Section 4.3; and
 - iii.Meet the threshold and qualification criteria for transmission projects potentially eligible to be included in the respective regional transmission plans for purposes of cost allocation in MISO and the SERTP, pursuant to their respective regional transmission planning processes.

- B. On a case-by-case basis, the Duke Transmission Provider and MISO may consider an interregional transmission project that does not satisfy all of the criteria specified in this Section 4.1 but that: (i) meets the threshold criteria for a project proposed to be included in the regional transmission plan for purposes of cost allocation in only one of the two regions; and (ii) would be interconnected to transmission facilities in both the SERTP and MISO regions. The facilities to which the project is proposed to interconnect may be either existing facilities or transmission projects included in the regional transmission plan that are currently under development.
- C. The transmission project must be proposed for purposes of cost allocation in both the SERTP and MISO. The project submittal must satisfy all criteria specified in the respective regional transmission processes, including the respective timeframes for submittals proposed for cost allocation purposes. If a project is proposed by a transmission developer, the transmission developer must also satisfy the qualification criteria specified by each region.
- **4.2** Calculation of Benefits for Interregional Transmission Projects Proposed for Interregional Cost Allocation Purposes: The benefits used to establish the allocation of costs of a transmission project proposed for Interregional CAP between the SERTP and MISO shall be determined as follows:
 - A. Each transmission planning region, acting through its regional transmission planning process, will evaluate proposals to determine

whether the proposed project(s) addresses transmission needs that are currently being addressed with projects in its regional transmission plan and, if so, which projects in the regional transmission plan could be displaced by the proposed project(s).

B. Based upon its evaluation, each region will quantify its benefits based upon the transmission costs that each region is projected to avoid due to its transmission projects being displaced by the proposed interregional transmission project as follows:

> (i) for the SERTP, the total avoided costs of projects included in the then-current regional transmission plan that would be displaced if the proposed interregional transmission project was included; and

> (ii) for MISO, the total avoided costs of projects identified, but not approved, in the then-current regional transmission plan that would be displaced if the proposed interregional transmission project was included.

The benefits calculated pursuant to this Section 4.2 are not necessarily the same as the benefits used for purposes of *regional* cost allocation.

4.3. Calculation of Benefit-to-Cost Ratio for an Interregional Transmission Project Proposed for Interregional CAP:

Prior to any regional benefit-to-cost ratio calculation pursuant to either regional transmission planning process, the combined interregional benefit-to-cost ratio, referenced in Section 4.1.A, shall be calculated for an interregional transmission

project proposed for Interregional CAP. Such calculation shall be performed by dividing the sum of the present value of the avoided project cost determined in accordance with Section 4.2.B.i for the SERTP region and the present value of avoided project cost determined in accordance with Section 4.2.B.ii for the MISO region by the present value of the proposed interregional transmission project's total project cost. The present values used in the cost calculation shall be based on a common date, comparable cost components, and the latest cost estimates used in the evaluation of the interregional transmission project. The combined interregional benefit-to-cost ratio will be assessed in addition to, not in the place of, the SERTP's and MISO's respective regional benefit-to-cost ratio assessment(s) (if applicable) as specified in the respective regional processes.

- **4.4 Inclusion in Regional Transmission Plans:** An interregional transmission project proposed for Interregional CAP in the transmission planning regions of the SERTP and MISO will be included in the respective regional transmission plans for purposes of cost allocation after:
 - A. Each region has performed all evaluations, as prescribed in its regional transmission planning process, necessary for a project to be included in its regional transmission plan for purposes of cost allocation including any regional benefit-to-cost ratio calculations. Each region shall utilize the benefit calculation(s) as defined in such region's regional transmission planning process (for purposes of clarity, these benefits are not necessarily the same as the benefits determined pursuant to Section 4.2). Each region shall utilize the cost calculation(s) as defined in such region's regional

transmission planning process. The anticipated percentage allocation of costs of the interregional transmission project to each region shall be based upon the ratio of the region's benefits to the sum of the benefits, both as determined pursuant to Section 4.2, identified for both the SERTP and MISO.

