BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of an Investigation of the Cost to Missouri's Electric Utilities Resulting from Compliance with Federal Environmental Regulations	)))	File No. EW-2012-0065

RESPONSIVE COMMENTS OF SOUTHWEST POWER POOL, INC.

COMES NOW Southwest Power Pool, Inc. ("SPP"), by and through its counsel, and hereby submits its response to Comments filed on August 25, 2014 in response to the Public Service Commission of the State of Missouri's ("Commission" or "MoPSC") July 30, 2014 Order Directing Response to Certain Questions and August 6, 2014 Order Directing Response to Additional Questions.

Respectfully submitted,

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RESPONSIVE COMMENTS OF SOUTHWEST POWER POOL, INC.

SPP is pleased to provide a response to comments filed in this matter on August 25, 2014. In particular, in the Comments of Kansas City Power & Light Company ("KCP&L") and KCP&L Greater Missouri Operations Company ("GMO"), KCP&L and GMO identified SPP as being able to provide additional information regarding the reliability impacts of Environmental Protection Agency ("EPA") proposed Clean Power Plan ("CPP") 111(d) requirements. Specifically, KCP&L and GMO: (i) offered that electric transmission constraint information should come from SPP regional modeling; (ii) explained that SPP may be able to provide further information on the question as to whether an Independent Operator's control over the dispatch of the generation will affect the utility's ability to control emissions and comply with EPA's proposed CPP 111(d) requirements; and (iii) stated that SPP has started a reliability analysis. The Comments of The Empire District Electric Company also recognized that there are reliability concerns that could result in a power shortage if proposed CPP 111(d) is implemented without revisions. SPP agrees with these assertions and appreciates the opportunity to provide the Commission with additional information in response to the comments offered by KCP&L and GMO.

SPP is currently undertaking an impact assessment of reliability within the SPP region using as its baseline the generator retirements that EPA has projected will result from implementation of the CPP. Results of that assessment are not yet available. Accordingly, SPP is not yet able to provide the Commission with specific information on these items identified by

KCP&L and GMO at this time. However, SPP expects a report on the reliability assessment to be made available by October 7, 2014 and will provide the Missouri Public Service Commission with a copy of the report.

Based on preliminary results, SPP anticipates that there will be significant reliability impacts as a result of compliance with EPA's proposed CPP 111(d) requirements. Some of these reliability impacts could be mitigated in a number of ways, including via construction of new transmission facilities. At this point in our analysis, it is reasonable to assume that the mitigation will require the addition of transmission upgrades. It is important to recognize that if electric transmission upgrades are required as part of the solutions to comply with the EPA's proposed rule, the planning and construction of transmission upgrades can take up to eight and a half years and cost up to approximately $2.3 million per mile for new 345 kV transmission lines, excluding substation costs. Setting the costs of transmission aside and solely considering that it takes up to eight and a half years for transmission to be placed into service, under the EPA proposed rule, a transmission related solution would not likely be feasible for a 2020 deadline.

Again, once SPP has completed its reliability assessment and report, SPP will provide the report to the Commission in advance of the October 16, 2014 date for submitting comments to the EPA.

In connection with this docket, Mr. Lanny Nickell, SPP Vice President of Engineering, made a presentation on August 18, 2014 to the Commission and interested entities that provides additional information on the scope of the impact assessment. Mr. Nickell's presentation is attached hereto as Attachment 1.

Respectfully submitted,

/s/ Mark W. Comley

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Certificate of Service

I hereby certify that a true and correct copy of the above and foregoing document was sent via e-mail on this 16th day of September, 2014, to General Counsel's Office at staffcounselservice@psc.mo.gov; and Office of Public Counsel at opcservice@ded.mo.gov.

/s/ Mark W. Comley

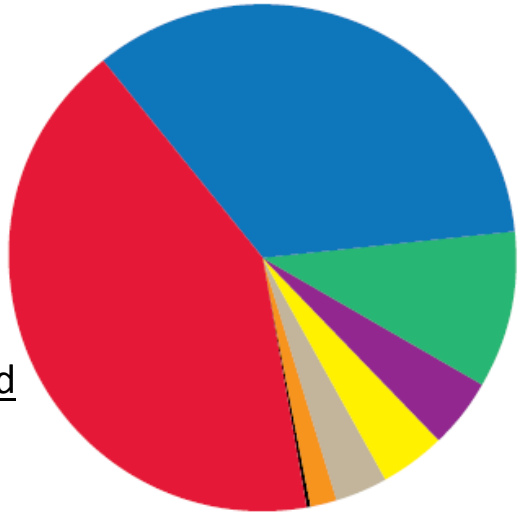
ATTACHMENT 1


Helping our members work together to keep the lights on...
today and in the future
SPP
Southwest
Power Pool

