Omaha Public Power District

Southwest Power Pool Policy Update

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All Committee

August 13, 2024

Agenda Update

- Generator Interconnection Study Process (DISIS)
- Subregional Cost Allocation
- Various Resource Adequacy Related Policies

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Generator Interconnection Study Process (DISIS)

Generator Interconnection Study Process (DISIS)

- For safety and predictability reasons, thermal and intermittent resources that interconnect to the bulk electric system are studied for system impact (DISIS).
- Definitive Interconnection System Impact Studies (DISIS) identify:
  - Required Transmission Owner Interconnection Facilities
  - Network Upgrades and other Direct Assignment Facilities
  - Required to determine requirements for each specific Point of Interconnection
- Today, a Generator Owner who submits an application into the DISIS typically must wait four to five years for studies to be completed which:
  - Prolongs negotiations with a Transmission Owner and SPP for interconnection
  - Prolongs new verifiable generators from being able to serve new load requirements
- The DISIS process is currently “clustered” into two submission periods each year.

Generator Interconnection Study Process (DISIS)

- Each "cluster" is used to determine a time-period allowed for applications
  - Then studied holistically for impacts to the transmission system
  - When studies are completed and costs are shared with Generator Owners for their portion of upgrades; some applications are withdrawn
    - This causes additional delays and restudies
- Shortly after one cluster closes another one opens to allow for new applications
- SPP and other RTOs are looking for solutions to speed up this process
  - This process has not worked as anticipated, restudies have been made which causes delays and significant additional costs to Load Responsible Entities (LREs) and Generator Owners like OPPD

Generator Interconnection Study Process (DISIS)

- SPP proposed two FERC waiver requests that will impact the next two DISIS clusters
  - DISIS 2024 Waiver: *Delays start of 2024 DISIS study work by +1yr. Causing 2024 GIAs to be delayed*
  - DISIS 2025 Waiver: Combines 2025/2026 clusters. Causing 2025 GIAs to be delayed, *no GIA requests can be made in year 2025*
- To file these waivers at FERC, the proposal must be approved by SPP Stakeholders
  - OPPD has opposed this measure in each working group
    - Market Operations and Policy Committee approved with 80.59% of members supporting
  - SPP Board of Directors and Members Committee voted to approve the FERC waivers on August 8, 2024
    - Added a third request for a wavier seeking to possibly extend the time for submission of GIA requests to *no later than March 1, 2025*
    - FERC filing will likely be made in September

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Subregional Cost Allocation

Subregional Cost Allocation

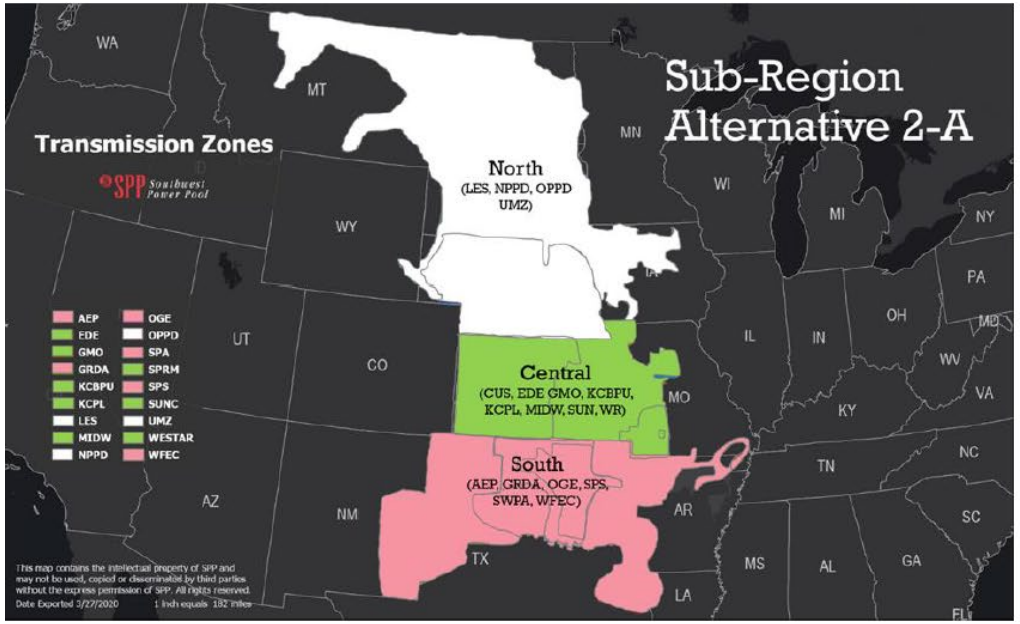
- Currently, SPP has a socialization policy that principally states that regional transmission infrastructure provides economic and reliability benefits to not only the implementing utility but also the broader region near the transmission facility upgrade.
- Accordingly, cost allocation (socialization) is created by regional entities paying for transmission system upgrades they don't necessarily originate nor is on their system but that they benefit from the transmission being in place with lower system cost for power or higher levels of reliability.