- B. Each region has obtained all approvals, as prescribed in its regional process, necessary for a project to be included in the regional transmission plan for purposes of regional cost allocation.
- **4.5** Allocation of Costs Between the SERTP and MISO Regions: The cost of an interregional transmission project, selected for purposes of cost allocation in the regional transmission plans of both the SERTP and MISO, will be allocated as follows:
 - A. Each region will be allocated a portion of the interregional transmission project's costs in proportion to such region's benefit as calculated pursuant to Section 4.2 to the sum of the benefits identified for both the SERTP and MISO calculated pursuant to Section 4.2.
 - The benefits used for this determination shall be based upon the benefit calculation most recently performed pursuant to the method described in Section 4.2 before each region included the project in its regional transmission plan for purposes of cost allocation and as approved by each region.
 - B. Costs allocated to each region shall be further allocated within each region pursuant to the cost allocation methodology contained in its regional

transmission planning process.

- 4.6 Milestones of Required Steps Necessary to Maintain Status as Being Selected for Interregional Cost Allocation Purposes: Once selected in the respective regional transmission plans for purposes of cost allocation, the SERTP Sponsors that will be allocated costs of the transmission project, MISO, and the transmission developer(s) must mutually agree upon an acceptable development schedule including milestones by which the necessary steps to develop and construct the interregional transmission project must occur. These milestones may include (to the extent not already accomplished) obtaining all necessary rights of way and requisite environmental, state, and other governmental approvals and executing a mutually-agreed upon contract(s) between the applicable SERTP Sponsors, MISO and the transmission developer. If such critical steps are not met by the specified milestones and then afterwards maintained, then the Duke Transmission Provider and MISO may remove the transmission project from the selected category in the regional transmission plans for purposes of cost allocation.
- **4.7 Interregional Transmission Project Contractual Arrangements:** The contracts referenced in Section 4.6 will address terms and conditions associated with the development of the proposed interregional transmission project included in the regional transmission plans for purposes of cost allocation, including but not limited to:
 - (i) Engineering, procurement, construction, maintenance, and operation of the proposed transmission project, including coordination responsibilities of

the parties;

- (ii) Emergency restoration and repair;
- (iii) The specific financial terms and specific total amounts to be charged by the transmission developer of the transmission project to each beneficiary, as agreed to by the parties;
- (iv) Creditworthiness and project security requirements;
- (v) Milestone reporting, including schedule of projected expenditures;
- (vi) Reevaluation of the transmission project; and
- (vii) Non-performance or abandonment.
- **4.8 Removal from Regional Transmission Plans:** An interregional transmission project may be removed from the Duke Transmission Provider's or MISO's regional transmission plan(s) for Interregional CAP: (i) if the transmission developer fails to meet developmental milestones; (ii) pursuant to the reevaluation procedures specified in the respective regional transmission planning processes; or (iii) if the project is removed from one of the region's regional transmission plans pursuant to the requirements of its regional transmission planning process.
 - A. The Duke Transmission Provider shall notify MISO if an interregional transmission project or a portion thereof is likely to be, and/or is actually removed from its regional transmission plan.

5. Transparency

5.1 Stakeholders will have an opportunity to provide input and feedback within the respective regional transmission planning processes of the SERTP and MISO related to interregional transmission projects identified, analysis performed, and

any determination/results. Stakeholders may participate in either or both regions' regional transmission planning processes to provide their input and feedback regarding the interregional coordination between the SERTP and MISO.

- **5.2** At the fourth quarter SERTP Summit, or as necessary due to current activity of proposed interregional transmission projects, the Duke Transmission Provider will provide status updates of interregional activities including:
 - (i) Facilities to be evaluated;
 - (ii) Analysis performed; and
 - (iii) Determinations/results.
- 5.3 The Duke Transmission Provider will post a list on the Regional Planning Website of interregional transmission projects proposed for purposes of cost allocation in both the SERTP and MISO regions that are not eligible for consideration because they do not satisfy the regional project threshold criteria of one or both of the regions as well as post an explanation of the thresholds the proposed interregional projects failed to satisfy.

