



**Southwest Power Pool  
ECONOMIC STUDIES WORKING GROUP /  
TRANSMISSION WORKING GROUP JOINT MEETING**

**October 1<sup>st</sup>, 2019**

**Net Conference Call**

**• Summary of Actions Taken •**

1. Approved Consent Agenda: October 1, 2019 Meeting Agenda & MDWG Scope
2. Approved 2019 ITP NTC Approvals of Consolidated Portfolio
3. Approved 2019 ITP Assessment Report
4. Approved RR 384: ITP Manual Revision Request
5. Approved RR 367: Resource Planning Load Forecasts



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**• M I N U T E S •**

**Agenda Item 1 – Administrative Items**

**Call to Order**

ESWG: Chair Alan Myers (ITC) called the meeting of the Economic Studies Working Group (ESWG) to order at 1:05 p.m.

There were 105 web conference participants, representing 13 of 16 ESWG members. (Attachment 1 – TWG ESWG 10 1 19 WebEx Attendance.xls)

Chair Travis Hyde, called the meeting of the Transmission Working Group (TWG) to order at 1:08 p.m. There were 21 TWG members represented (Attachment 01a, 01b – TWG ESWG 10 1 19 WebEx Attendance.xls):

**Organizational Roster**

**ESWG Members**

Alan Meyers (Chair), ITC  
Tim Owens (Vice Chair), NPPD  
Randy Collier, CUS  
Calvin Daniels, WFEC  
Zac Hager, OGE  
Jody Holland, GHP  
Jon Iverson, OPPD  
Gayle Nansel, WAPA

John Olsen, WERE and KCP&L, Evergy  
Companies  
Jeremy Severson, BEPC  
Anita Sharma, AEP  
Kurt Stradley, LES  
Al Tamimi, SUNC  
Michael Watt, OMPA  
Bennie Weeks, XCEL  
Warren Whitson, SPC

**TWG Members**

Travis Hyde (Chair), OGE  
Nathan McNeil (Vice Chair), MIDW  
Daniel Benedict, INDN  
Scott Benson, LES  
John Boshears, CUS  
Derek Brown, WERE and KCP&L, Evergy  
Companies  
Jarred Cooley, XCEL  
Clifford Franklin, SUNC  
Joe Fultz, GRDA  
James Ging, KPP  
Kalun Kelley, WFEC  
John Knofczynski, EREC  
Randy Lindstrom, NPPD

Jim McAvoy, OMPA  
Matthew McGee, AEP  
Shane McMinn, GSEC  
Nate Morris, EMDE  
Michael Mueller, AECC  
Gayle Nansel, WAPA  
John Payne, KEPC  
Chris Pink, TGST  
David Sargent, SWPA  
Jason Shook, GDS  
Joshua Verzal, OPPD  
Michael Wegner, ITC  
Phil Westby, BEPC  
Noman Williams, GHP

#### Proxies

Amber Greb (SPP) asked for any proxy statements; five proxies were identified. (Attachment 2 – Proxy Statements)

The following proxies were provided for all or portions of the meeting:

#### TWG:

- Jarred Cooley (SPS) identified Renee' Miranda (SPS) as his proxy
- Gayle Nansel (WAPA) identified Josie Daggett (WAPA) as her proxy for the first 15 minutes of the meeting

#### ESWG:

- John Olsen identified JP Meitner as his proxy
- Phil Westby identified Jeremy Severson as his proxy
- Tim Owens identified Randy Lindstrom as his proxy

Amber Greb, ESWG SPP Staff secretary, informed Alan that the group had a quorum.

Dee Edmondson, TWG SPP staff secretary, informed Travis that the group had a quorum.

#### Antitrust Guidelines

Mrs. Greb noted to the ESWG/TWG that the agenda for the meeting included Antitrust Guidelines and reminded the group that certain topics were not allowed for discussion during the meeting.

#### Meeting Materials Review

The group reviewed the meeting materials that were posted. There was no further discussion.

#### Consent Agenda (Action Item)

- I. Agenda Approval
- II. MDWG Scope

The October 1 ESWG/TWG meeting agenda and the MDWG scope were unanimously approved via the consent agenda.

#### **Agenda Item 2 – MDWG Scope Approval – Consent Agenda (Approval Item)**

Amber Greb, SPP staff, asked the TWG Members for a motion on the MDWG Scope Approval on the Consent Agenda for TWG only (Attachment 02 –MDWG Charter Revision.pptx, MDWG Charter Revision.docx). The TWG motion by Cliff Franklin (Sunflower Electric Power Corporation) seconded by Jason Shook (GDS Associates, Inc.) to approve the consent agenda. The motion passed unanimously.

#### **Agenda Item 3 – 2019 ITP NTC Approvals of Consolidated Portfolio (Approval Item)**

Kirk Hall, SPP staff, discussed the 2019 ITP NTC recommendations process and the project lead times. Kirk explained the goal for the groups was to approve the 2019 ITP NTC recommendations for the reliability, short circuit, and economic projects (Attachment 03, 2019 ITP NTC Recommendations.pptx).

**TWG Motion: The TWG motion by John Boshears (City Utilities of Springfield Missouri) seconded by Nate Morris (Empire District Electric Company) to endorse the following recommendation.**

Staff recommends the TWG/ESWG endorse the 2019 ITP portfolio NTC/NTC-C recommendations as presented. The motion passed with a vote of thirteen in favor, five opposing, and five abstaining.

The five opposing are Scott Benson (Lincoln Electric System), Renee' Miranda (Xcel Energy), Travis Hyde (OG&E), Kalun Kelley (Western Farmers Electric Cooperative), and Shane McMinn (Golden Spread Electric Cooperative).

The five abstaining (Cliff Franklin (Sunflower Electric Power Corporation), Josh Verzal (OPPD), Randy Lindstrom (Nebraska Public Power District), Michael Mueller (Arkansas Electric Cooperative Corporation), and Gayle Nansel (Western Area Power Administration).

**ESWG motion by Anita Sharma (AEP) seconded by Randy Collier (CUS) to endorse the following recommendation:**

Staff recommends the TWG/ESWG endorse the 2019 ITP portfolio NTC/NTC-C recommendations as presented. The motion passed with a vote of nine in favor, five opposing, and two abstaining.

The five opposing are Al Tamimi (Sunflower Electric Power Corporation), Bennie Weeks (Xcel Energy), Kurt Stradley (LES), Calvin Daniels (Western Farmers Electric Cooperative), and Zac Hager (OG&E).

The two abstaining are Gayle Nansel (Western Area Power Administration) and Randy Lindstrom (proxy for Tim Owens) (Nebraska Public Power District).

**Scott Benson**

"I opposed the TWG vote to endorse the 2019 ITP portfolio NTC/NTC-C recommendations. Even though I believe SPP staff adequately followed the process as laid out in the ITP governance, I still have concerns about the ultimate validity of the two large economic projects included:

- New Wolf Creek - Blackberry 345 kV Line & New Butler 138 kV Phase-Shifting Transformer.
- New Sooner – Wekiwa 345 kV Line and Sand Springs – Sheffield Steel 138 kV Terminal Upgrades.

From a cost standpoint, I believe these two projects represent about 96% of the total proposed portfolio of economic projects, and as established by SPP at the August joint ESWG/TWG meeting, in each case there existed a much lower cost option with a superior B/C ratio. I understand that our established ITP criteria would not rate these lower cost alternatives nearly as high, but I think that is an indicator that our current criteria needs to be revisited. I would have preferred to hold off on the NTC-Cs for these two large projects until after this ITP criteria review was completed, and then reevaluate them again in the next ITP one year later. Per the information provided in the 2019 ITP report, it also appears this one-year reevaluation could be accommodated without adjusting the 1/1/2026 need date of either project."

**Renee Miranda (proxy for Jarrod Cooley)**

"SPS's No voted was a result of the question presented to SPP on whether the projects in the proposed 2019 ITP consolidated portfolio solved all the Needs, and the No response provide by SPP. In addition, the two 345kV projects, when evaluated against the 2019 ITP consolidated portfolio projects receiving an NTC, make up 75% of the entire cost of the portfolio and 96% of the entire cost of NTC identified economic projects. During the discussion it was also mentioned that lower cost projects were submitted

that resolved the same Need but they were not selected, leading to the belief that the correct projects were not selected.”

### **Kalun Kelley**

“I agree with WFEC, OGE, and LES comments in regard to the consolidated portfolio. There are two 345 kV projects in the portfolio, \$250 Million, and I do not feel comfortable that just approving the process is adequate with these two projects listed in the portfolio.”

The ESWG approved the NTC/NTC-C recommendations with nine votes in favor, five opposing, and two abstaining. The five opposing are Al Tamimi (Sunflower Electric Power Corporation), Bennie Weeks (Xcel Energy), Kurt Stradley (LES), Calvin Daniels (Western Farmers Electric Cooperative), and Zac Hager (OG&E). The two abstaining are Gayle Nansel (Western Area Power Administration), Randy Lindstrom (proxy for Tim Owens) (Nebraska Public Power District).

### **Kurt Stradley**

“LES voted “No” on the SPP request for endorsement of the 2019 ITP NTC/NTC-C recommendations as presented on the October 1 ESWG/TWG conference call. LES feels that SPP staff adequately followed the ITP planning assessment process as specified in SPP OATT Attachment O, Section 111. We do have concerns about the validity of the two large economic projects which are listed below:

- New Wolf Creek - Blackberry 345 kV Line & New Butler 138 kV Phase-Shifting Transformer.
- New Sooner – Wekiwa 345 kV Line and Sand Springs – Sheffield Steel 138 kV Terminal Upgrades.

These two projects represent approximately \$249 million or 96% of the cost of the proposed portfolio of economic projects as presented at the August 13, 2019 joint ESWG/TWG meeting. In each instance these projects were compared to a much cheaper alternative which had a much higher B/C ratio. The consolidation calculations established for this ITP seems to favor the higher priced projects and would not rate the lower cost alternatives as high. LES thinks that the current consolidation methodology should be relooked at and reevaluated to make sure it is valid and thus postpone the NTC-Cs for the two projects mentioned until they are evaluated again in the next ITP in the coming year. This revaluation process looks like it could still be accomplished without adjusting the two project’s 1/1/2026 need date.”