SPP's 2013 Energy Consumption and Capacity

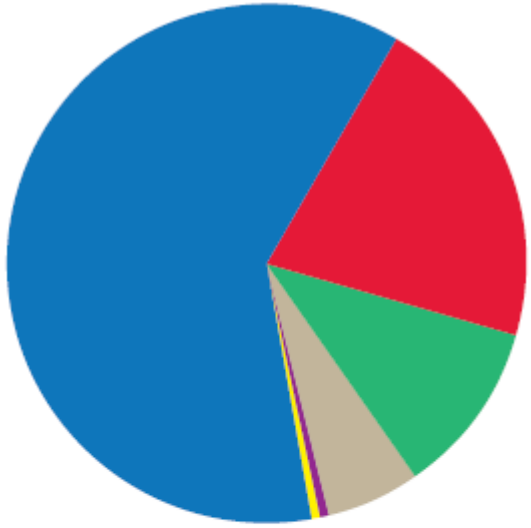
Total Capacity
66 GW
Total Peak Demand
49 GW

Capacity



Gas	42.04%
Coal	34.08%
Wind	10.01%
Hydro	4.55%
Dual Fuel	4.06%
Nuclear	3.34%
Fuel Oil	1.83%
Other	0.08%

Consumption



Coal	61.2%
Gas	21.2%
Wind	10.8%
Nuclear	6.0%
Hydro	0.6%
Diesel Fuel Oil (DFO)	0.3%