Record Content Description, Tariff Record Title, Record Version Number, Option Code: Attachment N-1 - PJM, Transmission Planning Process (SERTP-PJM Seam), 2.0.0, A Record Narative Name: Tariff Record ID: 176 Tariff Record Collation Value: 35553792 Tariff Record Parent Identifier: 8 Proposed Date: 2015-01-01 Priority Order: 150000000 Record Change Type: CHANGE Record Content Type: 1 Associated Filing Identifier:

ATTACHMENT N-1 - PJM

Interregional Transmission Coordination Between the SERTP and PJM Regions

The Duke Transmission Provider, through its regional transmission planning process,

coordinates with the PJM Interconnection, LLC ("PJM") as the transmission provider and planner for the PJM region to address transmission planning coordination issues related to interregional transmission projects. The interregional transmission coordination procedures include a detailed description of the process for coordination between public utility transmission providers in the SERTP and PJM to identify possible interregional transmission projects that could address transmission needs more efficiently or cost-effectively than transmission projects included in the respective regional transmission plans. The interregional transmission coordination procedures are hereby provided in this Attachment N-1 - PJM with additional materials provided on the Regional Planning website.

The Duke Transmission Provider and PJM shall:

- (1) Coordinate and share the results of the SERTP's and PJM's regional transmission plans to identify possible interregional transmission projects that could address transmission needs more efficiently or cost-effectively than separate regional transmission projects;
- Identify and jointly evaluate transmission projects that are proposed to be located in both transmission planning regions;
- (3) Exchange, at least annually, planning data and information; and
- (4) Maintain a website and e-mail list for the communication of information related to the coordinated planning process.

The Duke Transmission Provider and PJM developed a mutually agreeable method for allocating between the two transmission planning regions the costs of new interregional transmission projects that are located within both transmission planning regions. Such cost allocation method satisfies the six interregional cost allocation principles set forth in Order No. 1000 and are included in this Attachment N-1 - PJM.

For purposes of this Attachment N-1 - PJM, the SERTP's transmission planning process is the process described in Attachment N-1 of this Tariff; PJM's regional transmission planning process is the process described in Schedule 6 of PJM's OATT. References to the respective transmission planning processes in this Attachment N-1 - PJM are intended to identify the activities described in those tariff provisions. Likewise, references to the respective regional transmission plans in this Attachment N-1 - PJM are intended to identify, for PJM, the PJM Regional Transmission Expansion Plan ("RTEP"), as defined in applicable PJM documents and, for the Duke Transmission Provider, the SERTP regional transmission plan, which includes the Duke Transmission Provider's ten (10) year transmission expansion plan. Unless noted otherwise, Section references in this Attachment N-1 - PJM refer to Sections within this Attachment N-1 - PJM.

Nothing in this Attachment N-1 - PJM is intended to affect the terms of any bilateral planning or operating agreements between transmission owners and/or transmission service providers that exist as of the effective date of this Attachment N-1 - PJM or that are executed at some future date.

INTERREGIONAL TRANSMISSION PLANNING PRINCIPLES

Representatives of the SERTP and PJM will meet no less than once per year to facilitate the interregional coordination procedures described below (as applicable). Representatives of the SERTP and PJM may meet more frequently during the evaluation of project(s) proposed for purposes of interregional cost allocation between the SERTP and PJM. For purposes of this Attachment N-1 - PJM, an "interregional transmission project" means a facility or set of facilities that would be physically located in both the SERTP and PJM regions and would interconnect to transmission facilities in both the SERTP and PJM regions. The facilities to which the project is proposed to interconnect may be either existing transmission facilities or transmission projects included in the regional transmission plan that are currently under development.

1. Coordination

- **1.1 Review of Respective Regional Transmission Plans:** Biennially, the Duke Transmission Provider and PJM shall review each other's current regional transmission plan(s) and engage in the data exchange and joint evaluation described in Sections 2 and 3.
 - The review of each region's regional transmission plan(s), which plans include the transmission needs and planned upgrades of the transmission providers in each region, shall occur on a mutually agreeable timetable, taking into account each region's transmission planning process timeline.
- 1.2 Review of Proposed Interregional Transmission Projects: The Duke Transmission Provider and PJM will also coordinate with regard to the evaluation of interregional transmission projects identified by the Duke Transmission Provider and PJM as well as interregional transmission projects proposed for Interregional Cost Allocation Purposes ("Interregional CAP"), pursuant to Sections 3 and 5, below. Initial coordination activities regarding new interregional proposals will typically begin during the third calendar quarter. The Duke Transmission Provider and PJM will exchange status updates for new interregional transmission project proposals or proposals currently under consideration as needed. These status updates will generally include, if

applicable: (i) an update of the region's evaluation of the proposal; (ii) the latest calculation of Regional Benefits (as defined in Section 5.2); (iii) the anticipated timeline for future assessments; and (iv) reevaluations related to the proposal.

