

**BEFORE THE  
ARKANSAS PUBLIC SERVICE COMMISSION**

|  |   |                            |
|--|---|----------------------------|
| <b>IN THE MATTER OF THE APPLICATION OF</b>     | ) |                            |
| <b>SOUTHWESTERN ELECTRIC POWER COMPANY</b>     | ) |                            |
| <b>FOR A CERTIFICATE OF ENVIRONMENTAL</b>      | ) |                            |
| <b>COMPATIBILITY AND PUBLIC NEED FOR THE</b>   | ) | <b>DOCKET NO: 13-041-U</b> |
| <b>CONSTRUCTION, OWNERSHIP, OPERATION</b>      | ) |                            |
| <b>AND MAINTENANCE OF THE PROPOSED 345 KV</b>  | ) |                            |
| <b>TRANSMISSION LINE BETWEEN THE SHIPE</b>     | ) |                            |
| <b>ROAD STATION AND THE PROPOSED KINGS</b>     | ) |                            |
| <b>RIVER STATION AND ASSOCIATED FACILITIES</b> | ) |                            |
| <b>TO BE LOCATED IN BENTON, CARROLL AND/OR</b> | ) |                            |
| <b>MADISON AND WASHINGTON COUNTIES,</b>        | ) |                            |
| <b>ARKANSAS</b>                                | ) |                            |

**Reply Brief of Southwest Power Pool, Inc.**

COMES NOW Southwest Power Pool, Inc. (“SPP”) and submits its Reply Brief in accordance with Order No. 27 from the Arkansas Public Service Commission (“APSC” or “Commission”). On October 1, 2013, SPP submitted a Post-Hearing Brief addressing the issue of the need for the Shipe Road to Kings River 345 kV transmission line and Kings River substation (the “Project”) proposed by SWEPCO in its April 3, 2013 Application for a Certificate of Environmental Compatibility and Public Need (“CECPN”) (the “Application”).<sup>1</sup> Post-hearing briefs were also filed in the docket by SWEPCO, Save the Ozarks (“STO”), the City of Garfield, Arkansas, and B. Michael and Lori L. Bennett (“Bennett Intervenors”).

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<sup>1</sup> Application of Southwestern Electric Power Company for a Certificate of Environmental Compatibility and Public Need for the Construction, Ownership, Operation and Maintenance of the Proposed 345 kV Transmission Line between the Ship Road Station and the Proposed Kings River Station and Associated Facilities to be Located in Benton, Carroll and/or Madison and Washington Counties, Arkansas, dated April 3, 2013, Docket No. 13-041-U

**I. As the Regional Transmission Organization and Planning Authority, SPP is responsible for transmission expansion in its region.**

SPP is a Federal Energy Regulatory Commission (“FERC”) approved Regional Transmission Organization (“RTO”).<sup>2</sup> In FERC Order No. 2000, FERC set forth the minimum functions that an RTO must provide.<sup>3</sup> One such function is “Regional Planning and Expansion.” FERC specifically determined in Order No. 2000 that the RTO “must have ultimate responsibility for both transmission planning and expansion within its region that will enable it to provide efficient, reliable and non-discriminatory service.”<sup>4</sup> Order No. 2000 also determined that RTOs should be given “considerable flexibility in designing a planning and expansion process that works best for its region.”<sup>5</sup>

**A. The SPP Transmission Planning Process is outlined in SPP’s FERC-approved Open Access Transmission Tariff.**

SPP’s transmission planning process is outlined in Attachment O to the SPP Open Access Transmission Tariff (“Tariff”).<sup>6</sup> In accordance with Attachment O, SPP’s transmission planning process produces a comprehensive regional plan called the SPP Transmission Expansion Plan (“STEP”) that includes transmission expansion projects sourcing from any of the following: 1) transmission service requests; 2) generator interconnection service requests, 3) integrated

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<sup>2</sup> *Sw. Power Pool, Inc.*, 109 FERC ¶ 61,009 (2004), *order on reh’g*, 110 FERC ¶ 61,137 (2005).