12% annual capacity margin requirement

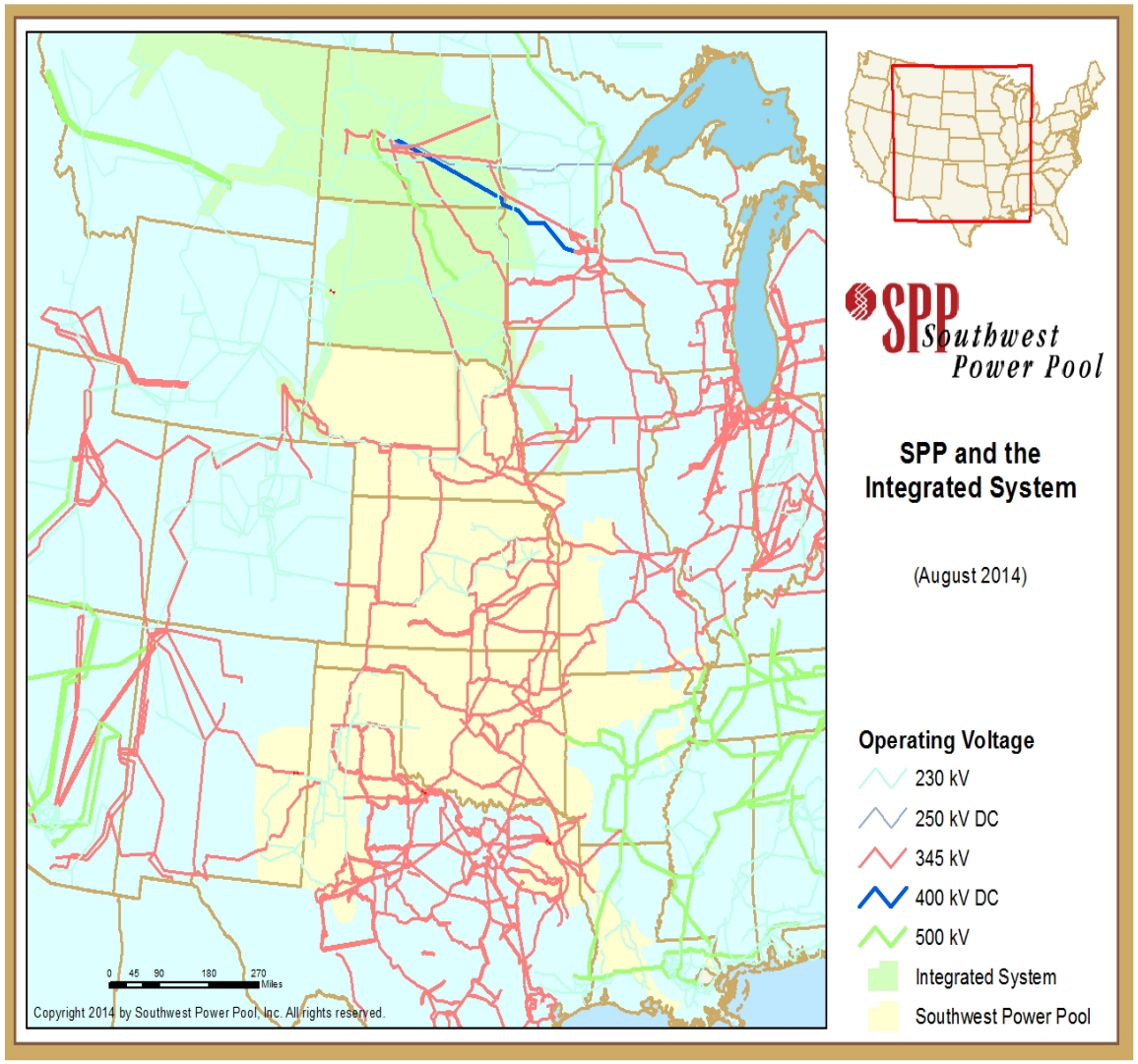
SPP's Operating Region

Current

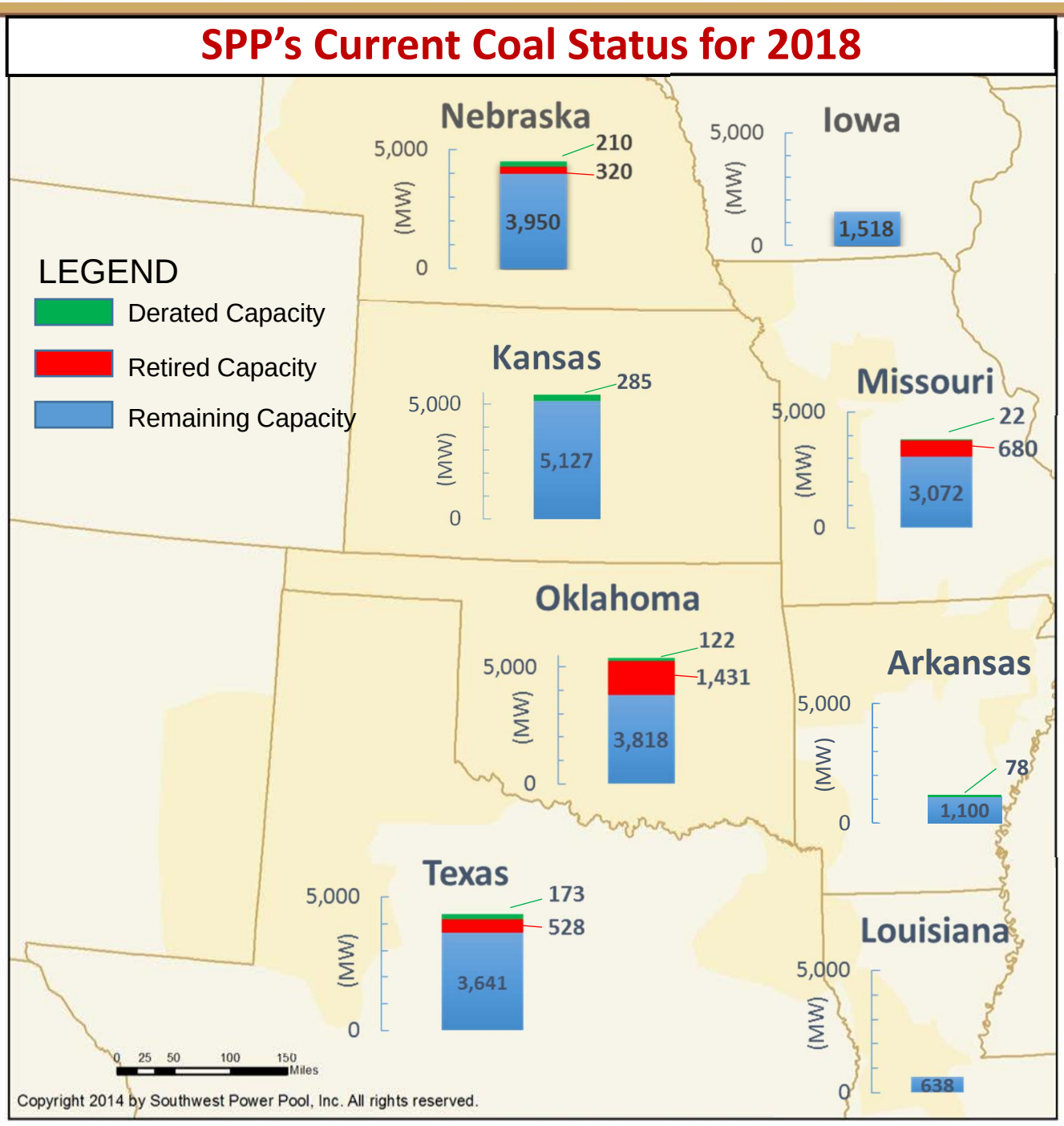
- 77,366 MW of generating capacity
- 46,136 MW of peak demand
- 48,930 miles transmission:
  - 69 kV – 12,569 miles
  - 115 kV – 10,239 miles
  - 138 kV – 9,691 miles
  - 161 kV – 5,049 miles
  - 230 kV – 3,889 miles
  - 345 kV – 7,401 miles
  - 500 kV – 93 miles