- **1.3 Coordination of Assumptions Used in Joint Evaluation:** The Duke Transmission Provider and PJM will coordinate assumptions used in joint evaluations, as necessary, which includes items such as:
 - o Expected timelines/milestones associated with the joint evaluation
 - Study assumptions
 - Regional benefit calculations.
- 1.4 Posting of Materials on Regional Planning Websites: The Duke Transmission Provider and PJM will coordinate with respect to the posting of materials related to the interregional coordination procedures described in this Attachment N-1 on each region's regional planning website.

2. Data Exchange

2.1 At least annually, the Duke Transmission Provider and PJM shall exchange power-flow models and associated data used in the regional transmission planning processes to develop their respective then-current regional transmission plan(s). This exchange will occur when such data is available in each of the transmission planning processes, typically during the first calendar quarter. Additional transmission-based models and data may be exchanged between the Duke Transmission Provider and PJM as necessary and if requested. For purposes of the interregional coordination activities outlined in this Attachment N-1 - PJM, only data and models used in the development of the Duke Transmission

Provider's and PJM's then-current regional transmission plans and used in their respective regional transmission planning processes will be exchanged. This data will be posted on the pertinent regional transmission planning process' websites, consistent with the posting requirements of the respective regional transmission planning processes, and is considered CEII. The Duke Transmission Provider shall notify PJM of such posting.

2.2 The SERTP regional transmission plans will be posted on the Regional Planning website pursuant to the Duke Transmission Provider's regional transmission planning process. The Duke Transmission Provider will also notify PJM of such posting so PJM may retrieve these transmission plans. PJM will exchange its then-current regional plan(s) in a similar manner according to its regional transmission planning process.

3. Joint Evaluation

3.1 Identification of Interregional Transmission Projects: The Duke Transmission Provider and PJM shall exchange planning models and data and current regional transmission plans as described in Section 2. The Duke Transmission Provider and PJM will review one another's then-current regional transmission plan(s) in accordance with the coordination procedures described in Section 1 and their respective regional transmission planning processes. If through this review, the Duke Transmission Provider and PJM identify a potential interregional transmission project that could be more efficient or cost effective than projects included in the respective regional plans, the Duke Transmission Provider and PJM will jointly evaluate the potential project pursuant to Section 3.3.

- **3.2** Identification of Interregional Transmission Projects by Stakeholders: Stakeholders may propose projects that may be more efficient or cost-effective than projects included in the Duke Transmission Provider's and PJM's regional transmission plans pursuant to the procedures in each region's regional transmission planning processes. The Duke Transmission Provider and PJM will evaluate interregional transmission projects proposed by stakeholders pursuant to Section 3.3.
- 3.3 Evaluation of Interregional Transmission Projects: The Duke Transmission Provider and PJM shall act through their respective regional transmission planning processes to evaluate potential interregional transmission projects and to determine whether the inclusion of any potential interregional transmission projects in each region's regional transmission plan would be more efficient or cost-effective than projects included in the respective then-current regional transmission plans. Such analysis shall be consistent with accepted planning practices of the respective regions and the methods utilized to produce each region's respective regional transmission plan(s). The Duke Transmission Provider will evaluate potential interregional transmission projects consistent with Sections 4, 5, and 20 of Attachment N-1. To the extent possible and as needed, assumptions and models will be coordinated between the Duke Transmission Provider and PJM, as described in Section 1. Data shall be exchanged to facilitate this evaluation using the procedures described in Section 2.

3.4 Evaluation of Interregional Transmission Projects Proposed for

Interregional Cost Allocation Purposes:

Interregional transmission projects proposed for Interregional CAP must be submitted in both the SERTP and PJM regional transmission planning processes. The project submittals must satisfy the applicable requirements for submittal of interregional transmission projects, including those in Sections 5.1(A) and 5.1(B). The submittals in the respective regional transmission planning processes must identify the project proposal as interregional in scope and identify SERTP and PJM as the regions in which the project is proposed to interconnect. The Duke Transmission Provider will determine whether the submittal for the proposed interregional transmission project satisfies all applicable requirements. Upon finding that the project submittal satisfies all such applicable requirements, the Duke Transmission Provider will notify PJM. Upon both regions so notifying one another that the project is eligible for consideration pursuant to their respective regional transmission planning processes, the Duke Transmission Provider and PJM will jointly evaluate the proposed interregional projects.