<sup>3</sup> Regional Transmission Organizations, Order No. 2000, 65 FR 810 (January 6, 2000), FERC Stats. & Regs. ¶ 31,089 (1999) (“Order No. 2000”).

<sup>4</sup> *See* Order No. 2000 at 485

<sup>5</sup> *Id.* at 486.

<sup>6</sup> Southwest Power Pool, Inc., FERC Electric Tariff, Sixth Revised Volume No. 1.

transmission planning process, 4) balanced portfolio process, 5) high priority study process; and 6) requests for sponsored upgrades. The STEP gives a twenty year projection of transmission changes in the SPP region and is presented to the SPP Board of Directors annually.

During the SPP transmission planning process, SPP performs reliability assessments of the transmission system for its region and works with its stakeholders to identify solutions. Attachment O, Section III.8(b) of the Tariff requires that during the transmission planning process for all potential solutions provided by the stakeholders, SPP “shall determine if there is a more comprehensive regional solution to address the reliability and economic needs identified in the assessment.”<sup>7</sup> As the RTO, SPP is responsible for preparing long-range plans that provide a road map for future transmission reinforcements that address a wide range of needs within its region. This requires that SPP’s transmission planning process be regionally focused, rather than locally focused. SPP’s current planning process is designed such that the long-term vision for the region is determined and then utilized to inform SPP’s shorter-term plans. The process thus ensures that the transmission grid is developed not only to ensure reliability but also to ensure that it is developed in a way that yields greater levels of economic, environmental, and public policy benefits. Should SPP fail in this obligation, it would be more likely to develop solutions that work only for a short period of time but soon thereafter would require modification or replacement. Over the long run, reliance on multiple short-term solutions is inevitably more costly than implementing the best, long-term solutions, which provide both immediate and long-term benefits.

**B. The Commission Approved SWEPCO as a Member of SPP.**

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<sup>7</sup> See Tariff at Attachment O, Section III.8(b).

On August 10, 2006, in Docket No. 04-137-U, the Commission authorized the transfer of functional control of SWEPCO's transmission facilities to SPP.<sup>8</sup> Thereafter, SPP became responsible for directing SWEPCO's transmission construction under the SPP Tariff. In the Commission's August 10, 2006 Order, the Commission recognized the benefits of SPP's regional approach to transmission planning. The Commission recognized that the RTO concept would help "achieve one of the Commission's goals: vigorous wholesale generation competition throughout the region in which all Arkansas utilities can feasibly shop."<sup>9</sup> The Commission further recognized that for

[w]holesale generation competition, to become vigorous throughout the region, requires adequate transmission capacity and nondiscriminatory transmission service across that same region. An RTO, operating transmission independently across the regional market, is an appropriate institution for providing such service and for planning a transmission system that is interconnected and robust enough to facilitate across a broader array of regional resource options.<sup>10</sup>

**C. SPP is required to comply with North American Electric Reliability Corporation Reliability Standards.**

The North American Electric Reliability Corporation ("NERC") has a mission to ensure the reliability of the Bulk-Power System in North America. NERC's Reliability Standards define the reliability requirements for planning and operating that system. SPP has a long-standing relationship with NERC as SPP was a founding member of NERC in 1968. SPP has an extensive history of operating in accordance with NERC's mandatory Reliability Standards and the

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<sup>8</sup> See Order No. 6 issued In the Matter of the Application of Southwest Power Pool, Inc. for a Certificate of Public Convenience and Necessity for the Limited Purpose of Managing and Coordinating the Use of Certain Facilities Located within the State of Arkansas, dated August 10, 2006, Docket No. 04-137-U ("Order No. 6").

<sup>9</sup> See Order No. 6, page 22.

<sup>10</sup> See *id.*, pages 22-23.

voluntary operating and planning guidelines that preceded these standards. SPP understands well what it takes to plan for and maintain reliable operations of the Bulk-Power System within its region. SPP has significant regional reliability planning and operating experience and an unparalleled understanding of the SPP region that should not be overlooked. Today, SPP is registered with NERC as an Interchange Authority, Planning Authority, Reliability Coordinator, Reserve Sharing Group, Transmission Planner, and Transmission Service Provider. SPP must comply with all NERC Reliability Standards applicable to these functions, which define the reliability requirements for planning and operating North America's Bulk-Power System. SPP is audited at least every three years by the SERC Reliability Corporation to ensure compliance with the applicable standards. SPP is at risk for a fine of up to \$1 million per day for non-compliance with NERC Reliability Standards. Mandating compliance with the reliability standards is NERC's way of ensuring reliability across the grid.