Future (October 2015)

- Adding 3 new members (WAPA, BEPC, and HCPD)
- + 5,000 MW of peak demand
- + 7,600 MW of generating capacity
- 50% increase in SPP's current hydro capacity

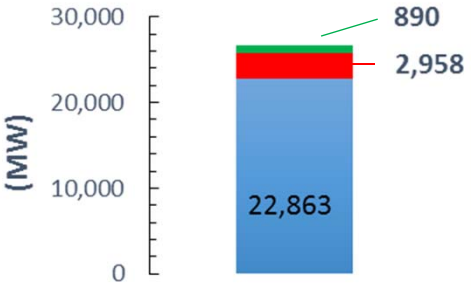


SPP's Current Coal Status for 2018

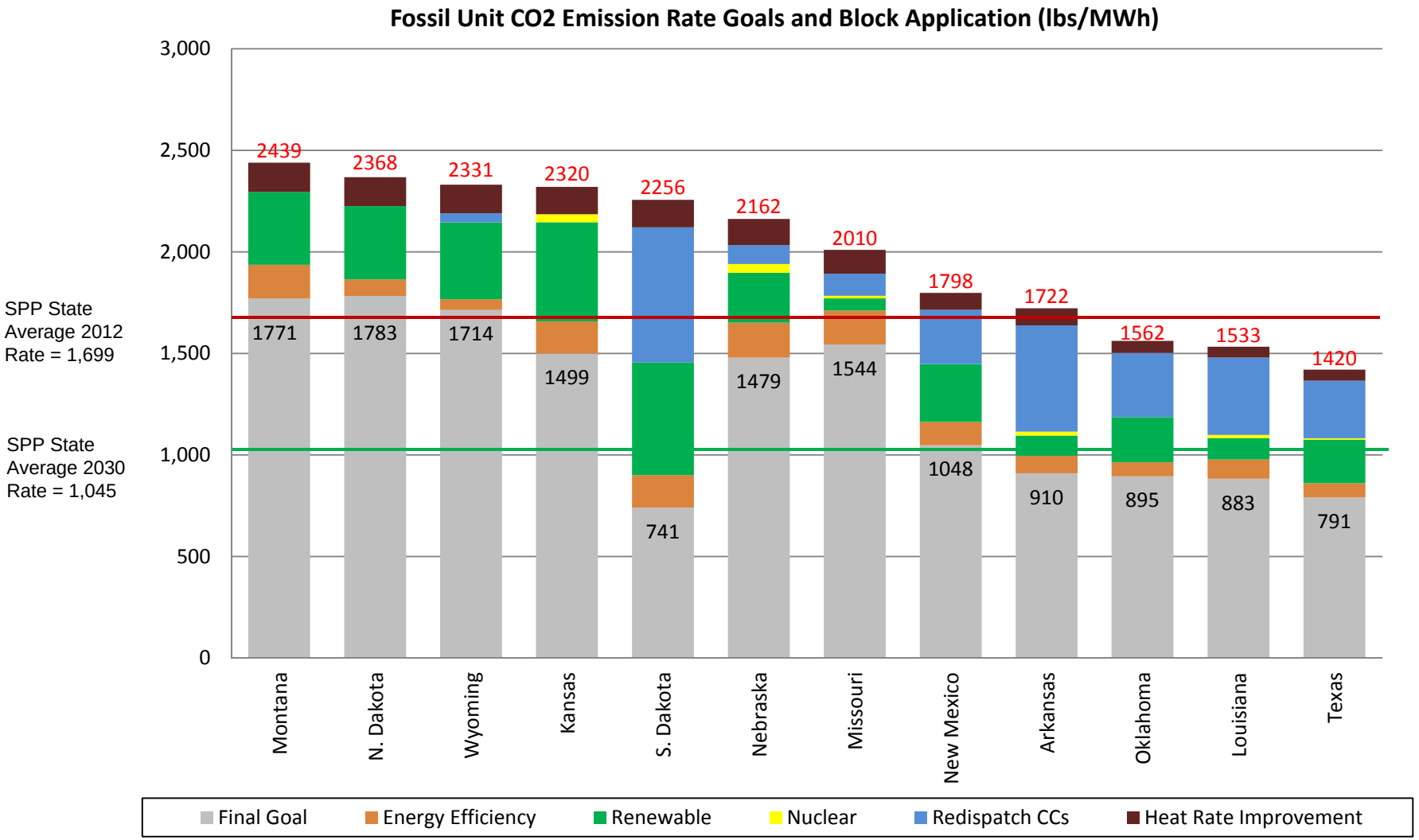