3.4.1 If an interregional transmission project is proposed in the SERTP and PJM for Interregional CAP, the initial evaluation of the project will typically begin during the third calendar quarter, with analysis conducted in the same manner as analysis of interregional projects identified pursuant to Sections 3.1 and 3.2. Further evaluation shall also be performed pursuant to this Section 3.4. Projects proposed for Interregional CAP shall also be subject to the requirements of Section 5.

3.4.2 Each region, acting through its regional transmission planning process,

will evaluate proposals to determine whether the interregional transmission project(s) proposed for Interregional CAP addresses transmission needs that are currently being addressed with projects in its regional transmission plan(s) and, if so, which projects in the regional transmission plan(s) could be displaced by the proposed project(s).

- **3.4.3** Based upon its evaluation, each region will quantify a Regional Benefit based upon the transmission costs that each region is projected to avoid due to its transmission projects being displaced by the proposed project. For purposes of this Attachment N-1 PJM, "Regional Benefit" means: (i) for the Duke Transmission Provider, the total avoided costs of projects included in the then-current regional transmission plan that would be displaced if the proposed interregional transmission project was included and (ii) for PJM, the total avoided costs of projects included in the then-current regional transmission project was included in the then-current regional transmission project was included and (ii) for PJM, the total avoided costs of projects included in the then-current regional transmission plan that would be displaced if the proposed interregional transmission project was included. The Regional Benefit is not necessarily the same as the benefits used for purposes of *regional* cost allocation.
- **3.5** Inclusion of Interregional Projects Proposed for Interregional CAP in Regional Transmission Plans: An interregional transmission project proposed for Interregional CAP in the SERTP and PJM will be included in the respective regional plans for purposes of cost allocation only after it has been selected by both the SERTP and PJM regional processes to be included in their respective regional plans for purposes of cost allocation.

- **3.5.1** To be selected in both the SERTP and PJM regional plans for purposes of cost allocation means that each region has performed all evaluations, as prescribed in its regional transmission planning processes, necessary for a project to be included in its regional transmission plans for purposes of cost allocation.
 - For the SERTP: All requisite approvals are obtained, as prescribed in the SERTP regional transmission planning process, necessary for a project to be included in the SERTP regional transmission plan for purposes of cost allocation. This includes any requisite regional benefit to cost ("BTC") ratio calculations performed pursuant to the respective regional transmission planning processes. For purposes of the SERTP, the anticipated allocation of costs of the interregional transmission project for use in the regional BTC ratio calculation shall be based upon the ratio of the SERTP's Regional Benefit to the sum of the Regional Benefits identified for both the SERTP and PJM; and
 - For PJM: All requisite approvals are obtained, as prescribed in the respective regional transmission planning processes, necessary for a project to be included in the regional transmission plans for purposes of cost allocation.
- 3.6 Removal from Regional Plans: An interregional transmission project may be removed from the SERTP's or PJM's regional plan for purposes of cost allocation:
 (i) if the developer fails to meet developmental milestones; (ii) pursuant to the

reevaluation procedures specified in the respective regional transmission planning processes; or (iii) if the project is removed from one of the region's regional transmission plan(s) pursuant to the requirements of its regional transmission planning process.

3.6.1 The Duke Transmission Provider shall notify PJM if an interregional project or a portion thereof is likely to be removed from its regional transmission plan.

4. Transparency

- **4.1** The Duke Transmission Provider shall post procedures for coordination and joint evaluation on the Regional Planning website.
- **4.2** Access to the data utilized will be made available through the Regional Planning website subject to the appropriate clearance, as applicable (such as CEII and confidential non-CEII). Both planning regions will make available, on their respective regional websites, links to where stakeholders can register (if applicable/available) for the stakeholder committees or distribution lists of the other planning region.
- **4.3** At the fourth quarter SERTP Summit, or as necessary due to current activity of proposed interregional transmission projects, the SERTP will provide status updates of interregional activities including:
 - Facilities to be evaluated
 - Analysis performed
 - o Determinations/results.
- 4.4 Stakeholders will have an opportunity to provide input and feedback within the

respective regional planning processes of SERTP and PJM related to interregional facilities identified, analysis performed, and any determination/results.