### **Bennie Weeks**

“SPS’s No voted was a result of the question presented to SPP on whether the projects in the proposed 2019 ITP consolidated portfolio solved all the Needs, and the No response provide by SPP. In addition, the two 345kV projects, when evaluated against the 2019 ITP consolidated portfolio projects receiving an NTC, make up 75% of the entire cost of the portfolio and 96% of the entire cost of NTC identified economic projects. During the discussion it was also mentioned that lower cost projects were submitted that resolved the same Need but they were not selected, leading to the belief that the correct projects were not selected.”

### **Zac Hager**

“OG&E voted no for 2019 ITP portfolio NTC recommendations and the 2019 ITP report due to concerns on the process used to select the Wolf Creek – Black Berry 345 kV and Sooner – Wekiwa 345 kV lines. The ESWG established the process to score competing projects from each of the two futures during the scope and SPP followed that process. However, the scoring methodology and process inadvertently favored projects from a future that was designed to have more congestion, and therefore favored more expensive projects that would be required to solve the higher congestion future.

Projects selected for future 1 were based on the cost effectiveness of those projects and therefore realized higher benefit to cost ratios. Projects selected for future 2 were based on the highest net benefit produced by those projects. Since future 2 was designed to have more congestion, it is not surprising that those projects achieved higher total benefits from the more congested system but they also cost significantly more money to achieve those benefits. A major part of the evaluation criteria used to determine which project should be included in the final portfolio focuses on net benefit and therefore favors future 2 and the more expensive projects.

This selection process is new for SPP and the ESWG and now that the mechanics of the process are more visible, OG&E believes the evaluation criteria should be revised before selecting which of these types of projects should be included in the ITP portfolio. Additionally, the scoring process automatically awards points to projects if it is a "New EHV" line. All projects should stand on their own economics in the APC calculation and should not be rewarded with additional points simply because it is a new EHV line."

### **Calvin Daniels**

"The Economic Portfolio methodology has led to the mistaken choice of two expensive 345 kV projects. Those two projects cost a combined \$248,357,131 and are 96.5% of the cost of the projects in the Economic Portfolio. That's 72.4% of the cost of all the projects in the Reliability and Economic Portfolios. When this new methodology was adopted, it was clear that individual projects that were mistakenly approved could be canceled and the methodology changed to correct problems.

MOPC and the Board should vote this year to not issue NTCs for these two projects. These two projects won't have their calculated savings equal their cost until 2026, so 2026 is called the "need date". They don't have a reliability based "need date". These projects need to be reconsidered in the next ITP cycle, rather than rushing to construction. If approved in next year's ITP, 6 years would remain to complete the projects before their economic "need date". Each of our companies would allow ourselves the extra year to consider these projects before spending a quarter of a billion dollars on them. MOPC and/or the Board have the option to have these projects reconsidered per the Business Practice 7060, Section 3.1, or by just refusing to approve them this year.

These two projects are 'losers' in the Reference future and only big 'winners' in the Emerging Technologies (ET) future. Since the ET future has more generation, causing more congestion, these big, costly projects show big benefits in that future. However, in the Reference future, neither had high Net Benefits and their year 5 and 10 Benefit/Cost ratios (B/C) were less than 0.77. The methodology used has resulted in projects that cost more and have lower repayment security (in the form of lower B/C) for the Economic Portfolio.

A relevant side issue is the B/C information given for the projects that are By-way (< 300 kV). WFEC believes that the SPP Region should pay 100 % of the cost of all ITP developed economic projects because these economic projects are justified based on the Regional Benefits as measured against the total cost of the project. These By-way projects benefit the Region, but the Zone that is required to build them must pay 2/3 of that cost. The Region only pays 1/3 of that cost to build.

The average cost-weighted 40-year B/C for the two projects in the Reference case is 1.49 but the Byway projects is 29.35. By showing how certain it is that the Region will get repaid at least its cost of the By-way projects (29.35 B/C) it is easy to see how uncertain we are of getting the calculated benefits of those two projects that cost a quarter of a billion dollars."

### **Shane McMinn**

For Agenda Item 3 of the ESWG/TWG October 1, 2019 meeting, GSEC voted no (TWG) for the recommendation by staff to endorse the 2019 ITP Portfolio NTC/NTC-C as presented due to the results coming out of the New Wolf Creek-Blackberry 345kV line and the New Sooner-Wekiwa 345 kV line.

These two projects total \$250M in cost, or 96% of the total project cost, but does not attain over a 1.0 B/C ratio by Y10 in both futures, with a negative B/C ratio in F1 Y5 for the Sooner line. Since the projects do not attain at least a 1.0 B/C ratio by Y10, we vote no. There needs to be more assurance and confidence that spending \$250M will bring back a strong economic return by doing the projects than the results displayed.

#### **Agenda Item 4 – 2019 ITP Assessment Report (Approval Item)**

Juliano Freitas reviewed the 2019 ITP Assessment Report with the groups. Juliano covered the draft posted dates for the partial review and complete through the final assessments (Attachment 04 - 4. 2019 ITP Report.pptx). Juliano provided next steps for the final report and recommendation.

#### **The TWG motion by Derek Brown (Evergy) seconded by Michael Wegner (ITC Holdings) to approve the following recommendation:**

Staff recommends the TWG/ESWG approve and endorse the 2019 ITP Assessment Report as documentation of completion of the ITP planning assessment specified in SPP OATT Attachment O, Section III. The motion passed with two opposing (Travis Hyde - OG&E and Kalun Kelley - Western Farmers Electric Cooperative) and two abstaining (Cliff Franklin - Sunflower Electric Power Corporation and Josh Verzal - OPPD).

#### **The ESGW motion by Randy Collier (CUS) seconded by Warren Whitson (Southern Power) to approve the following recommendation:**

Staff recommends the TWG/ESWG approve and endorse the 2019 ITP Assessment Report as documentation of completion of the ITP planning assessment specified in SPP OATT Attachment O, Section III. The motion passed with two opposing (Calvin Daniels - WFEC and Zac Hager - OG&E) and one abstaining (AI Tamimi - Sunflower Electric Power Corporation).

#### **Kalun Kelley**

*"I agree with WFEC, OGE, and LES comments in regard to the consolidated portfolio. There are two 345 kV projects in the portfolio, \$250 Million, and I do not feel comfortable that just approving the process is adequate with these two projects listed in the portfolio.*

*Also, I approved of the complex and detailed report; however, I do not approve of the two 345 kV projects and need more assurance that all plausible upgrades have been exhausted. The process in determining these projects may need to be reevaluated.*

*Upgrades need to be pushed to the GIA's instead of our members paying for them (I agree with Randy's comments).*

*GI's know exactly how many MW's they can add without causing upgrades to our systems (EX: 120 MW's at Snyder Switch & 288 MW's at Dover Switch). Once our available capacity is taken and our members' loads continue to grow the burden than falls 'back' to our members to pay for the upgrades."*

**The ESGW approved the 2019 ITP report with two opposing (Calvin Daniels - WFEC and Zac Hager - OG&E) and one abstaining (AI Tamimi - Sunflower Electric Power Corporation).**

#### **Zac Hager**

*"OG&E voted no for 2019 ITP portfolio NTC recommendations and the 2019 ITP report due to concerns on the process used to select the Wolf Creek – Black Berry 345 kV and Sooner – Wekiwa 345 kV lines. The ESGW established the process to score competing projects from each of the two*

futures during the scope and SPP followed that process. However, the scoring methodology and process inadvertently favored projects from a future that was designed to have more congestion, and therefore favored more expensive projects that would be required to solve the higher congestion future.

Projects selected for future 1 were based on the cost effectiveness of those projects and therefore realized higher benefit to cost ratios. Projects selected for future 2 were based on the highest net benefit produced by those projects. Since future 2 was designed to have more congestion, it is not surprising that those projects achieved higher total benefits from the more congested system but they also cost significantly more money to achieve those benefits. A major part of the evaluation criteria used to determine which project should be included in the final portfolio focuses on net benefit and therefore favors future 2 and the more expensive projects.

This selection process is new for SPP and the ESWG and now that the mechanics of the process are more visible, OG&E believes the evaluation criteria should be revised before selecting which of these types of projects should be included in the ITP portfolio. Additionally, the scoring process automatically awards points to projects if it is a "New EHV" line. All projects should stand on their own economics in the APC calculation and should not be rewarded with additional points simply because it is a new EHV line."

#### **Calvin Daniels**

"Since the Economic Portfolio methodology used in this report has mistakenly chosen two 345 kV projects that have a combined cost of a quarter of a billion dollars I can neither approve nor endorse this report. The MOPC and/or Board of Directors needs to not approve these two projects this year. Below are my comments explaining why I voted no on the Economic Portfolio at this meeting and the prior ESWG meeting."

**The following TWG members provided information regarding their support for the NTC recommendations included in the 2019 ITP Assessment Report.**

#### **John Boshears (CUS)**

"City Utilities of Springfield supports the 2019 ITP consolidated portfolio Notice to Construct recommendations. City Utilities believes the 345kV projects in the consolidated portfolio are a vital part of the overall Integrated Transmission Plan for SPP. City Utilities offers the following points in support of our position:

1. The 345kV projects recommended in the 2019 ITP are in Target Areas 1 & 2, which SPP identified as areas of need.
2. The 345kV projects provide a long-term solution in the areas of need. City Utilities believes 345kV projects provide a superior solution to 161kV projects that may provide short-term relief (by moving congestion), rather than providing a long-term congestion solution. It is likely that 161kV solutions will require additional future funding to solve new congestion issues in the target areas.
3. A review of the 2019 Step Portfolio reveals that the majority of ITP projects in the STEP portfolio are 345kV solutions. This illustrates that SPP considers 345kV solutions an integral part of the Integrated Transmission Plan.
4. The approved processes and criteria were followed by SPP staff in compiling the consolidated portfolio and notice to construct recommendations."

#### **Matt McGee (AEP)**

In TWG, AEP voted in favor of the 2019 ITP NTCs for the Consolidated Portfolio and the 2019 ITP Assessment Report. The ITP study process and models were developed with stakeholder input and

approval. We believe SPP Staff followed the process. Based upon Staff's analysis, the projects in the portfolio have substantial benefits to the region. Specifically with regard to the Sooner-Wekiwa 345 kV project, we are supportive, and based upon our familiarity with the area, we do not believe that the line routing for this project will be problematic.