SPP Southwest Power Pool

Total Generation and Losses of Coal Units by 2018



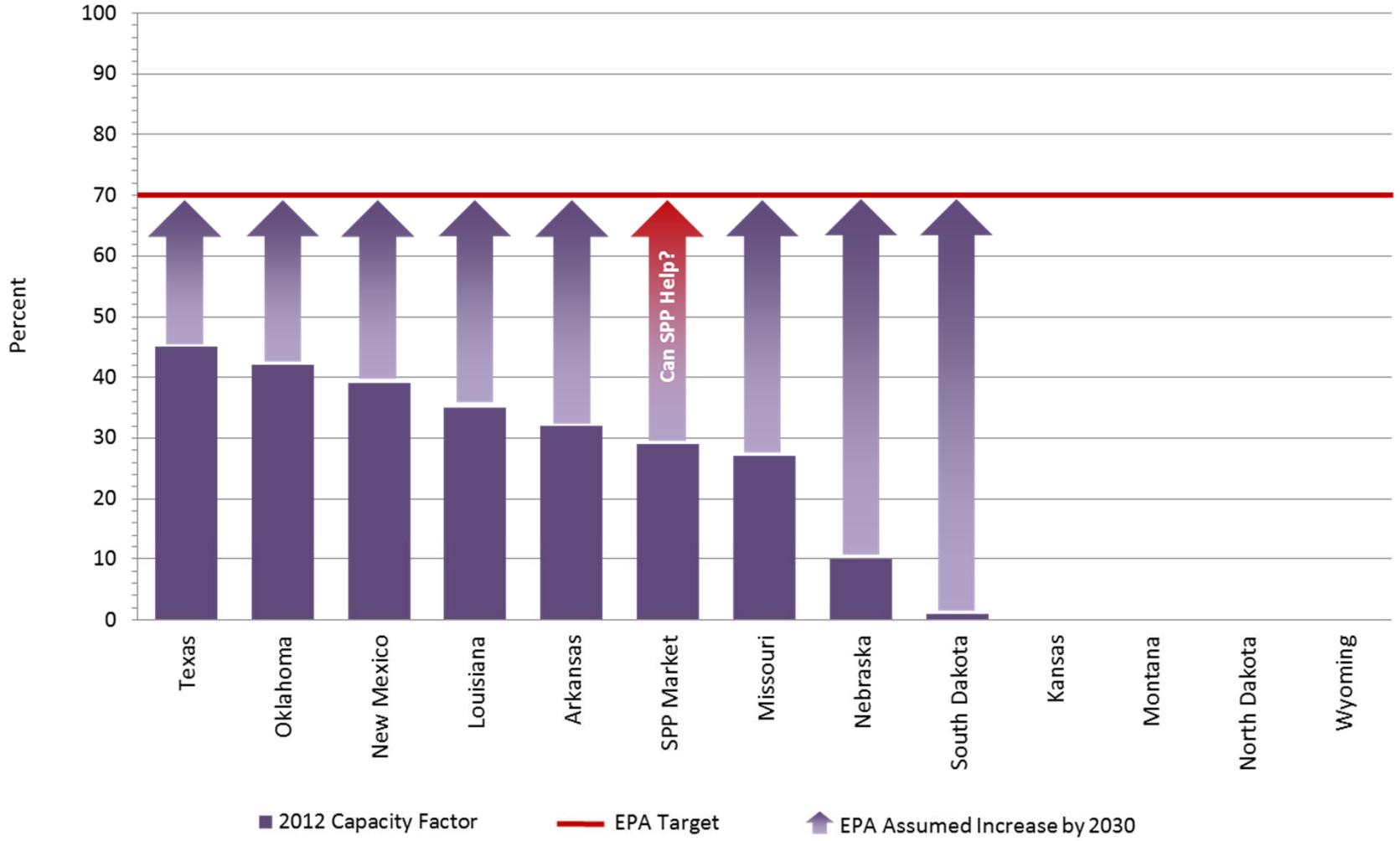
2030 Goals for States in SPP



*Includes Future States with IS Generation in SPP (N. Dakota, S. Dakota, Montana, and Wyoming)

NGCC Capacity Factors

(For SPP and Select Neighboring States)