Stakeholders may participate in either or both regions' regional planning processes to provide their input and feedback regarding the interregional coordination between the SERTP and PJM.

4.5 The Duke Transmission Provider will post a list on the Regional Planning Website of interregional transmission projects proposed for purposes of cost allocation in both the SERTP and PJM that are not eligible for consideration because they do not satisfy the regional project threshold criteria of one or both of the regions as well as post an explanation of the thresholds the proposed interregional project failed to satisfy.

5. Cost Allocation

- **5.1 Proposal of Interregional Transmission Projects for Interregional CAP:** For an interregional transmission project to be eligible for Interregional CAP within the SERTP and PJM regions, all of the following criteria must be met:
 - A. The interregional transmission project must be interregional in nature, which requires that it must:
 - Be physically located in both the SERTP region and the PJM region;
 - Interconnect to transmission facilities in both the SERTP and PJM regions. The facilities to which the project is proposed to interconnect may be either existing facilities or transmission projects included in the regional transmission plan that are currently under development; and

- Meet the threshold criteria for transmission projects potentially eligible to be included in the regional transmission plans for purposes of cost allocation in both the SERTP and PJM regions, pursuant to their respective regional transmission planning processes.
- B. The interregional transmission project must be proposed for purposes of cost allocation in both the SERTP and PJM regions.
 - The transmission developer and project submittal must satisfy all criteria specified in the respective regional transmission processes; and
 - The proposal should be submitted in the timeframes outlined in the respective regional transmission planning processes.
- C. The interregional transmission project must be selected in the regional transmission plans of both the SERTP and PJM regions.
 - The costs of the interregional transmission project eligible for interregional cost allocation shall only be allocated to a region if that region has selected the interregional transmission project in its regional transmission plan for purposes of cost allocation; and
 - No cost shall be allocated to a region that has not selected the interregional transmission project in its regional transmission plan for purposes of cost allocation.
- 5.2 Allocation of Costs for Interregional Transmission Projects Between the SERTP and PJM Regions: The cost of an interregional transmission project selected for purposes of cost allocation in the regional transmission plans of both

the SERTP and PJM regions shall be allocated for Interregional CAP to those regions as provided below:

- The share of the costs of an interregional transmission project allocated to A. a region will be determined by the ratio of the present value(s) of the estimated costs of such region's displaced regional transmission project(s) to the total of the present values of the estimated costs of the displaced regional transmission projects in all regions that have selected the interregional transmission project in their regional transmission plans for purposes of cost allocation. The present values used in the cost allocation shall be based on a common date, comparable cost components, and the latest cost estimates used in the determination to include the interregional transmission project in the respective regional plans for purposes of cost allocation. The applicable discount rate(s) used for the SERTP region for interregional cost allocation purposes will be based upon the after-tax weighted average cost of capital of the SERTP transmission owners whose projects would be displaced by the proposed interregional transmission project. The applicable discount rate for the PJM region shall be the discount rate included in the assumptions that are reviewed with the PJM Board of Managers each year for use in the economic planning process.
- B. When all or a portion of an interregional transmission project is to be located within a region in which there is no displaced regional transmission project, such region may, at its sole discretion, select the interregional transmission project for inclusion in its regional transmission

plan; provided, however, that no portion of the costs of the interregional transmission project shall be allocated to such region pursuant to Section 5.2.A.

- C. Nothing in this Section 5 shall govern the further allocation of costs allocated to a region pursuant to this Section 5.2 within such region.
- D. The following example illustrates the cost allocation provisions in Section 5.2.A:
 - Regions A and B, through the joint evaluation process prescribed in Section 3.4 of this Attachment N-1 - PJM have included Transmission Project Z in their respective regional plans for purposes of cost allocation. Transmission Project Z was determined to address both regions' needs more efficiently or cost effectively than Transmission Project X in Region A and Transmission Project Y in Region B.
 - The estimated cost of Transmission Projects X and Y are Cost (X) and Cost (Y) respectively. As described in Section 5.2.A, these costs shall be based upon common cost components.
 - The number of years from the common present value date to the year associated with the cost estimates of Transmission Projects X and Y are N(X) and N(Y) respectively.
 - \circ Recognizing that the regions may have different discount rates, for purposes of this example D_A is the discount rate used for Transmission Project X and D_B is the discount rate used for

Transmission Project Y.