#### **Derek Brown (Evergny)**

Evergny voted yes on the SPP 2019 ITP portfolio NTC/NTC-C recommendations because these projects will ensure the reliable and economic delivery of energy while maximizing benefits to the end-use customer.

1. *The recommended Reliability and Short-Circuit NTC projects will ensure the reliable delivery of energy by complying with the requirements of NERC Reliability Standard TPL-001-4 and preserving sold long-term transmission service under the SPP Tariff.*
2. *The recommended Economic NTC projects will ensure the long-term economic delivery of energy and maximize benefits to the end-use customer by meeting multiple need types including economic, operational, and reliability.*
  - a. *The two new 345 kV transmission lines recommended in the portfolio both have a 40-year B/C ratio greater than 1.1 in the Future 1 Reference case and 2.4 in the Future 2 Emerging Technologies case. The Future 1 reference case has very low wind capacity assumptions in Year 5 (24.2 GW by 2024) and Year 10 (24.6 GW by 2029) based on current projections. SPP stated at the 2019 Planning Summit that they expect to have 28-33 GW of wind installed by 2025. This projection is more in line with the Future 2's wind capacity assumptions in Year 5 (27 GW by 2024) and Year 10 (30 GW by 2029). Future 2's entire economic portfolio provides over \$2B of benefit over 40 years with a B/C ratio of 3.8.*
  - b. *Seven of the ten 2019 ITP persistent operational needs will be solved by the final portfolio projects. Each need has accrued at least \$10M in congestion costs over the last 2 years. Removal of these persistent operational needs is critical to the continued reliable operation of the SPP Transmission System. Today, SPP as the Reliability Coordinator and Evergny, as a Transmission Operator experience difficulty in developing mitigation plans to relieve predicted overloads during system intact and scheduled transmission outages. Scheduled transmission work requiring outages typically occurs during the off-peak Fall and Spring seasons because they are impossible during on peak seasons. This is getting more and more difficult to achieve during these off-peak seasons due to the high flows on the 100 kV and above transmission system caused by increased wind penetration. Transmission system reliability will degrade if we are unable to take transmission outages to perform necessary maintenance work.*
  - c. *The recommended new Wolf Creek-Blackberry 345 kV line will solve the primary issues that drove the Southeast Kansas/Southwest Missouri Target Area analysis performed in the 2019 ITP Study:*
    - i. *Historic and projected congested flowgates in the area. Including two of the Persistent Operational Needs.*
    - ii. *Degrading stability margins at the Wolf Creek power plant due to increasing West-East power flows across the transmission system in Kansas driven by increasing wind penetration. The TWG's direction to SPP Staff was to determine a path forward with these reliability issues using the 2019 ITP study. Study results indicate this new line resolves these issues.*

The following ESWG members provided information regarding their support for the NTC recommendations included in the 2019 ITP Assessment Report.

**Randy Collier (CUS)**

*“City Utilities of Springfield supports the 2019 ITP consolidated portfolio Notice to Construct recommendations. City Utilities believes the 345kV projects in the consolidated portfolio are a vital part of the overall Integrated Transmission Plan for SPP. City Utilities offers the following points in support of our position:*

- 1. The 345kV projects recommended in the 2019 ITP are in Target Areas 1 & 2, which SPP identified as areas of need.*
- 2. The 345kV projects provide a long-term solution in the areas of need. City Utilities believes 345kV projects provide a superior solution to 161kV projects that may provide short-term relief (by moving congestion), rather than providing a long-term congestion solution. It is likely that 161kV solutions will require additional future funding to solve new congestion issues in the target areas.*
- 3. A review of the 2019 Step Portfolio reveals that the majority of ITP projects in the STEP portfolio are 345kV solutions. This illustrates that SPP considers 345kV solutions an integral part of the Integrated Transmission Plan.*
- 4. The approved processes and criteria were followed by SPP staff in compiling the consolidated portfolio and notice to construct recommendations.”*

**Anita Sharma**

*AEP’s vote in favor of moving forward with the NTCs as recommended by SPP Staff was based on the following points:*

- 1. AEP believes that the two new 345kV line projects in this portfolio are a very important first step in helping SPP to ensure the market benefits all participants and to realize the benefits of the low-cost clean energy resources within the region.*
- 2. These projects address some of the top congested flowgates identified in the 2018 Annual State of the Market Report and also identified as economic needs in the 2019 ITP assessments. SPP has addressed congestion in the SPP western region in previous ITP studies. This has resulted in moving congestion to the eastern part of the SPP region. Eliminating these eastern transmission constraints is essential to ensuring reliable and affordable electricity to customers now and in the future. The analysis performed by staff clearly shows that these projects exceed the B/C criteria, and based on SPP’s current resource forecasts AEP believes that the actual benefits will be in line with those demonstrated by the Future 2 analysis of the 2019 ITP study. SPP identified the southeast KS area and central OK area as target areas in this study. Due to the highly correlated nature of system and economic needs in these target areas, it is imperative to address the needs holistically with the regional 345kV solutions identified through the 2019 ITP Study process.*
- 3. The EHV projects in this portfolio pass the B/C criteria easily, even though benefits to the “SPP other zone” that includes merchant generation are not included in the calculations for the 2019 ITP study. The 40-yr NPV benefits to the SPP other zone are real – an additional \$1.6 billion in Future 1 and \$1.8 billion Future 2. As SPP Load Serving Entities contract the generation resources in this SPP other zone, a portion of those additional 40-year benefits flow to the load-serving entities’ customers as savings, increasing the overall benefits to the SPP region. This portfolio is a good investment for SPP and its customers – even without the benefits from the SPP other zone, the portfolio’s estimated 40-yr NPV APC savings to the SPP region range from \$975 million in Future 1, to \$1.98 billion in Future 2.*

*4. AEP believes that the staff has conducted its work according to the established processes, and has brought forth comprehensive solutions to critical needs. AEP believes it is now time to focus on implementation of this portfolio as recommended. New EHV projects take a considerable amount of time to plan, permit, and execute. All projects in the portfolio pass the B/C criteria. The two EHV projects show 40-yr B/Cs of 1.33 and 1.12 in Future 1 (Wolf Creek-Blackberry and Sooner – Wekiwa respectively) and the B/Cs for these two projects grow significantly in Future 2 to 2.41 and 4.29 respectively. SPP's own wind projections show that Future 2 aligns with the expected reality – this region will likely have over 30 GW of wind power in the not distant future. These projects offer real and significant benefits to the region, and should not be delayed. It is critical for the region to have a healthy EHV backbone to support reliability and future growth for the entire SPP bulk electric system.*

#### **Agenda Item 5 – 2020 ITP Market Economic Model Update**

Kelsey Allen gave an update on the 2020 ITP Market Economic Models and an approximate timeframe on when the models would be available for review. Kelsey covered some of the intricate details of the model build process and the next steps.

#### **TWG Only Items**

#### **Agenda Item 6 – RR 384: ITP Manual Revision Request (Approval Item)**

Michael Odom, SPP staff presented to the group a background for the requirements to model long term firm transmission service in the tariff (Attachment 6 – RR 384 - ITP BR Generation Resource Retirements with Firm Transmission Service Modeling\_v2.pptx). Michael explained the issue of the long-term firm service and capacity forecasts, including generation additions and retirements are required inputs to the Integrated Transmission Planning Assessment. Michael explained to the group that the approval of this revision request would need to be expedited through the SPP revision request process because the working group is being asked to take action before the posting of the RR has passed the required 15 business days.

**Motion by Michael Wegner (ITC Holdings) seconded by Derek Brown (Evergy) to approve RR 384 as amended in the meeting. The motion passed unanimously.**

Once the group approved the expediting RR 384, Michael reviewed the revision request and the changes to the ITP manual to implement the clarifications.

**Motion by Derek Brown (Evergy) seconded by Scott Benson (Lincoln Electric System) to approve RR 384 as amended in the meeting. The motion passed unanimously.**

#### **Agenda Item 7 – RR 367: Resource Planning Load Forecasts**

Antonio Barber, SPP Staff, presented to the group a background for a revision request that covers the load forecast for resource planning (Attachment 7. RR 367 recommendation report.docx, RR\_Load Forecasts for Resource Planning.docx, and RR367 Resource Planning Load Forecasts.pptx). Antonio expounded on the various load forecast used in past studies, current process for the 2019 ITP, and the ask for the 2020 ITP process. Antonio also explained to the group this RR recommendation was in response to SPP stakeholders requesting that SPP request separate, optional load forecasts considering controllable load curtailing programs and utilize them for the development of ITP conventional resource plans. The ESWG approved RR367 on October 12, 2018 and would like to make the change to the ITP Manual.



**Motion by Noman Williams (GridLiance High Plains LLC) seconded by Michael Wegner (ITC Holdings) to approve RR 367 as presented in the meeting. The motion passed with one abstaining (Noman Williams - GridLiance High Plains LLC).**

**Agenda Item 8 – SUS-013 Neosho Ridge Wind Sponsored Upgrade**

Prior to covering this item, the group asked for clarification on this agenda item being listed on the October 1 and October 7 agendas. Dee Edmondson, SPP staff, informed the group that the meeting materials for this item were not sent out to the TWG until Friday, September 27, 2019 (Attachment 8 – 20191001\_Sponsored\_Upgrade\_Study\_013.pptx, Attachment 8 - SUS-013\_Neosho\_Ridge\_Wind\_Sponsored\_Upgrade\_Study.pdf).

TWG decided as a group to discuss this item at the October 7, 2019 meeting to give the group more time to review the background materials.

**Agenda Item 9 – Summary of Action Items**

Seeing there was no further business, the meeting adjourned at 3:30 PM.