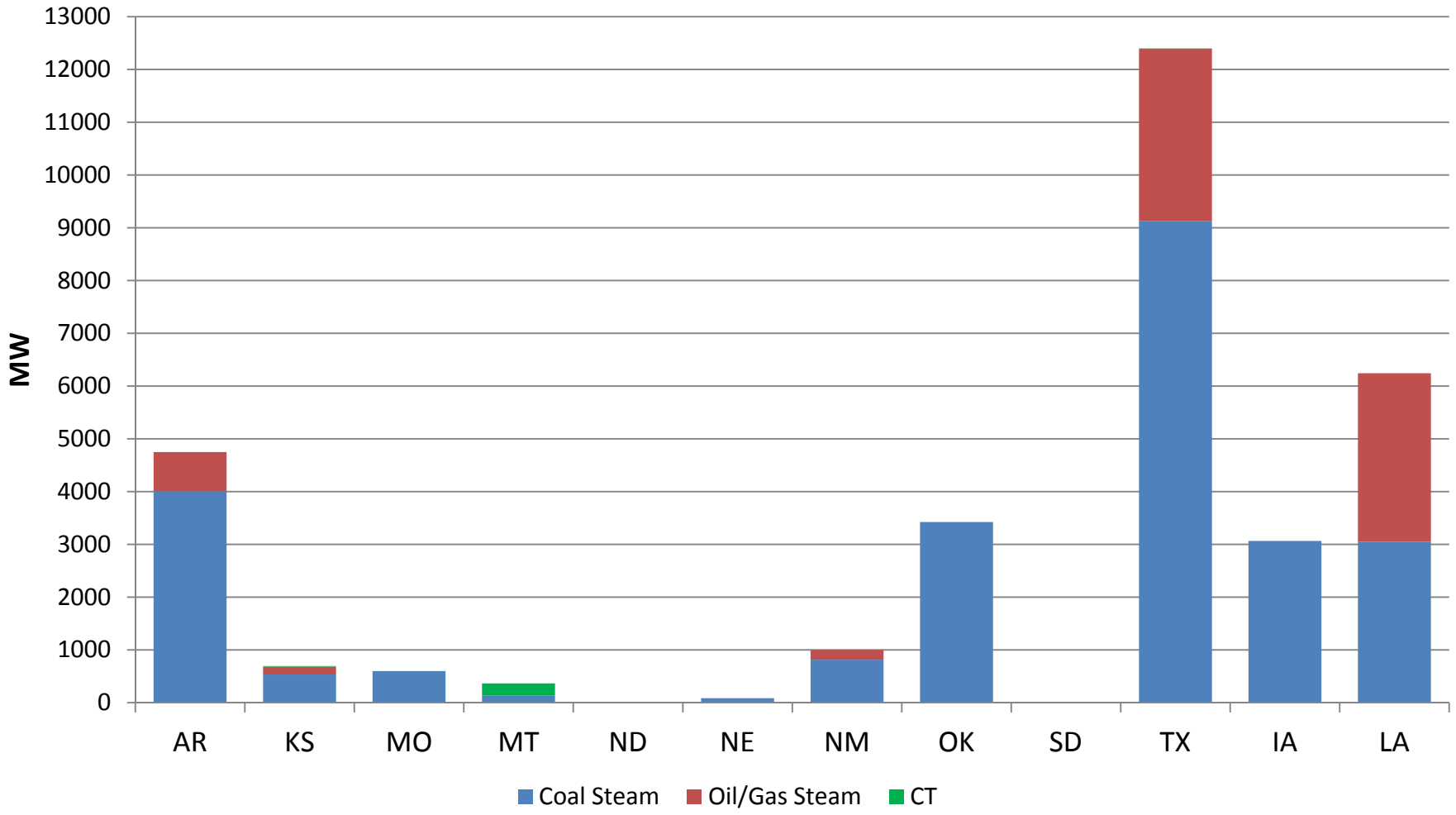


SPP's CPP Impact Assessments

- Initial analysis requested by SPP's Strategic Planning Committee
  - Reliability analysis
  - Use existing ITP 2024 models
  - Model EPA's projected EGU retirements
  - Replace retired EGUs with a combination of increased output from existing CCs, new CCs, Energy Efficiency, and increased renewables (with input from member utility experts)
  - Assessment underway, results expected week of August 18th
- SPP's Regional State Committee requested analysis comparing both individual state and regional approaches
  - Will discuss approach during their August 25th conference call