As the FERC-approved RTO and NERC Planning Authority for the region, SPP is in the best position to understand and accurately evaluate the needs of the region and the areas within its region. SPP adheres to its FERC-approved strategy of developing robust solutions to meet the long-term needs of the regional system. SPP is independent and plans for the needs of the reliability of the transmission system and not for the exclusive benefit of any utility company.

**II. The need for the Project has been clearly demonstrated in this proceeding.**

Contrary to the Bennett Intervenors' and STO's assertions, SWEPCO and SPP have demonstrated that the Project proposed in this proceeding continues to be needed in order to

alleviate a number of reliability risks and meet minimum reliability requirements in Benton and Carroll Counties, Arkansas.<sup>11</sup>

**A. The Ozark Transmission Study and 2007 STEP identified the need for the Project.**

The Project was originally identified by SPP in the Ozark Transmission Study and the 2007 STEP as necessary to meet reliability requirements in the Northwest Arkansas and surrounding areas. SPP's Ozark Transmission Study found that without 345 kV transmission expansion, numerous voltage violations and overloaded lines would occur in Northwest Arkansas and surrounding areas under a range of studied conditions. The 2007 STEP identified reliability problems in Northwest Arkansas that required a transmission solution in 2016 and identified the need for a new 345 kV transmission line from the Flint Creek generation facility to Shipe Road in Benton County, Arkansas to the area near the existing Osage Creek Station in Carroll County, Arkansas. SPP issued a Notification to Construct ("NTC") on February 13, 2008 directing SWEPCO to construct the Project with an in-service date of June 2016.

**B. SPP's 2013 re-evaluation confirmed the need for the Project.**

In June 2013, SPP performed a re-evaluation of the Project.<sup>12</sup> The re-evaluation was not a replication of the Ozark Transmission Study. Rather, the re-evaluation was done for the purpose of confirming that the assumptions in the Ozark Transmission Study and the 2007 STEP had not changed significantly enough to impact the need for the Project. The re-evaluation confirmed

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<sup>11</sup> Hearing Transcript, pages 289-290; 1833.

<sup>12</sup> Described in the Direct Testimony of Lanny Nickell, pages 11-15.

that that the assumptions and original conclusions of the Ozark Transmission Study and 2007 STEP were still on point and that the Project is still needed to ensure system reliability.

Specifically, the 2013 re-evaluation showed that the Shipe Road-Kings River 345 kV line will significantly reduce, by more than half, high post-contingency (N-1) loadings on the Avoca-East Rogers 161 kV and the Beaver Dam-Eureka Springs 161 kV lines that would otherwise exist during summer peak conditions with high output from hydro generators in the area. The re-evaluation also showed that during low-hydro system conditions, numerous first contingency overloads and low voltages would be relieved by the Project. Finally, the re-evaluation showed that the Project will relieve numerous overloads and low voltages that could otherwise exist during an event involving a simultaneous outage of two transmission elements (N-2) as well as an event involving an outage of a transmission facility and a generation facility (N-1, G-1). Some of these overloads are significant enough that even if only one of the paired contingencies occurred, SPP would have to be prepared to perform proactive load shedding to protect against uncontrolled loss of load that could result from the remaining subsequent contingency. These results demonstrate that the Project provides considerable needed reliability improvements and benefits under a number of studied scenarios. The Project also allows SPP to comply with mandatory NERC Transmission Planning (“TPL”) Reliability Standards. In addition, SPP’s recent transmission service evaluations demonstrated that the Project is needed to relieve overloaded facilities resulting from transmission service requests submitted in SPP’s long-term transmission service process.