- Based on the foregoing assumptions and the allocation of costs based upon displaced regional transmission projects as prescribed in Section 5.2.A, the following illustrative formulas would be used:
 - Present Value of Cost (X) = PV Cost (X) = Cost (X) / $(1+D_A)^{N(X)}$
 - Present Value of Cost (Y) = PV Cost (Y) = Cost (Y) / $(1+D_B)^{N(Y)}$
 - Cost Allocation to Region A = PV Cost (X) / [PV Cost (X) +
 PV Cost (Y)]
 - Cost Allocation to Region B = PV Cost (Y) / [PV Cost (X) + PV Cost (Y)]
- Applying the above formulas, if:
 - Cost (X) = 60 Million and N(X) = 8.25 years
 - Cost (Y) = \$40 Million and N(Y) = 4.50 years
 - $D_A = 7.5\%$ per year
 - $D_B = 7.4\%$ per year
- o Then:
 - PV Cost (X) = $\frac{60}{(1+0.075)8.25} = 33.0$ Million
 - PV Cost (Y) = 40/(1+0.074)4.50 = 29.0. Million
 - Cost Allocation to Region A = 33.0 / (33.0 + 29.0) = 53.2% of the cost of Transmission Project Z
 - Cost Allocation to Region B = 29.0 / (33.0 + 29.0) = 46.8% of

the cost of Transmission Project Z

- **5.3** Merchant Transmission and Transmission Owner Projects: Nothing in this Section 5 shall preclude the development of interregional transmission projects that are funded by merchant transmission developers or by individual transmission owners.
- 5.4 Exclusivity with Respect to Interregional Transmission Projects Selected for Interregional CAP: The following provisions shall apply regarding other cost allocation arrangements:
 - A. Except as provided in Section 5.4.B, the provisions in this Section 5 are the exclusive means by which any costs of an interregional transmission project selected for Interregional CAP between the SERTP and PJM regions may be allocated between or among those regions.
 - B. A transmission owner(s) or transmission developer(s) may propose to fund or allocate, on a voluntary basis, the cost of an interregional transmission project selected for Interregional CAP using an allocation other than the allocation that results from the methodology set forth in Section 5.2, provided that, should the allocation of cost of such interregional transmission project be subject to the Federal Energy Regulatory Commission's ("FERC") jurisdiction, such allocation proposal is accepted for filing by FERC in accordance with the filing rights with respect to cost allocation set forth in Section 5.5 of this Attachment N-1 - PJM and provided further that no allocation shall be made to any region that has not agreed to that allocation.

- 5.5 Section 205 Filing Rights with Respect to Interregional Transmission Projects Selected for Interregional CAP: Solely with respect to interregional transmission projects evaluated under this Attachment N-1 - PJM and selected by the SERTP and PJM regional transmission planning processes for purposes of Interregional CAP, the following provisions shall apply:
 - A. Except as provided in Sections 5.4 and 5.5.B of this Attachment N-1 -PJM, nothing in this Section 5 will convey, expand, limit or otherwise alter any rights of the transmission owners, transmission developers or other market participants to submit filings under Section 205 of the Federal Power Act ("FPA") regarding cost allocation or any other matter.
 - B. The cost allocation provisions in this Section 5 shall not be modified under Section 205 of the FPA without the mutual consent of the holders of the FPA Section 205 rights with respect to interregional cost allocation in the SERTP and PJM regions.
- 5.6 Consequences to Other Regions from Interregional Transmission Projects: Except as provided in this Section 5, or in other documents, agreements or tariffs on file with FERC, neither the SERTP region nor the PJM region shall be responsible for compensating another planning region for required upgrades or for any other consequences in another planning region associated with interregional transmission projects identified pursuant to this Attachment N-1 – PJM.

20151021-5065 FERC PDF (Unofficial) 10/21/2015 10:23:55 AM
Document Content(s)
Transmittal Order 1000 PJM Seam (Final 10.21-2015).PDF
Attachment N-1 PJM Clean Tariff.PDF6-23
Attachment N-1 PJM Redline Tariff.PDF24-41
Attachment N-1 MISO Clean Tariff.PDF42-55
Attachment N-1 MISO Redline Tariff.PDF
FERC GENERATED TARIFF FILING.RTF