EPA Projected 2016-2020 EGU Retirements

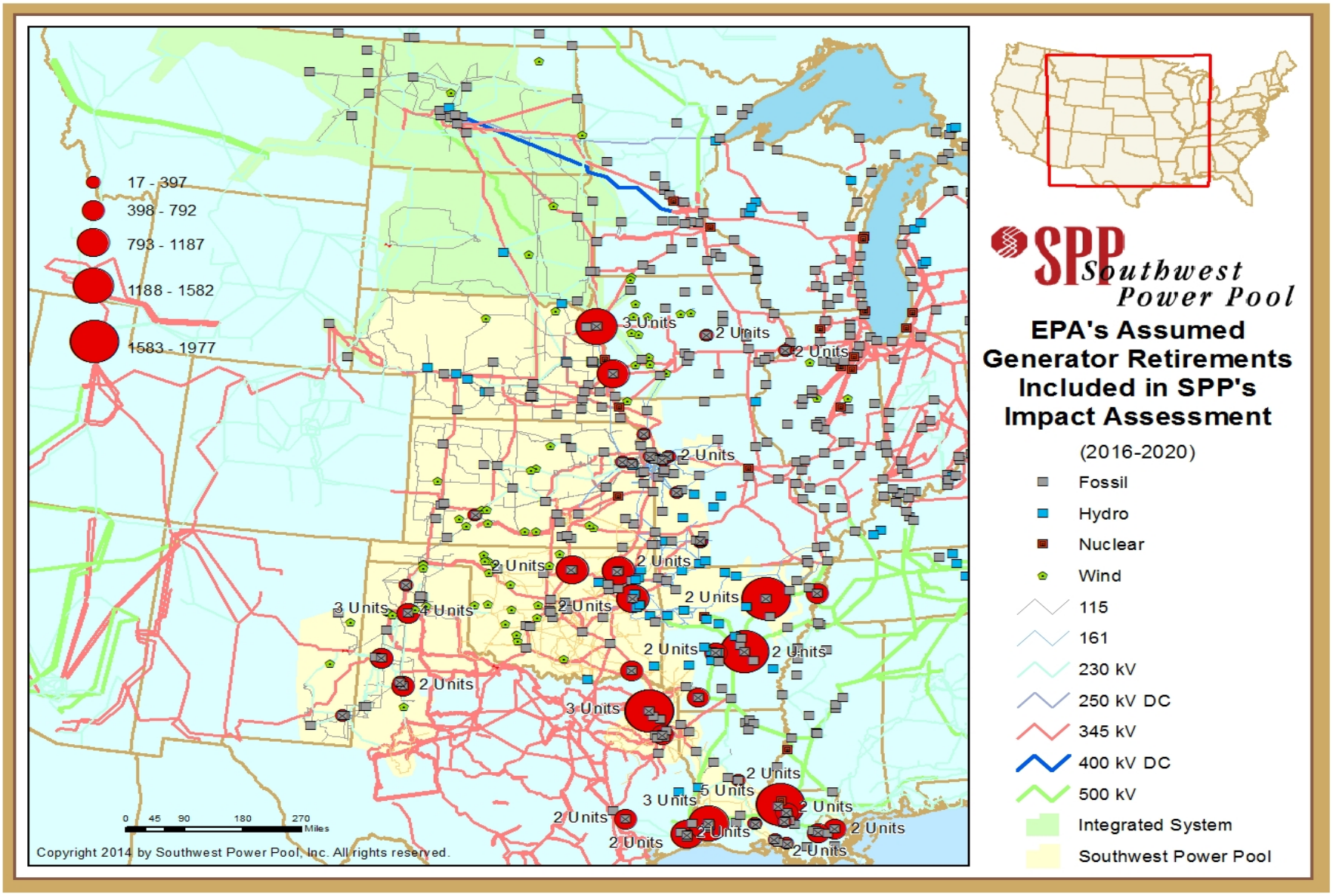
(For SPP and Select Neighboring States)