**C. The Bennett Intervenors' and STO's allegations about the need for the Project are simply incorrect.**

**1. The need for the Project has been re-visited.**

The Bennett Intervenors and STO allege that the need for the Project has not been revisited since 2007. This is simply not the case, ignores the facts, and demonstrates a lack of familiarity with the SPP transmission planning processes. The Project has been included in each annual STEP subsequent to the 2007 STEP. Mr. Nickell testified that during the annual SPP transmission planning process, the future needs of the system are annually evaluated with new projects added to address the changing needs and existing projects removed if they are no longer necessary.<sup>13</sup> If the SPP transmission planning process, or the 2013 re-evaluation, demonstrated that the need for the project had changed, SPP would have either withdrawn the NTC or would have initiated a study to look further into the issue. Mr. Nickell testified that since 2007, SPP has withdrawn 186 NTCs.<sup>14</sup> Clearly, SPP has no interest in its members building transmission that is not needed.

**2. The results of the Ozark Transmission Study and 2007 STEP remain valid.**

The Bennett Intervenors and STO also allege that the Ozark Transmission Study and the 2007 STEP are outdated and should not be relied upon. While these studies were performed in 2006 and 2007, Mr. Hassink, witness for SWEPCO, testified that “the generation and transmission infrastructure for North Arkansas and Southern Missouri has not changed since 2007, other than a pair of local upgrades.” Further, “[t]here have been no new lines constructed

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<sup>13</sup> Hearing Transcript, pages 1781-1782.

<sup>14</sup> Hearing Transcript, pages 1781-1782.

into or through the area, and there have been no generation additions. While projections of load have changed during this time period, load has continued to grow. As such, the fundamental assumptions underlying both the [Ozark Transmission Study and 2007 STEP] remain sound.”<sup>15</sup> The Ozark Transmission Study contemplated a 2.6 percent load growth for the ten years between 2008 and 2017. For the 2013 re-evaluation, SPP used 2.2 percent load growth.<sup>16</sup> While the load growth percentage has changed since the Ozark Transmission Study and 2007 STEP, “it’s not a significant enough deviation” to negate the results of those studies.<sup>17</sup> In addition, subsequent annual STEPs have retained the Project because it continues to be needed for reliability and to relieve congestion and overloaded transmission facilities. As noted above, if SPP had determined that the Project was no longer needed, SPP would have modified or withdrawn the NTC.

**3. Although SPP is regionally focused as the RTO, the Project is also needed to mitigate local reliability risks.**

Bennett Intervenors state that “[t]he current project’s need should be assessed in terms of the communities in Benton and Carroll county that are impacted by the project, not in terms of some long range regional plan of SPP.”<sup>18</sup> First, the Project is needed to mitigate local reliability risks. The Bennett Intervenors overlook the testimony from Mr. Nickell regarding the reliability risks in Benton and Carroll Counties and surrounding areas.<sup>19</sup> Mr. Nickell included a contour map to his Surrebuttal Testimony illustrating the reliability risks present in Northwest Arkansas

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<sup>15</sup> Rebuttal Testimony of Joseph Paul Hassink, page 5.

<sup>16</sup> Hearing Transcript, page 1780.

<sup>17</sup> Hearing Transcript, page 1781.

<sup>18</sup> Bennett Intervenors Brief, page 4.

<sup>19</sup> Surrebuttal Testimony of Lanny Nickell, pages 4-5; Hearing Transcript, pages 1882-1884.

that the Project will mitigate.<sup>20</sup> Mr. Nickell also testified about the benefits the Project will provide to Benton and Carroll Counties, and Northwest Arkansas.<sup>21</sup> In summary, the benefits of the project include mitigation of numerous local reliability risks such as the reduced likelihood of cascading outages, which improves SPP's ability to keep the lights on.<sup>22</sup>

Second, as an RTO, SPP is required to have a regional focus and to develop a long-range regional plan pursuant to its Tariff. SPP's current planning approach recognizes the multi-value benefits of appropriately incorporating extra-high voltage ("EHV") facilities into the transmission grid to create an electric system capable of delivering regional benefits while also providing local benefits and serving local needs. SPP's FERC-approved planning process indicates that a 345 kV line is the best robust solution to serve the long-term need for the area. Knowing this, it would not be prudent to continue the incremental development of the existing 161 kV system which would only provide short-term solutions that would have to soon be replaced and/or expanded resulting in a larger cumulative investment over the same time frame.