Respectfully Submitted,

Dee Edmondson & Amber Greb  
Staff Secretaries

All sessions in Central Daylight Time (Chicago, GMT-05:00)

Session detail for 'ESWG/TWG Joint Net Conference':

Participant Name	Email
1 Chris Cranford (SPP)	ccranford@spp.org
2 Aaron Shipley	ashipley@spp.org
3 Chris Lyons	clyons@ces-ltd.com
4 Alan Myers	amyers@itctransco.com
5 Adam Bell (SPP)	abell@spp.org
6 Scott Mijin	scott.mijin@swpa.gov
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## ECONOMIC STUDIES/TRANSMISSION WORKING GROUP JOINT MEETING

October 1, 2019

Net Conference

• **A G E N D A** •

1:00 p.m. - 5:00p.m. (Central Time)

1. Administrative Items
  - a. Call to Order, Introductions.....Alan Myers/Travis Hyde (10 minutes)
  - b. Receipt of Proxies ..... Amber Greb (2 minute)
  - c. Review of Agenda<sup>1</sup> ..... Alan Myers/Travis Hyde (2 minute)
  - d. Antitrust Reminder ..... Amber Greb (1 minute)
2. Consent Agenda<sup>1</sup>
  - a. MDWG Scope Approval (TWG Only)
3. 2019 ITP NTC Approvals of Consolidated Portfolio<sup>1</sup> (Approval Item) ..... SPP Staff (150 minutes)
4. 2019 ITP Assessment Report<sup>1</sup> (Approval Item)..... Juliano Freitas (20 minutes)
5. 2020 ITP Market Economic Model Update..... Kelsey Allen (1 minute)

### TWG Only Items

6. RR 384: ITP Manual Revision Request<sup>1,2</sup> (Approval Item).....Michael Odom (30 minutes)
7. RR 367: Resource Planning Load Forecasts<sup>1</sup> (Approval Item) .....Antonio Barber (15 minutes)
8. SUS-013 Neosho Ridge Wind Sponsored Upgrade (Approval Item) ..... Chris Payne (15 minutes)

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<sup>1</sup> Background Material Included

<sup>2</sup> Expedited is selected when the submitter is requesting the RR be considered for expedited review, meaning the working group will take action even if the posting of the RR was past the required 15 business days. For an RR to be expedited, the working groups must agree to waive the comment period included in the RR process.

**Antitrust:** SPP strictly prohibits use of participation in SPP activities as a forum for engaging in practices or communications that violate the antitrust laws. Please avoid discussion of topics or behavior that would result in anti-competitive behavior, including but not limited to, agreements between or among competitors regarding prices, bid and offer practices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that might unreasonably restrain competition.

# Scope

Nate Morris– MDWG Chair

# MIDWG Scope Revision

# Revision Summary

- Initiated by Annual Scope Review and Corporate Governance Committee (CGC) Action Item
  - Review all Scope (Charter) for template consistence and accordance of SPP Bylaws
- Current MDWG scope revision includes updates for standard SPP Scope template formatting
  - Approved unanimously by MDWG on September 12<sup>th</sup>, 2019

# Recommendation

- MDWG recommends TWG approve the formatting updates to the MDWG Scope

**Southwest Power Pool, Inc.**  
**MODEL DEVELOPMENT WORKING GROUP**  
**Organizational Group ~~Charter~~ Scope Statement**  
**"[Click here and type date of BOD approval]"**

**Purpose**

The Model Development Working Group (MDWG) is responsible for the coordination, development, and maintenance of transmission system planning models in accordance with Southwest Power Pool (SPP) Planning Criteria, Regional Standards, and procedures. The MDWG is also responsible for supporting development of interconnection wide models by providing SPP transmission system planning models and related information to the Eastern Interconnection Reliability Assessment Group (ERAG) Multiregional Modeling Working Group (MMWG).

**Scope of Activities**

In carrying out its purposes, the MDWG will:

1. Provide oversight and coordination of the activities of MDWG-initiated task forces.
2. Develop and maintain the MDWG Model Development Procedure Manual.
3. Develop, maintain, and coordinate steady state, short circuit, dynamic, and geomagnetic disturbance models in accordance to the SPP Planning Criteria, SPP Regional Standards, and procedures.
4. Work with SPP Staff and the Transmission Working Group (TWG) to determine the models that should be used in SPP, basis for the models, and how they are modified to ensure that the transmission system planning models support the needs of SPP and SPP Organizational Groups.
5. Review and monitor existing and proposed NERC Reliability Standards for impacts to the development, maintenance, and coordination of SPP transmission system planning models. Coordinate responses to new and proposed standards with SPP and other SPP Organizational Groups.
6. Support the SPP submission of modeling data to the ERAG MMWG for the SPP transmission system. Coordinate the incorporation of ERAG MMWG modeling information for facilities external to the SPP transmission system into the SPP models.

7. Respond to assignments from the TWG, Markets and Operations Policy Committee (MOPC), or the Board of Directors.

### **Representation**

The MDWG membership consists of a minimum of 8 and up to 24 representatives from the SPP membership, including the chair and vice-chair.

### **Duration**

~~"[Task Force Only/All Others Omit: Click here and identify the task force's limited duration]"~~

### **Reporting**

The MDWG reports to the TWG. As necessary the MDWG may appoint a member of the MDWG as a liaison to other working groups.

# 2019 ITP NTC RECOMMENNDATIONS

KIRK HALL

# OBJECTIVE

- Discuss project lead times and NTC recommendation process
- Approve 2019 ITP NTC recommendations

# NTC RECOMMENDATIONS AND LEAD TIMES

- NTCs are recommended based upon a project's
  - Need date (i.e. Staging results)
  - Lead time
- If financial commitment is necessary within the next 4 years\* an NTC is recommended
  - Need date – lead time = Board approval + 4 yrs

\*Business Practice 7060

# SHORT CIRCUIT NTC RECOMMENDATIONS

- All short circuit projects are based upon a year 2 summer model, therefore needed within 2 years
  - Recommend NTCs for all short circuit projects

# RELIABILITY NTC RECOMMENDATIONS

Project Description	Need Date	Lead Time (months)	NTC/NTC-C?
Cleo Corner - Cleo Switch Terminal Equipment	6/1/2022	18	NTC
Deaf Smith - Plant X Terminal Equipment	4/1/2029	18	No
Deaf Smith - Bushland Terminal Equipment	4/1/2026	18	No
Potter - Newhart Terminal Equipment	4/1/2028	18	No
Getty - Skelly Terminal Equipment	4/1/2021	18	NTC
Marshall - Smittyville - Bailey - Seneca Rebuild	4/1/2021	30	NTC
Pryor Junction Transformer	6/1/2021	24	NTC
Tulsa SE - 21st Street Tap Rebuild	6/1/2021	24	NTC
Tulsa SE - S. Hudson Rebuild	6/1/2021	24	NTC
Moore - RBSS Terminal Equipment	6/1/2026	18	No
Carlisle - LP Doud Terminal Equipment	6/1/2026	18	No
Lubbock - Jones Ckt 1 Terminal Equipment	6/1/2029	18	No
Lubbock - Jones Ckt 2 Terminal Equipment	6/1/2029	18	No
Plains - Yoakum Terminal Equipment	6/1/2029	18	No
Firth Cap Bank	4/1/2021	24	NTC
Marietta Switch	12/1/2021	18	NTC
Gypsum Cap Bank	6/1/2021	24	NTC

\*NTCs expected to be issued 11/15/2019

# ECONOMIC NTC RECOMMENDATIONS

Project Description	Need Date	Lead Time	NTC?
Lawrence EC - Midland Terminal Equipment	1/1/2021	18	NTC
Sundown - Amoco Terminal Equipment	1/1/2023	18	NTC
Spearman - Hansford Terminal Equipment	1/1/2021	18	NTC
Kingfisher - E. Kingfisher Rebuild	1/1/2021	24	NTC
Cimarron - Northwest - Mathewson Terminal Equipment	1/1/2021	18	NTC
Wekiwa-Sooner new 345 kV line			
Sheffield Steel - Sand Springs Terminal Equipment	1/1/2026	48	NTC-C
Arnold-Ransom, Pile-Scott City-Setab Terminal Equipment	1/1/2025	18	NTC
Gracemont - Anadarko Rebuild	1/1/2021	24	NTC
Wolf Creek - Blackberry New 345 kV Line Butler Phase Shifting Transformer	1/1/2026	48	New Line – NTC-C Butler PST - No

\*NTCs expected to be issued 11/15/2019

# BUTLER PHASE-SHIFTING TRANSFORMER DISCUSSION

- Butler PST not recommended for NTC
  - Staff believes further analysis is appropriate in the 2020 ITP
  - Qualitative assessment reveals Butler PST may not be the best long-term solution
    - One of oldest lines in SPP (~100 yrs.)
    - Rating is well below minimum standard
    - High outage rate due to lack of shield wire
    - Final plans TBD for this facility

# RECOMMENDATION

- Staff recommends the TWG/ESWG endorse the 2019 ITP portfolio NTC/NTC-C recommendations as presented



2019 **ITP**

# 2019 ITP REPORT

*Helping our members work together to  
keep the lights on... today and in the future.*



SouthwestPowerPool



SPPorg



southwest-power-pool

# OBJECTIVE

- Review and Approve the 2019 ITP Assessment Report

# 2019 ITP DRAFT REPORT

- Draft Report posted 8/22/19
  - Partial report through needs assessments
  - Stakeholder Review: 8/22/19 – 8/28/19
- Draft Report posted 9/17/19
  - Report complete through final assessments
  - Stakeholder Review: 9/18/19-9/24/19

# 2019 ITP DRAFT REPORT

- Final Report posted 9/27/19 for ESWG/TWG Approval
  - Joint ESWG/TWG Teleconference: 10/1/19
- **Next Steps**
  - MOPC: 10/15/19-10/16/19
  - SPP Board: 10/29/19

# RECOMMENDATION

- Staff recommends the TWG/ESWG approve and endorse the 2019 ITP Assessment Report as documentation of completion of the ITP planning assessment specified in SPP OATT Attachment O, Section III



# RR 384 - ITP BASE RELIABILITY GENERATION RESOURCE RETIREMENTS MODELING

TRAVIS HYDE



# BACKGROUND

- **Requirements**

- Model Long Term Firm Transmission Service, Att O Sec. iii.3
- Model Capacity forecasts, including generation additions and retirements, Att O Sec. iii.3

- **Issue**

- Long-term firm transmission service and Capacity forecasts, including generation additions and retirements are required inputs to the Integrated Transmission Planning Assessment. Therefore, related data for these inputs are required to be modeled in the ITP Base Reliability (BR) models, as applicable. However, some generator resources planned for retirement that are part of an Active Service agreement for Long-Term Firm Transmission Service are currently being modeled with the resource's capability zeroed out (P<sub>MAX</sub>, P<sub>MIN</sub>, Q<sub>MAX</sub>, Q<sub>MIN</sub> = 0) and cannot be appropriately dispatched in the ITP BR models.