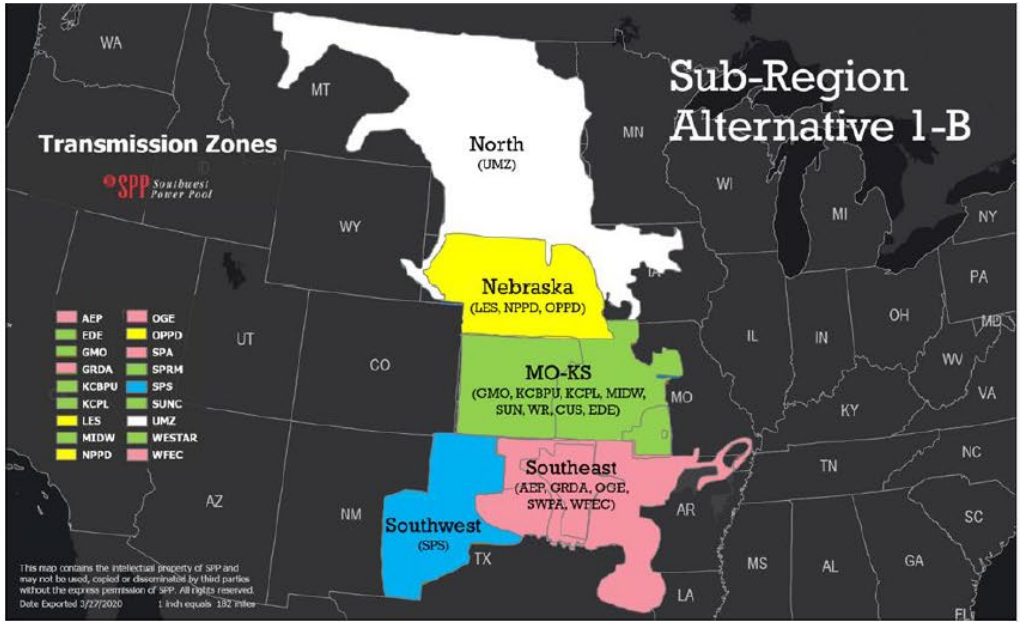
Subregional Cost Allocation

- Align cost allocation of transmission upgrades with needed upgrades for generation and load
  - There are two main cost allocation tiers (zonal and regional)
  - SPP looking to create a third tier (sub-regional)
- Today zonal cost allocation includes two components
  - Projects between 100-300 kV zonal cost allocated 67% and 33% of costs regional
  - Projects below 100 kV are zonal cost allocated 100%
  - Today there are 19 zonal allocation zones
- SPP proposed changing allocation for projects between 100-300kV to sub-regional
  - SPP Originally proposed 3 sub-regions
  - Through the Cost Allocation Working Group; SPP is also analyzing 5 sub-regional zones

Subregional Cost Allocation

- SPP has proposed both options
  - Both options have significant cost impacts to OPPD.
  - The per annum cost impacts are hard to predict but are expected to be millions of dollars, dependent upon transmission expansion in the yet to be defined sub region.





Next Steps

- SPP did not garner support from the Cost Allocation Working Group (CAWG), the Power Review Board consultant was vocal on negative views of this plan
- SPP plans to bring modified version in August to the CAWG
  - Greater analysis on impacts for the 3 and 5 sub-regional zones
  - Clearer recommendation
  - Will seek approval from the CAWG
- If successful, SPP will seek approval from the Regional State Committee in October

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Resource Adequacy Policy Update

Resource Adequacy Policies Priorities

FERC Filing

Performance Based Accreditation

Utilizes historical reliability data (EFORd') as a basis for determining accreditation value

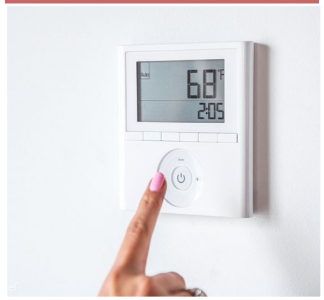
7 Years excluding certain Outside of Management Control Events

FERC Filing

Effective Load Carrying Capability

Utilizes over 40 years of historical weather data to determine how much wind, solar, and storage facilities produce during the most severe reliability conditions.

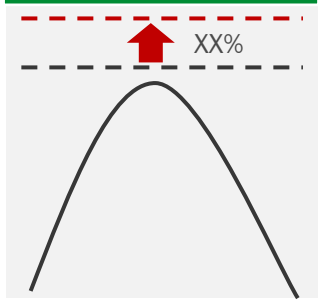
In Progress



Demand Response Policy

Establish strict requirements for demand response used for regional resource adequacy and utilize ELCC for programs with limitations.

SAWG/REAL Complete



Planning Reserve Margin/ EUE

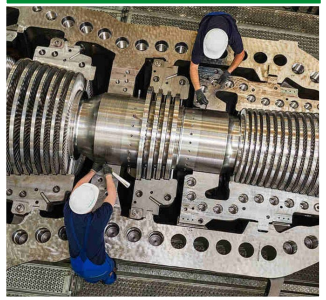
Update both summer and winter PRM requirements to better account for reliability during extreme events.

SAWG/REAL Complete

Fuel Assurance

Develop methods to incent resources to have reliable sources of fuel during extreme conditions. This is currently taking the form of increased PBA weighting during reliability events.

Complete



Availability / Outage Policy

Develop policy to ensure sufficient outage availability for generators to undergo necessary maintenance to preserve reliability

Postponed

Ramping Requirements

Evaluate and develop potential policy to ensure that SPP retains a resource mix with sufficient ramp capability to balance an increasingly dynamic system.

Resource Adequacy Policy Update

- Fuel Assurance: develop a policy to weight for Performance Based Accreditation based on critical system periods
  - If resource on outage during critical periods, its accreditation will be decreased
  - Motion passed

- Planning Reserve Margin: Ensure LREs plan for capacity in winter and summer seasons
  - 2 options:
    - 33% winter 16% summer PRM with 2-year sufficiency valuation curve
    - 36% winter and 16% summer PRM with 3-year sufficiency valuation curve
  - Motion: Approve 36% winter option
    - Failed in Members Committee
    - Passed in Board of Directors (this vote was all that was needed)