In 2009, SPP's Synergistic Planning Project Team ("SPPT") proposed in its report ("SPPT Report")<sup>23</sup> "that a robust transmission system must be both large in scale and in geography." The SPPT was comprised of State Commissioners, SPP member utilities representing generation, load-serving, and transmission owning interests and a corporate financing company. The SPPT concluded "that a system that is large in scale include EHV transmission lines that would include 345, 500, or 765-kV voltage lines" and recommended "an

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<sup>20</sup> Surrebuttal Testimony of Lanny Nickell, Attachment 2.

<sup>21</sup> Hearing Transcript, pages 1882-1884.

<sup>22</sup> Surrebuttal Testimony of Lanny Nickell, pages 9-10; Hearing Transcript, pages 1844-1846.

<sup>23</sup> The SPPT Report may be viewed at: <http://www.spp.org/publications/SPPT%20Report%20Version%20v6-1.pdf>.

EHV system that is large in geography that connects the eastern and western areas of SPP's footprint, provides flexibility for future generation interconnections, and anticipates expansion of RTO membership."<sup>24</sup> It clearly recognized the regional value and multi-purpose benefits of EHV transmission expansion as it exhorted SPP to plan for and construct a robust transmission system that would provide both short-term and long-term needs.

Although concluded before the SPPT report was issued, the 2007 determination that the Project was the appropriate and best solution for the need identified was well in line with the strategic direction from the SPPT and the policy reasons that support it. SPP's 2013 re-evaluation further substantiates that the Project continues to be needed and is in fact the best project to meet the long-term needs of the area.

**4. The load growth for the area supports the need for the project.**

STO and the Bennett Intervenors attempt to cast doubt on the forecasted load growth rate used in the Ozarks Transmission Study and 2007 STEP. The Ozark Transmission Study contemplated a 2.6 percent load growth for the ten years between 2008 and 2017. Mr. Bittle, witness for Arkansas Electric Cooperative Corporation ("AECC"), described in his Direct Testimony energy and peak demand growth observations for the Osage Creek substation over the period of 2002 to 2012. He observed that the energy usage at Osage Creek over that period grew at an average annual compound rate of 1.24% per year and that peak demand grew at an average annual compound rate of 2.23% per year over the same period.<sup>25</sup> Although Mr. Bittle did not provide a forecasted growth rate for the load at Osage Creek, he did testify that energy efficiency

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<sup>24</sup> See SPPT Report at footnote 2.

<sup>25</sup> Direct Testimony of Ricky Bittle, pages 7-8.

programs will not slow the rate of load growth at that location. Based on SPP's re-evaluation, this kind of growth supports the need for the Project.

Likewise, Mr. Hassink testified in his Rebuttal Testimony, that the annual compound growth rate in peak demand for the entire Northwest Arkansas area over the next 10 years is expected to be 2.2% per year.<sup>26</sup> This is in fact the same peak demand growth rate used for the Northwest Arkansas area in the 2013 re-evaluation performed by SPP.<sup>27</sup> SPP depends on its members to provide information, such as load growth rate, for the SPP transmission planning process. Neither SPP nor the Commission have any reason to doubt the information provided by AECC and SWEPCO.

#### **5. Low Hydro Conditions are not unusual for the area.**

STO states that of all the "overloads identified by SPP's study of June 2013, only five are in N-1 conditions, albeit under unusual low hydro conditions."<sup>28</sup> STO repeatedly misconstrues the low hydro conditions as "unusual." The Ozark Transmission Study and SPP's 2013 re-evaluation both included a low hydro analysis. NERC's TPL Reliability Standards require that the assessments by the Planning Authority "cover critical systems conditions" as deemed appropriate by the responsible entity.<sup>29</sup> In a request for an interpretation of R1.3.2 of TPL-002-0 and TPL-003-0, the Midcontinent Independent System Operator, Inc. ("MISO") asked NERC "if the TPL standards require that any specific dispatch be applied, other than one that is representative of supply of firm demand and transmission service commitments, in the modeling

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<sup>26</sup> Rebuttal Testimony of Joseph Paul Hassink, page 14.