- **Goals**

- Clarify the ITP Manual to address the issue

- **Benefits**

- Addresses the modeling of planned retirements of generator resources with Long-Term Firm Transmission Service in the ITP BR model

# LANGUAGE MODIFICATION

- ITP Manual, section 2.1.1

Generation resources that have been mothballed or are planned for retirement must be submitted to SPP through SPP's MOD Application and the SPP RMS for the base reliability model. Upon receiving this information, if the resource is still listed in the applicable Service Agreement, the resource may be dispatched to address shortfall. If planned retired generation resources are identified for dispatch, SPP will notify the modeling entity to coordinate the dispatch for the affected parties.~~The mothballed or planned retirement resources that are not dispatched will be modeled offline (in-service status = 0) and will remain these resources will remain in the models until such time they are officially decommissioned. Until this decommission occurs, the resources will be given a  $P_{Min}$ ,  $P_{Max}$ ,  $Q_{Min}$ , and  $Q_{Max}$  value of zero within the models to ensure that the units are not dispatched.~~ Resources considered required to be online may be modified in order to displace renewable generation in the planning models. These resource types include, but are not limited to: area slack machines, hydroelectric, cogen, landfill gas, and nuclear.

# PROCESS EXPLANATION

- **Shortfall scenario**

- If there is a shortfall scenario in the ITP BR models then allow the planned retirement generator resources that have long-term firm transmission service, within the model area, to be dispatched to help make up the shortfall deficiency after coordination with the modeling entity

- **Non-shortfall scenario**

- If there is no shortfall then model the planned resource retirements as offline, but keep the generator capability (P<sub>MAX</sub>, P<sub>MIN</sub>, Q<sub>MAX</sub>, Q<sub>MIN</sub>) set to actual capability amounts, do not zero out these values

# EXPEDITION NEED

- **2020 ITP Base Reliability models**
  - The 2020 ITP Base Reliability models are scheduled to be finalized November 2019
- **Use in the 2020 ITP Assessment**
  - The 2020 ITP BR models can include this modeling update for how planned resource retirements are modeled for use in the 2020 ITP assessment

# RECOMMENDATION

- Approve the expedition of Revision Request 384
- Approve Revision Request 384, as updated by the TWG, to clarify the ITP Manual language for ITP BR planned generation resource retirement modeling

## Revision Request Form

### SPP STAFF TO COMPLETE THIS SECTION

**RR #: 384**
**Date: 9-10-19**
**RR Title: ITP Manual Base Reliability Generator Retirement Modeling**
**System Changes**  No  Yes

**Process Changes?**  No  Yes

**Impact Analysis Required?**  No  Yes | **If no, but system or process changes are expected please explain why an Impact Analysis will not be performed** (e.g. FERC Order, work included in another Impact Analysis for a related RR):

ITP Base Reliability model performance impacts should be trivial due to most model areas having enough generation to serve planned load in the ITP Base Reliability models. For areas that do not (shortfall), a shortfall process is already in place to address this condition.

### SUBMITTER INFORMATION

**Name:** Michael Odom

**Company:** SPP

**Email:** [modom@spp.org](mailto:modom@spp.org)
**Phone:** 501-688-8205

*Only Qualified Entities may submit Revision Requests.  
Please select at least one applicable option below, as it applies to the named submitter(s).*

 **SPP Staff**  
 **SPP Market Participant**  
 **SPP Member**  
 **An entity designated by a Qualified Entity to submit a Revision Request "on their behalf"**
 **SPP Market Monitor**  
 **Staff of government authority with jurisdiction over SPP/SPP member**  
 **Rostered individual of SPP Committee, Task Force or Working Group**  
 **Transmission Customers or other entities that are parties to transactions under the Tariff**

### REVISION REQUEST DETAILS

**Requested Resolution Timing:**  Normal  Expedited  Urgent Action

Reason for Expedited/Urgent Resolution: To allow the updated ITP Manual language to be applied to the 2020 ITP Base Reliability models before finalization in November 2019.

**Type of Revision (select all that apply):**
 Correction (*i.e., revising erroneous language or language that needs clean-up for grammatical errors or inconsistency across governing documents - no changes to intent or policy*)

 New Protocol, Business Practice, Criteria, Tariff (*i.e., new language to accommodate new functionality or policy not existing today*)

 Clarification (*i.e., revising language to better represent existing intent, no changes to functionality or policy*)

 NERC Standard Impact (*Specifically state if revision relates to/or impacts NERC Standards, list standard(s)*)

 Enhancement (*i.e., revising language to expand upon existing intent or functionality*)

 FERC Mandate (*List order number(s)*)

### REVISION REQUEST RISK DRIVERS

Are there existing risks to one or more SPP Members or the BES driving the need for this RR?  Yes  No

If yes, provided details to explain the risk and timelines associated:

- Compliance (Tariff, NERC, Other)
- Reliability/Operations
- Financial

**SPP Documents Requiring Revision:**

Please select your primary intended document(s) as well as all others known that could be impacted by the requested revision (e.g. a change to a protocol that would necessitate a criteria or business practice revision).

<input type="checkbox"/> <b>Market Protocols</b>	<b>Section(s):</b>	<b>Protocol Version:</b>
<input type="checkbox"/> <b>Operating Criteria</b>	<b>Section(s):</b>	<b>Criteria Date:</b>
<input type="checkbox"/> <b>Planning Criteria</b>	<b>Section(s):</b>	<b>Criteria Date:</b>
<input type="checkbox"/> <b>Tariff (OATT)</b>	<b>Section(s):</b>	
<input type="checkbox"/> <b>Business Practice</b>	<b>Business Practice Number:</b>	
<input checked="" type="checkbox"/> <b>Integrated Transmission Planning (ITP) Manual</b>	<b>Section(s): 2.1.1</b>	
<input type="checkbox"/> <b>Revision Request Process</b>	<b>Section(s):</b>	
<input type="checkbox"/> <b>Minimum Transmission Design Standards for Competitive Upgrades (MTDS)</b>	<b>Section(s):</b>	
<input type="checkbox"/> <b>Reliability Coordinator and Balancing Authority Data Specifications (RDS)</b>	<b>Section(s):</b>	
<input type="checkbox"/> <b>SPP Communications Protocols</b>	<b>Section(s):</b>	

**OBJECTIVE OF REVISION**

**Objectives of Revision Request:**

*Describe the problem/issue this revision request will resolve.*

Long-term firm transmission service and Capacity forecasts, including generation additions and retirements are required inputs to the Integrated Transmission Planning Assessment. Therefore, related data for these inputs are required to be modeled in the ITP Base Reliability (BR) models, as applicable. However, some generator resources planned for retirement that are part of an Active Service agreement for Long-Term Firm Transmission Service are currently being modeled with the resource’s capability zeroed out (P<sub>MAX</sub>, P<sub>MIN</sub>, Q<sub>MAX</sub>, Q<sub>MIN</sub> = 0) and cannot be appropriately dispatched in the ITP BR models.

*Describe the benefits that will be realized from this revision.*

The requested changes to the ITP Manual Section 2.1.1 addresses modeling enhancements for planned retirements of generator resources that are still part of an active Service Agreement for Long-Term Firm Transmission Service so that if there is shortfall in an ITP BR model then the generator resource can be dispatched to address the shortfall thus meeting the Long-Term Firm Transmission Service modeling requirement.

**REVISIONS TO SPP DOCUMENTS**

*In the appropriate sections below, please provide the language from the current document(s) for which you are requesting revision(s), with all edits redlined.*

**Market Protocols**

**SPP Tariff (OATT)**

## SPP Operating Criteria

## SPP Planning Criteria

## SPP Business Practices

## Integrated Transmission Planning (ITP) Manual

### 2.1.1 GENERATION RESOURCES

#### *Resource Dispatch*

Generation resources will be available for dispatch in the base reliability model if either of the following criteria are met:

1. The resource has approved long-term transmission service with an effective transmission service agreement, or
2. SPP has identified the resource as necessary to solve a model.

If a generation resource is utilized solely for reactive support, it will be dispatched to its  $P_{\text{Min}}$  value in the appropriate model(s). TWG approval will include the specific models for which the generation resource, reactive resource, or transmission upgrade will be included.

Dispatch will not surpass the lesser of gross  $P_{\text{max}}$  or net designated resource amount plus the station service load.

Generation resources that have been mothballed or are planned for retirement must be submitted to SPP through SPP's MOD Application and the SPP RMS for the base reliability model. Upon receiving this information, if the resource is still listed in the applicable Service Agreement, the resource will may be dispatched to address shortfall. If planned retired generation resources are identified for dispatch, SPP will notify the modeling entity to coordinate the dispatch for the affected parties. The mothballed or planned retirement resources that are not dispatched will be modeled offline (in-service status = 0) and will remain these resources will remain in the models until such time they are officially decommissioned. Until this decommission occurs, the resources will be given a  $P_{\text{Min}}$ ,  $P_{\text{Max}}$ ,  $Q_{\text{Min}}$ , and  $Q_{\text{Max}}$  value of zero within the models to ensure that the units are not dispatched.

Resources considered required to be online may be modified in order to displace renewable generation in the planning models. These resource types include, but are not limited to: area slack machines, hydroelectric, cogen, landfill gas, and nuclear.

**Revision Request Process**

**Minimum Transmission Design Standards for Competitive Upgrades (MTDS)**

**Reliability Coordinator and Balancing Authority Data Specifications (RDS)**

**SPP Communications Protocols**

## Revision Request Recommendation Report

<b>RR #:</b> 367	<b>Date:</b> 8/29/19
<b>RR Title:</b> Load Forecasts for Resource Planning purposes	
<b>SUBMITTER INFORMATION</b>	
<b>Submitter Name:</b> Antonio Barber	<b>Company:</b> Southwest Power Pool
<b>Email:</b> <a href="mailto:abarber@spp.org">abarber@spp.org</a>	<b>Phone:</b> 501-482-2391
<b>EXECUTIVE SUMMARY AND MOTION FOR RECOMMENDED MOPC/BOD ACTION</b>	
<i>(Executive summary is high-level explanation of what the revision request will accomplish and should include a summary of voting records and opposition. The motion for recommended MOPC/BOD action should be written such that the organization group "recommends" the action needed.)</i>	
<b>OBJECTIVE OF REVISION</b>	
<i>(Ensure the objective has been updated to reflect the intent of the revisions presented for approval)</i>	
<p>By default, the load forecasts obtained in the ITP load review and SPP annual data request, which do not consider controllable load curtailing programs, are used in the development of ITP conventional resource plans. This is inconsistent with how many members develop their individual resource plans, which generally consider controllable load curtailing programs. SPP stakeholders have requested that SPP request separate, optional load forecasts considering controllable load curtailing programs and utilize them for the development of ITP conventional resource plans.</p> <p><i>Describe the benefits that will be realized from this revision.</i></p> <p>The ITP Manual would explicitly allow separate, optional load forecasts to be incorporated into the ITP conventional resource plan. More specifically, the ITP Manual would detail what should be assumed in these load forecasts and where they should be submitted.</p>	
<b>SPP STAFF COMMENTS</b>	
<b>IMPACT ANALYSIS</b>	
<i>(See RR Impact Analysis Form for complete impact details)</i>	
<p><b>System Changes</b> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes</p> <p><b>Process Changes?</b> <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes</p> <p><b>Impact Analysis Required?</b> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes   <b>If no, but system or process changes are expected please explain why an Impact Analysis will not be performed</b> (e.g. FERC Order, work included in another Impact Analysis for a related RR):</p>	
<p><b>Estimated Vendor Cost:</b>  <small>ROM based on information available at the time of the estimate</small>  <b>Cost Categories:</b> A&gt;0-20k, B&gt;20-60k, C&gt;60-100k, D&gt;100-300k, E&gt;300k – 600k, F&gt;600k – 1mm, *G&gt;1mm</p> <p><small>*If greater than 1mm an upper limit will also be provided.</small></p>	<p><b>Estimated Implementation Staff Hours:</b>  <small>ROM based on information available at the time of the estimate</small></p>

<b>Estimated Implementation Time:</b> <i>ROM based on information available at the time of the estimate</i>	<b>Primary Working Group Priority:</b>
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**SPP DOCUMENTS IMPACTED**

<input type="checkbox"/> <b>Market Protocols</b>	<b>Protocol Section(s):</b>	<b>Protocol Version:</b>
<input type="checkbox"/> <b>Operating Criteria</b>	<b>Criteria Section(s):</b>	<b>Criteria Date:</b>
<input type="checkbox"/> <b>Planning Criteria</b>	<b>Criteria Section(s):</b>	<b>Criteria Date:</b>
<input type="checkbox"/> <b>Tariff</b>	<b>Tariff Section(s):</b>	
<input type="checkbox"/> <b>Business Practice</b>	<b>Business Practice Number:</b>	
<input checked="" type="checkbox"/> <b>Integrated Transmission Planning (ITP) Manual</b>	<b>Section(s): 2.2.1.2 LOAD AND ENERGY FORECASTS</b>	
<input type="checkbox"/> <b>Revision Request Process</b>	<b>Section(s):</b>	
<input type="checkbox"/> <b>Minimum Transmission Design Standards for Competitive Upgrades (MTDS)</b>	<b>Section(s):</b>	
<input type="checkbox"/> <b>Reliability Coordinator and Balancing Authority Data Specifications (RDS)</b>	<b>Section(s):</b>	
<input type="checkbox"/> <b>SPP Communications Protocols</b>	<b>Section(s):</b>	

**ORGANIZATIONAL GROUP ACTION**  
*(Action = Approved, Approved Unanimously, or Rejected)*

<b>Primary Working Group:</b>	<b>Date:</b> <b>Motion:</b> <b>Action:</b> <b>Abstained:</b> <b>Opposed:</b>
-------------------------------	--

**Reason for Abstention/Opposition:**

<b>Secondary Working Group:</b>	<b>Date:</b> <b>Motion:</b> <b>Action:</b> <b>Abstained:</b> <b>Opposed:</b>
---------------------------------	--

**Reason for Abstention/Opposition:**

<b>Secondary Working Group:</b>	<b>Date:</b> <b>Motion:</b> <b>Action:</b> <b>Abstained:</b> <b>Opposed:</b>
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<b>Reason for Abstention/Opposition:</b>	
<b>Secondary Working Group:</b>	<b>Date:</b> <b>Motion:</b> <b>Action:</b> <b>Abstained:</b> <b>Opposed:</b>
<b>Reason for Abstention/Opposition:</b>	
<b>MOPC</b>	<b>Date:</b> <b>Motion:</b> <b>Action:</b> <b>Abstained:</b> <b>Opposed:</b>
<b>Reason for Abstention/Opposition:</b>	
<b>BOD/Member Committee</b>	<b>Date:</b> <b>Motion:</b> <b>Action:</b> <b>Abstained:</b> <b>Opposed:</b>
<b>Reason for Abstention/Opposition:</b>	
<b>SUMMARY OF COMMENTS</b>	
<i>(See comment forms in the RR folder on SPP.org for full comment details)</i>	
<b>1. Comment Form Date and Submitter: 8/27/2019</b> Tim Owens (Nebraska Public Power District)	
<p><b>Summary of Comments:</b> Nebraska Public Power District (NPPD) is generally in agreement with the stated objectives of this revision request. With respect to the proposed additions to the ITP Manual, described below, NPPD would suggest that the new item labeled “Resource planning peak load” be modified in order to clarify whether the peak demand values to be provided include or exclude losses. For example, “ Resource planning peak load: A separate, optional load forecast, reflecting the no-loss aggregated bus load totals (MW), and which includes controllable load curtailing programs. This forecast will be used for the conventional resource plan.”</p>	
<p><b>Organizational Group Review Results</b> (e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance – provide details to explain):</p>	

**2. Comment Form Date and Submitter:**

**Summary of Comments:**

**Organizational Group Review Date and Results** (e.g. *Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance – provide details to explain*):

**3. Comment Form Date and Submitter:**

**Summary of Comments:**

**Organizational Group Review Date and Results** (e.g. *Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance – provide details to explain*):

**PROPOSED REVISION(S) TO SPP DOCUMENTS**

**Market Protocols**

**SPP Tariff (OATT)**

**SPP Operating Criteria**

**SPP Planning Criteria**

**SPP Business Practices**

**Integrated Transmission Planning (ITP) Manual**

*Load and Energy Forecasts*

The ITP assessment will require load forecasts for areas within and outside the SPP footprint for each of the study years. The load will represent each individual load-serving entity’s peak conditions without losses per season (*i.e.*, non-coincident peak conditions for the SPP region). Resource obligations will be determined for the footprint taking into consideration non-scalable and scalable loads.

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**Revision Request Process**

**Minimum Transmission Design Standards for Competitive Upgrades (MTDS)**

**Reliability Coordinator and Balancing Authority Data Specifications (RDS)**

**SPP Communications Protocols**

<sup>1</sup> Table within the SPP annual data request that maps loads according to their attributes to groups of demands for the economic model

### Revision Request Form

#### SPP STAFF TO COMPLETE THIS SECTION

<b>RR #:</b> 367		<b>Date:</b> 10/15/19
<b>RR Title:</b> Separate Load Forecasts for Resource Planning purposes		
<b>System Changes</b> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <b>Process Changes?</b> <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <b>Impact Analysis Required?</b> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		
<b>SUBMITTER INFORMATION</b>		
<b>Name:</b> Antonio Barber	<b>Company:</b> Southwest Power Pool	
<b>Email:</b> abarber@spp.org	<b>Phone:</b> 501-482-2391	
<i>Only Qualified Entities may submit Revision Requests. Please select at least one applicable option below, as it applies to the named submitter(s).</i>		
<input checked="" type="checkbox"/> <b>SPP Staff</b> <input type="checkbox"/> <b>SPP Market Participant</b> <input type="checkbox"/> <b>SPP Member</b> <input type="checkbox"/> <b>An entity designated by a Qualified Entity to submit a Revision Request "on their behalf"</b>	<input type="checkbox"/> <b>SPP Market Monitor</b> <input type="checkbox"/> <b>Staff of government authority with jurisdiction over SPP/SPP member</b> <input type="checkbox"/> <b>Rostered individual of SPP Committee, Task Force or Working Group</b> <input type="checkbox"/> <b>Transmission Customers or other entities that are parties to transactions under the Tariff</b>	
<b>REVISION REQUEST DETAILS</b>		
<b>Requested Resolution Timing:</b> <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Urgent Action Reason for Expedited/Urgent Resolution:		
<b>Type of Revision (select all that apply):</b>  <input type="checkbox"/> Correction <span style="margin-left: 200px;"><input type="checkbox"/> NERC Standard Impact (<i>Specifically state if revision relates to/or impacts NERC Standards, list standard(s)</i>)</span> <input type="checkbox"/> Clarification <input checked="" type="checkbox"/> Design Enhancement <span style="margin-left: 200px;"><input type="checkbox"/> FERC Mandate (<i>List order number(s)</i>)</span> <input type="checkbox"/> New Protocol, Business Practice, Criteria, Tariff		
<b>REVISION REQUEST RISK DRIVERS</b>		
<b>Are there existing risks to one or more SPP Members or the BES driving the need for this RR?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, provided details to explain the risk and timelines associated: <input type="checkbox"/> Compliance (Tariff, NERC, Other) <input type="checkbox"/> Reliability/Operations <input type="checkbox"/> Financial		
<b>SPP Documents Requiring Revision:</b> <i>Please select your primary intended document(s) as well as all others known that could be impacted by the requested revision (e.g. a change to a protocol that would necessitate a criteria or business practice revision).</i>		
<input type="checkbox"/> <b>Market Protocols</b>	<b>Section(s):</b>	<b>Protocol Version:</b>
<input type="checkbox"/> <b>Operating Criteria</b>	<b>Section(s):</b>	<b>Criteria Date:</b>
<input type="checkbox"/> <b>Planning Criteria</b>	<b>Section(s):</b>	<b>Criteria Date:</b>
<input type="checkbox"/> <b>Tariff (OATT)</b>	<b>Section(s):</b>	
<input type="checkbox"/> <b>Business Practice</b>	<b>Business Practice Number:</b>	