<sup>27</sup> Direct Testimony of Lanny Nickell, pages 10-15.

<sup>28</sup> STO Brief, page 29.

<sup>29</sup> NERC Reliability Standards TPL-002-0, TPL-003-0 Requirement R1.3.2

of system contingencies specified in Table 1 in the TPL standards.”<sup>30</sup> MISO also asked “if a variety of possible dispatch patterns should be included in planning analyses, including a probabilistically based dispatch that is representative of generation deficiency scenarios, would it be an appropriate application of the TPL standard to apply the transmission contingency conditions in Category B of Table 1 to these possible dispatch pattern.”<sup>31</sup> The NERC response stated that the “selection of a credible generation dispatch for the modeling of critical system conditions is within the discretion of the Planning Authority” and that the Planning Authority “would formulate critical system conditions that may involve a range of critical generator unit outages as part of the possible generator dispatch scenarios.”<sup>32</sup>

As Mr. Hassink testified, “northern Arkansas has experienced the unavailability of area hydro generators an average of one out of five peak days over the past nine years. Almost a quarter of the time when demand is near its peak, the area is exposed to a critical shortage of this local generation resource.”<sup>33</sup> In addition, during the drought of 2012, “the average output of hydro generation was less than 250 MW, resulting in significant generation imports that demonstrate a local need.”<sup>34</sup> When hydro generation is unavailable, a single contingency will result in a line overload.<sup>35</sup> Routine load shed would be required to avoid the potential overload given the routine unavailability of hydro generation. Load shed is not a reasonable mitigation

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<sup>30</sup> NERC Reliability Standard TPL-002-0b, Appendix 1, which may be accessed at [http://www.nerc.com/layers/PrintStandard.aspx?standardnumber=TPL-002-0b&title=System Performance Following Loss of a Single Bulk Electric System Element \(Category B\)&jurisdiction=United%20States](http://www.nerc.com/layers/PrintStandard.aspx?standardnumber=TPL-002-0b&title=System%20Performance%20Following%20Loss%20of%20a%20Single%20Bulk%20Electric%20System%20Element%20(Category%20B)&jurisdiction=United%20States).

<sup>31</sup> *Id.*

<sup>32</sup> *Id.*

<sup>33</sup> Sur-surrebuttal Testimony of Joseph Paul Hassink, page 10.

<sup>34</sup> *Id.*

<sup>35</sup> Surrebuttal Testimony of Lanny Nickell, Attachment 1.

plan for an N-1 situation. The NERC TPL Reliability Standards require that the recent prevalence of low hydro dispatch during summer peak conditions in the Northwest Arkansas area compel SPP to consider it a critical system condition that must be modeled and assessed under contingency conditions. In addition, because of the prevalence of low hydro in the area, SPP's Board of Directors sensibly directed that SPP consider a low-hydro dispatch scenario for SPP's current transmission planning study, the ITP10.<sup>36</sup>

**6. SPP appropriately applied NERC Reliability Standards.**

In STO's discussion of the NERC reliability standards, STO points out that the Ozark Transmission Study, and the 2008, 2010, and 2012 STEP considered only N-1 contingencies and did not include N-2 contingency analysis. STO asserts that it is "only in SPP's June 2013 study is there concrete record of SPP applying criteria beyond N-1."<sup>37</sup> STO is correct that the Ozark Transmission Study and the 2008, 2010, and 2012 STEP considered only N-1. This is because SPP annually conducts a separate study that analyses contingency conditions beyond N-1, including N-2, in order to comply with NERC Reliability Standards. These analyses may result in additional transmission upgrades included in the STEP, depending on the severity of the results and availability of mitigation measures. Attachment O, Section II.1(h) provides that in accordance with its NERC reporting requirements, SPP shall publish its annual reliability report that shall include a list of the "regional upgrades required to maintain reliability in accordance with the NERC Reliability Standards and SPP Criteria."<sup>38</sup> These annual assessments are

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<sup>36</sup> Hearing Transcript, page 1789.