<input checked="" type="checkbox"/> <b>Integrated Transmission Planning (ITP) Manual</b>	<b>Section(s): 2.2.1.2 LOAD AND ENERGY FORECASTS</b>
<input type="checkbox"/> <b>Revision Request Process</b>	<b>Section(s):</b>
<input type="checkbox"/> <b>Minimum Transmission Design Standards for Competitive Upgrades (MTDS)</b>	<b>Section(s):</b>
<input type="checkbox"/> <b>Reliability Coordinator and Balancing Authority Data Specifications (RDS)</b>	<b>Section(s):</b>
<input type="checkbox"/> <b>SPP Communications Protocols</b>	<b>Section(s):</b>
<b>OBJECTIVE OF REVISION</b>	
<p><b>Objectives of Revision Request:</b>  <i>Describe the problem/issue this revision request will resolve.</i></p> <p>By default, the load forecasts obtained in the ITP load review and SPP annual data request, which do not consider controllable load curtailing programs, are used in the development of ITP conventional resource plans. This is inconsistent with how many members develop their individual resource plans, which generally consider controllable load curtailing programs. SPP stakeholders have requested that SPP request separate, optional load forecasts considering controllable load curtailing programs and utilize them for the development of ITP conventional resource plans.</p> <p><i>Describe the benefits that will be realized from this revision.</i></p> <p>The ITP Manual would explicitly allow separate, optional load forecasts to be incorporated into the ITP conventional resource plan. More specifically, the ITP Manual would detail what should be assumed in these load forecasts and where they should be submitted.</p>	
<b>REVISIONS TO SPP DOCUMENTS</b>	
<i>In the appropriate sections below, please provide the language from the current document(s) for which you are requesting revision(s), with all edits redlined.</i>	
<b>Integrated Transmission Planning (ITP) Manual</b>	

### *Load and Energy Forecasts*

The ITP assessment will require load forecasts for areas within and outside the SPP footprint for each of the study years. The load will represent each individual load-serving entity’s peak conditions without losses per season (*i.e.*, non-coincident peak conditions for the SPP region). Resource obligations will be determined for the footprint taking into consideration non-scalable and scalable loads.

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<sup>1</sup> Table within the SPP annual data request that maps loads according to their attributes to groups of demands for the economic model



# RR367: LOAD FORECAST FOR RESOURCE PLANNING

TWG

ANTONIO BARBER

OCTOBER 1, 2019



# OBJECTIVE

- Background
- Overview
- Recommendation

# BACKGROUND

- In past ITP studies SPP accommodated a separate load forecast to be used only for Conventional Resource Expansion Plan.
- For the 2019 ITP, by default the base reliability peak load forecast was used for developing the resource plan.
  - ESWG 01/22/2018: Approved motion to send out data request for load forecast for resource planning to accommodate controllable curtailable resources.
- For 2020 ITP, ESWG 10/12/2018; Approved allowing a separate load forecast for resource planning purposes. (To be submitted with the Load Review)

# OVERVIEW

- Load forecast is obtained in the ITP load review and SPP annual data request
  - This review does not consider controllable load curtailing programs.
- SPP stakeholders have requested that SPP request separate, optional load forecasts considering controllable load curtailing programs and utilize them for the development of ITP conventional resource plans.

# RECOMMENDATION

- ESWG and TWG recommends MOPC approve
- **RR367**: Separate Load forecast for Conventional Resource Expansion Plan

## Revision Request Comment Form

<b>RR #:</b> 367	<b>Date:</b> 8/27/2019
<b>RR Title:</b> Separate Load Forecasts for Resource Planning Purposes	
<b>SUBMITTER INFORMATION</b>	
<b>Name:</b> Tim Owens	<b>Company:</b> Nebraska Public Power District
<b>Email:</b> tjowens@nppd.com	<b>Phone:</b> 402-563-5526
<b>OBJECTIVE OF REVISION</b>	
<p>By default, the load forecasts obtained in the ITP load review and SPP annual data request, which do not consider controllable load curtailing programs, are used in the development of ITP conventional resource plans. This is inconsistent with how many members develop their individual resource plans, which generally consider controllable load curtailing programs. SPP stakeholders have requested that SPP request separate, optional load forecasts considering controllable load curtailing programs and utilize them for the development of ITP conventional resource plans.</p> <p><i>Describe the benefits that will be realized from this revision.</i></p> <p>The ITP Manual would explicitly allow separate, optional load forecasts to be incorporated into the ITP conventional resource plan. More specifically, the ITP Manual would detail what should be assumed in these load forecasts and where they should be submitted.</p>	
<b>COMMENTS</b>	
<p>Nebraska Public Power District (NPPD) is generally in agreement with the stated objectives of this revision request. With respect to the proposed additions to the ITP Manual, described below, NPPD would suggest that the new item labeled “Resource planning peak load” be modified in order to clarify whether the peak demand values to be provided include or exclude losses. For example, “Resource planning peak load: A separate, optional load forecast, <b>reflecting the no-loss aggregated bus load totals (MW), and</b> which includes controllable load curtailing programs. This forecast will be used for the conventional resource plan.”</p>	
<b>PROPOSED REVISION</b>	
<p><i>Provide proposed modifications (redlined) to the revision request for which you are providing comments. Use language from the revision request and redline with your additional edits.</i></p>	
<b>Market Protocols</b>	

<b>SPP Tariff (OATT)</b>
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<b>SPP Operating Criteria</b>
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<b>SPP Planning Criteria</b>
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<b>SPP Business Practices</b>
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### *Load and Energy Forecasts*

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<sup>1</sup> Table within the SPP annual data request that maps loads according to their attributes to groups of demands for the economic model

**Revision Request Process**

**Minimum Transmission Design Standards for Competitive Upgrades (MTDS)**

**Reliability Coordinator and Balancing Authority Data Specifications (RDS)**

**SPP Communications Protocols**



# SPONSORED UPGRADE STUDY

SUS-013 NEOSHO RIDGE WIND

TWG – OCTOBER 1, 2019

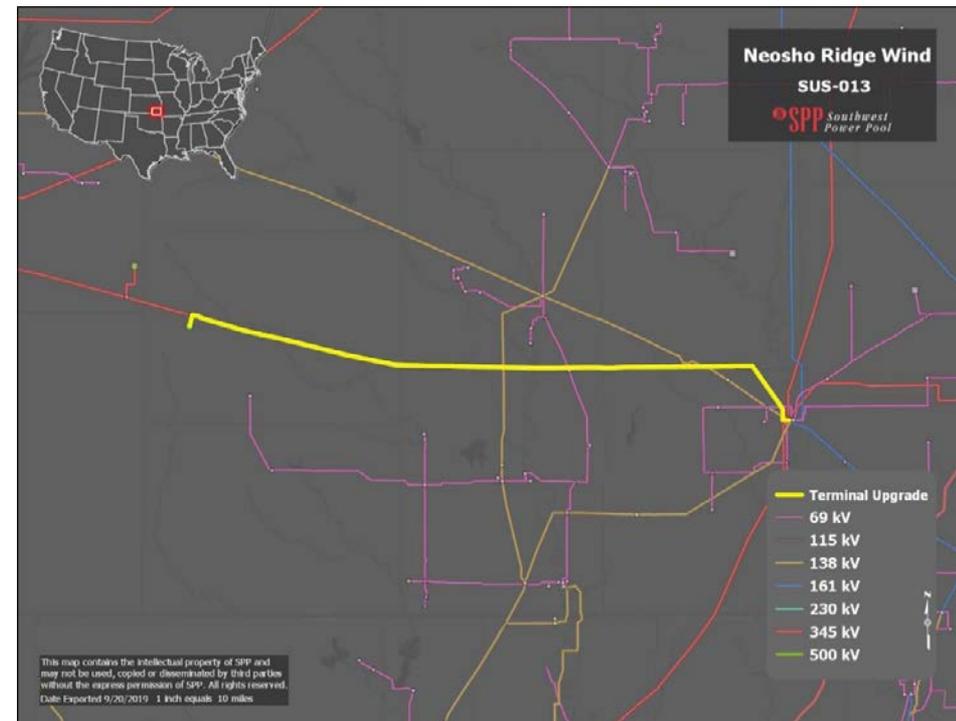


## **SUS-013 NEOSHO RIDGE WIND**

- SPP performed a Sponsored Upgrade Study for APEX Clean Energy (Sponsor) and Evergy (Host TO)
- Attachment O, Section IV.1:
  - Evaluate reliability impacts of proposed upgrade
  - The Sponsored Upgrade shall be submitted to the proper stakeholder working group for their review as part of the transmission planning process
- SPP completed the study and issued study report to APEX Clean Energy on 09/26/2019
- Seeking TWG approval today

## PROPOSED SPONSORED UPGRADE

- APEX Clean Energy proposes replacing four disconnect switches and a line switch on the Neosho – Caney River 345kV line to increase the normal and emergency rating from 956 to 1159 in Neosho County, KS
- Proposed ISD: Fall of 2020
- No system impacts resulting from terminal upgrades



## RESULTS OF ANALYSIS

- No System Impacts
- No mitigation needed

## NEXT STEPS

- After TWG approval, seek MOPC/BOD approval per Schedule 1 to Attachment J
- Sponsor executes Schedule 1 to Attachment J, financially committing to pay for the upgrade
- Obtain SCERT estimate from TO
- Per BP 7060 Section 3.2, NTCs would be issued at this point
  - Proposed Sponsored Upgrade
  - Costs assigned to Sponsor
    - Eligible for cost recovery through Attachment Z2 revenue crediting or candidate ILTCRs

## ENDORSEMENT

- SPP recommends the TWG endorse the Sponsored Upgrade Study work and study report for SUS-013 Neosho Ridge Wind



**SPONSORED UPGRADE STUDY**  
SUS-013 Neosho Ridge Wind

Published on 09/26/2019

By SPP Engineering, Transmission Services

## REVISION HISTORY

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DATE OR VERSION NUMBER	AUTHOR	CHANGE DESCRIPTION	COMMENTS
09/26/2019	SPP	Original	