<sup>37</sup> STO Brief, page 27.

<sup>38</sup> See Tariff at Attachment O, Section II.1(h).

performed by SPP and approved by the SPP Transmission Working Group.<sup>39</sup> The 2013 re-evaluation was not meant to be a replication of the Ozark Transmission Study or the 2007 STEP. Rather, the re-evaluation was done for the purpose of confirming that the assumptions in the Ozark Transmission Study and the 2007 STEP had not changed significantly enough to impact the need for the Project.

STO asserts that “neither NERC nor SPP criteria require that the system be designed to N-2 criteria.”<sup>40</sup> STO’s repeated statements about N-2 issues are misleading. While SPP’s 2013 re-evaluation demonstrated that the Project will relieve numerous overloads and low voltages that could otherwise exist during an event involving a simultaneous outage of two transmission elements (N-2), nowhere in the testimony of Mr. Nickell does SPP represent that the NERC TPL Reliability Standards generally require transmission expansion for N-2 contingency violations. On the other hand, as Mr. Nickell testified, NERC’s TPL Reliability Standards do require transmission expansion solutions to resolve N-1 contingency reliability problems. SPP’s 2013 re-evaluation indicated several significant N-1 overloads, including one originally identified in SPP’s NTC. Low voltages during low hydro conditions were also identified. Furthermore, the Project will also mitigate several severe N-2 contingency overloads and low voltages that would have to otherwise be mitigated. As previously testified, some of these situations are so severe, that without the Project, proactive interruption of service to customers would likely be required as a mitigation plan. Based on these results, the issues identified in the NTC continue to exist,

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<sup>39</sup> SPP’s annual reliability reports, known as TPL Reports, can be found at <http://www.spp.org/section.asp?group=2204&pageID=27> and <http://www.spp.org/section.asp?group=131&pageID=27>.

<sup>40</sup> STO Brief, page 29.

the Project is still needed in 2016, and the Project provides extensive reliability benefits to Northwest Arkansas and surrounding areas.

STO's statements about the N-2 overloads on the Entergy 161 kV lines are also misleading and seek to confuse the issue. Whether or not Entergy identified a reliability concern in this area is not an issue in this proceeding. Entergy is not a part of the SPP Planning Authority area and has no FERC or NERC directed responsibility for reliability analyses and transmission improvements in the SPP region. The Planning Authority responsible for the Entergy region is responsible for performing the NERC reliability assessments for that region.

The Ozark Transmission Study and 2007 STEP clearly identified the need for the Project. SPP's 2013 re-evaluation further demonstrated that the need for the Project still exists. As testified to by SWEPCO and AECC, the load in Northwest Arkansas continues to grow, low hydro remains a valid critical system condition and not a contingency, and this project is needed to ensure that reliable electric service can continue to be provided to Northwest Arkansas and surrounding areas.

### **III. STO's analysis is flawed and narrowly focused**

The narrowly-focused and extremely limited analysis performed by Dr. Merrill on behalf of STO is flawed and should not be relied up by the Commission. Both SPP and SWEPCO have testified to the short-comings of his analysis.<sup>41</sup> Dr. Merrill conducted a limited and perfunctory analysis that did not fully analyze the impacts on the Northwest Arkansas area. Dr. Merrill limited his analysis to observing only the flows on the Beaver Dam-Eureka Springs 161 kV line and the East Rogers-Avoca 161 kV line during a single simulated outage of the Flint Creek-

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<sup>41</sup> Surrebuttal Testimony of Lanny Nickell, pages 13-19.

Brookline 345 kV line, the one reliability risk mentioned in the NTC. In other words, Dr. Merrill did not assess the reliability impacts on those lines or any other lines in the area by simulating other outages or combinations of outages that the Project might otherwise mitigate.

What Dr. Merrill failed to appreciate is that an NTC is not meant to serve as a comprehensive list of all the needs for a project, which are captured in SPP's transmission planning studies. He failed to enlarge his scope of analysis to the system conditions set forth in the Ozark Transmission Study and 2007 STEP plans. Dr. Merrill also failed to consider reasonably expected generation dispatch conditions, specifically that of the low hydro generation in the area. He studied a summer peak demand condition during a year prior to the year in which the project is needed. This short-sighted approach did not include any consideration of the long-range impacts for the area.