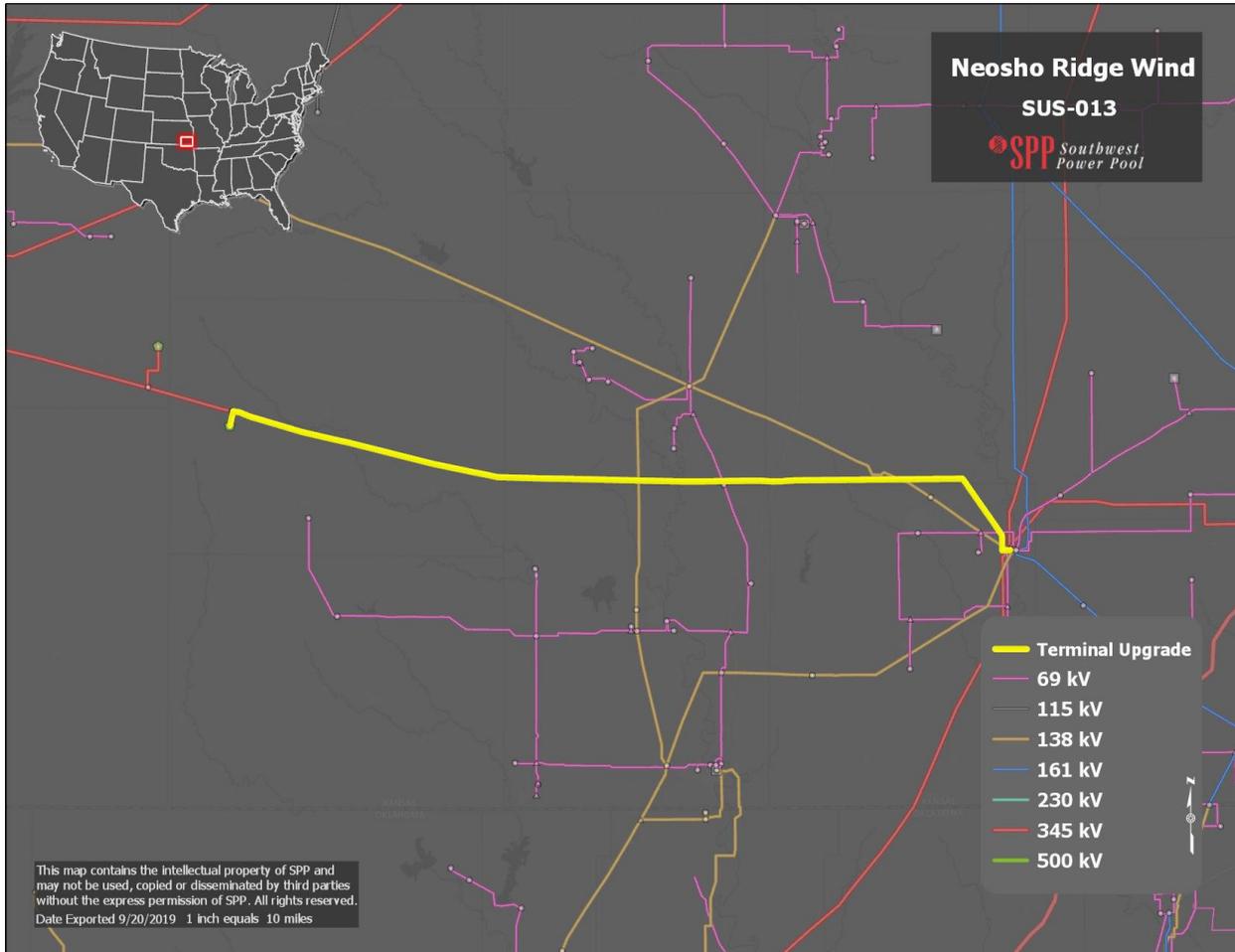
# CONTENTS

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Study Process .....	2
Mitigation Upgrades Required .....	3
Conclusion .....	4

# INTRODUCTION

APEX Clean Energy would like to sponsor an upgrade of terminal equipment for the Neosho – Caney River 345kV line. This Sponsored Upgrade would include the replacement of four disconnect switches and a line switch, resulting in an increase of the normal and emergency ratings of the line from 956 MVA to the conductor rating of 1159 MVA.



## STUDY METHODOLOGY

---

### *OBJECTIVE*

The proposed Sponsored Upgrade would include terminal equipment upgrades to increase the normal and emergency ratings of the Neosho – Caney River 345kV line as shown in Table 1.

SEASON	RATE CASE	ORIGINAL RATING (MVA)	NEW RATING (MVA)
Summer	Normal	956	1159
Summer	Emergency	956	1159
Winter	Normal	956	1159
Winter	Emergency	956	1159

**Table 1 – Neosho to Caney River 345 kV Facility Ratings**

SPP evaluated the reliability impacts of the change and to assess any required mitigation needed for reliability in accordance with Attachment O, Section IV.1 of the SPP Open Access Transmission Tariff (“Tariff”). The proposed in-service date for the Sponsored Upgrade is October 1, 2020 and the cost estimate is \$419,116.

### *STUDY PROCESS*

The Sponsored Upgrade Neosho Ridge Wind results in increased ratings for a facility, but does not result in any change in load, generation, or impedance to the transmission system. Therefore, there are no system impacts resulting from the terminal upgrades.

## MITIGATION UPGRADES REQUIRED

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Attachment O, Section IV.1 of the SPP Tariff requires SPP to evaluate the impact of the proposed Sponsored Upgrade on Transmission System reliability and identify any necessary mitigation of these impacts. Since there were no potential system impacts resulting from the proposed Sponsored Upgrade, no mitigation upgrades are required.

## CONCLUSION

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The Sponsored Upgrade consists only of terminal upgrades that will increase the maximum ratings of the Neosho – Caney River 345kV line, but do not cause any change in the impedance of the transmission system. As a result, this upgrade will not cause any impacts to the system that would be observed in power flow, short circuit, or dynamics analysis. No mitigation upgrades are needed.

Upon endorsement of the Sponsored Upgrade from the appropriate working groups, the Project Sponsor and SPP may execute the “Agreement for Sponsored Upgrade” found in Schedule 1 to Attachment J of the SPP OATT, financially committing the Project Sponsor to pay for the Sponsored Upgrade. The Project Sponsor must execute the Agreement on or before September 26, 2020, in order for SPP to issue an NTC for the Sponsored Upgrade.

The Sponsored Upgrade may be a Creditable Upgrade eligible for cost recovery through Attachment Z2 revenue crediting or ILTCRs. The Sponsor has expressed intention to pursue Attachment Z2 revenue crediting.

**Southwest Power Pool**  
**ECONOMIC STUDIES / TRANSMISSION WORKING GROUP MEETING**

**October 1, 2019**

**Net Conference**

**• Summary of Motions & Action Items•**

**Please provide rationale for voting on Agenda items 3 & 4 by Friday, October 4, 2019 in order for inclusion for MOPC materials posting. We would like to include all rationale for the votes on Agenda items 3 & 4.**

**Agenda Item 2 – MDWG Scope Approval – Consent Agenda** – The TWG motion by Cliff Franklin (Sunflower Electric Power Corporation) seconded by Jason Shook (GDS Associates, Inc.) to approve the consent agenda. The motion passed unanimously.

**Agenda Item 3 – 2019 ITP NTC Approvals of Consolidated Portfolio** – The TWG motion by John Boshears (City Utilities of Springfield Missouri) seconded by Nate Morris (Empire District Electric Company) to endorse the following recommendation:

- Staff recommends the TWG/ESWG endorse the 2019 ITP portfolio NTC/NTC-C recommendations as presented. The motion passed with a vote of thirteen in favor, five opposing, and five abstaining.

The five opposing are Scott Benson (Lincoln Electric System), Renee' Miranda (Xcel Energy), Travis Hyde (OG&E), Kalun Kelley (Western Farmers Electric Cooperative), and Shane McMinn (Golden Spread Electric Cooperative).

The five abstaining (Cliff Franklin (Sunflower Electric Power Corporation), Josh Verzal (OPPD), Randy Lindstrom (Nebraska Public Power District), Michael Mueller (Arkansas Electric Cooperative Corporation), and Gayle Nansel (Western Area Power Administration).

The ESWG motion by Anita Sharma (AEP) seconded by Randy Collier (CUS) to endorse the following recommendation:

- Staff recommends the TWG/ESWG endorse the 2019 ITP portfolio NTC/NTC-C recommendations as presented. The motion passed with a vote of nine in favor, five opposing, and two abstaining.

The five opposing are Al Tamimi (Sunflower Electric Power Corporation), Bennie Weeks (Xcel Energy), Kurt Stradley (LES), Calvin Daniels (Western Farmers Electric Cooperative), and Zac Hager (OG&E).

The two abstaining are Gayle Nansel (Western Area Power Administration), Josh Verzal (OPPD), Randy Lindstrom (proxy for Tim Owens) (Nebraska Public Power District).

**Agenda Item 4 – 2019 ITP Assessment Report** – The TWG motion by Derek Brown (Eversource) seconded by Michael Wegner (ITC Holdings) to approve the following recommendation:

- Staff recommends the TWG/ESWG approve and endorse the 2019 ITP Assessment Report as documentation of completion of the ITP planning assessment specified in SPP OATT Attachment O, Section III. The motion passed with one opposing (Travis Hyde OG&E) and two abstaining (Cliff Franklin - Sunflower Electric Power Corporation and Josh Verzal - OPPD).

The ESWG motion by Randy Collier (CUS) seconded by Warren Whitson (Southern Power) to approve the following recommendation:

- Staff recommends the TWG/ESWG approve and endorse the 2019 ITP Assessment Report as documentation of completion of the ITP planning assessment specified in SPP OATT Attachment O, Section III. The motion passed with two opposing (Calvin Daniels - WFEC and Zac Hager - OG&E) and one abstaining (Al Tamimi - Sunflower Electric Power Corporation).

• TWG Only •

**Agenda Item 6 – RR 384: ITP Manual Revision Request** – Motion by Derek Brown (Evergy) seconded by Scott Benson (Lincoln Electric System) to approve RR 384 as amended in the meeting. The motion passed unanimously.

**Agenda Item 7 – RR 367: Resource Planning Load Forecasts** – Motion by Noman Williams (*GridLiance High Plains LLC*) seconded by Michael Wegner (ITC Holdings) to approve RR 367 as presented in the meeting. The motion passed with one abstaining (Noman Williams - *GridLiance High Plains LLC*).

**Agenda Item 8 – SUS-013 Neosho Ridge Wind Sponsored Upgrade** – TWG decided as a group to discuss this item at the October 7, 2019 meeting to give the group more time to review the background materials.