As an RTO and Planning Authority, SPP does not have the luxury of performing such a limited analysis and is not able to justify any action based on such a limited analysis. It is easy for Dr. Merrill and his client, STO, to criticize the project using his limited perfunctory analysis – he is not responsible to the rate-payers of Arkansas nor is he responsible for complying with a FERC-approved Tariff or NERC Reliability Standards. SPP cannot be as cavalier. Instead, SPP must fully evaluate the impacts on the SPP region and the entire Northwest Arkansas area in accordance with the SPP Tariff and NERC Reliability Standards. To understand fully and to ascertain the reliability needs of the area necessary to comply with NERC Reliability Standards, an appropriate analysis must review impacts of a broad set of contingencies on all elements in the area. These contingencies should be analyzed using models that include a long-term range of consumer demand and generation dispatch assumptions and conditions. Dr. Merrill's analysis reveals that he simply does not have experience planning for the SPP region nor an appreciation

for the conditions unique to the SPP region and the northwest Arkansas area. His perfunctory, incomplete assessment should not be substituted for the transmission planning experience of SPP. SPP cannot adopt his results to demonstrate that it has complied with its FERC-approved and NERC mandated planning requirements.

Dr. Merrill proposes “alternatives” to the Project.<sup>42</sup> As Mr. Hassink testified, “Dr. Merrill’s proposals are academic solutions that do not recognize the realities of operating a power system.”<sup>43</sup> Dr. Merrill’s Surrebuttal Testimony even suggests that one alternative to the project is “to shed load.” In other words, he is suggesting that loss of power is an acceptable solution. Although this may be acceptable to Dr. Merrill and STO, this is not acceptable to SPP and its members and would not withstand NERC review. This Project is needed to maintain the reliability of the transmission system.

#### **IV. Conclusion**

SPP’s transmission planning process and analyses that resulted in the identification of the Project are consistent with the duties of an RTO as required by FERC and the SPP Tariff as well as the duties of a Planning Authority required by NERC. As identified in the NTC and proposed in this Docket, the 345 kV transmission line continues to be needed in order to alleviate a number of reliability risks in Benton and Carroll Counties, Arkansas.<sup>44</sup> The proposed Shipe Road to Kings River 345 kV transmission line will alleviate potential overloads on the Beaver Dam to Eureka Springs line; potential overloads of the Flint Creek to Berryville line; the Flint

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<sup>42</sup> Direct Testimony of Hyde Merrill, pages 19-24.

<sup>43</sup> Sur-surrebuttal Testimony of Joseph Paul Hassink, page 16.

<sup>44</sup> Hearing Transcript, pages 1883-1884.

Creek to Brookline; and the outage of Blackberry to Jasper which includes a fairly significant overload.<sup>45</sup> In addition, low-hydro conditions during peak summer demand also necessitate the proposed 345 kV line. Based on its real-time operational experience, SPP determined that it was necessary to consider low hydro generation dispatch assumptions during summer peak demand conditions for planning purposes.<sup>46</sup> The Project provides considerable reliability improvements and benefits under a number of studied scenarios and allows SPP to comply with mandatory NERC TPL Reliability Standards. SWEPCO and SPP have adequately demonstrated the need for the Project in this proceeding. For all the reasons stated in the record and this post-hearing brief, the Commission should grant SWEPCO's Application.

Respectfully submitted,

Southwest Power Pool, Inc.

By:  \_\_\_\_\_

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<sup>45</sup> Hearing Transcript, pages 1883-1884; 1878; 367.

<sup>46</sup> Surrebuttal Testimony of Lanny Nickell, pages 19, 20-21.

**CERTIFICATE OF SERVICE**

I, Tessie Kentner, attorney of record for Southwest Power Pool, Inc., do hereby certify that I have, on this 16th day of October, 2013, duly served a true and correct copy of the above and foregoing pleading upon all parties of record by electronic mail.

  
Tessie Kentner