*Extracted from EPA IPM data

**THESE RETIREMENTS ARE ASSUMED BY EPA – NOT SPP!

EPA Projected 2016-2020 EGU Retirements



SPP Reserve Margin Assessment

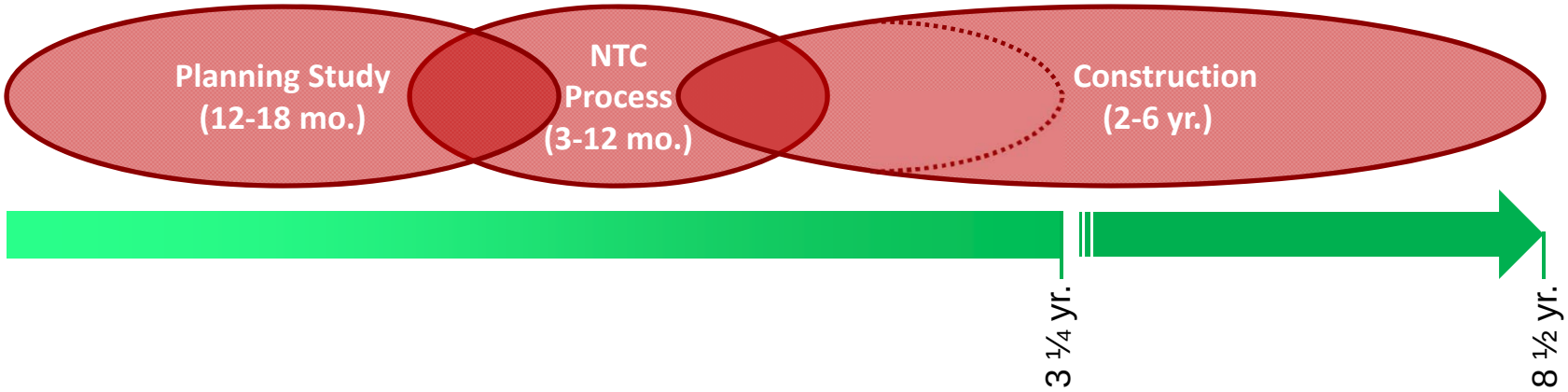
- Used current load forecasts supplied by SPP members, currently planned generator retirements, currently planned new generator capacity with GIAs, and EPA's assumed retirements
- SPP's minimum required reserve margin is 13.6%
- By 2020, SPP's anticipated reserve margin would be 5.0%, representing a capacity margin deficiency of approximately 4,500 MW
- By 2024, SPP's anticipated reserve margin would be -3.8%, representing a capacity margin deficiency of approximately 10,000 MW
- Out of 14 load serving members assessed, 9 would be deficient by 2020 and 10 by 2024

State Plans Need to Consider the Following

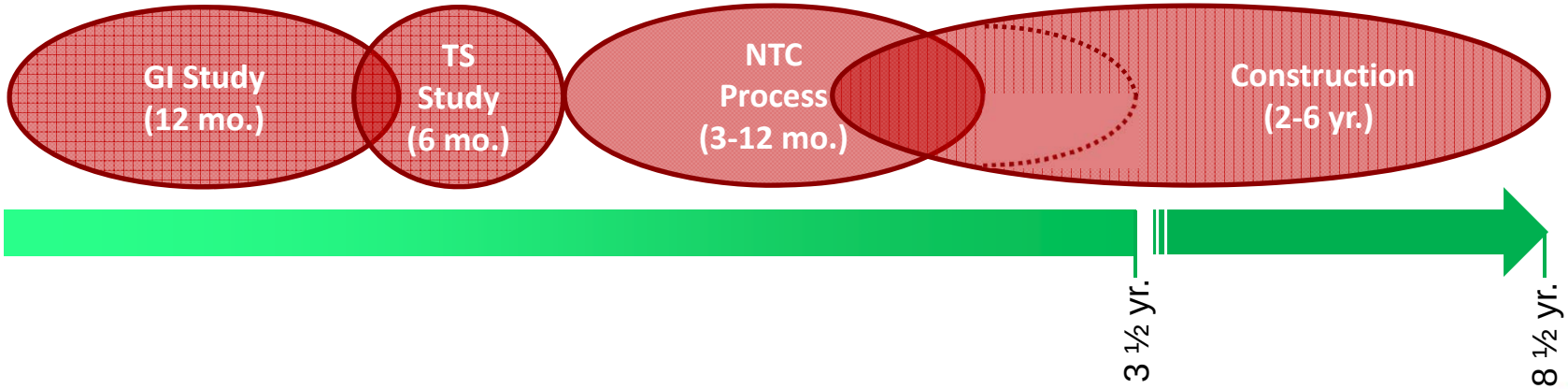
- SPP is responsible to FERC and NERC
  - Required to ensure reliability and perform in accordance with tariff
  - Rules, behavior, pricing, and revenue distribution are subject to FERC approval
  - Penalties may be levied by FERC/NERC for failure to comply (up to $1 MM/day/violation)
- SPP operates regional security-constrained, economically dispatched markets
  - Considers both reliability and economics
  - Generation dispatch provides reliable and economic solutions to needs over a multi-state area
- SPP plans and directs regional transmission construction
  - Addresses expected reliability, economic, and public policy needs
  - Generator interconnection and transmission service must be requested of SPP and processed by SPP
  - Takes up to 8.5 years to perform applicable planning processes and construct transmission upgrades

Transmission Build Cycle

Transmission Planning Process



GI and Transmission Service Process



MoPSC Questions of Interest to SPP

Q. II, b) Are there transmission constraints (either gas in or electricity out) or operational or market constraints that make the EPA's target of 12.78 Million MWhs for NGCC problematic? Explain. If there are any constraints, what steps would be necessary to relieve them? What are the costs of those steps?

A. SPP believes its impact assessment can be useful to answer this question but does not have results yet. If electric transmission upgrades are required to facilitate increased production of NGCC, it can take up to 8.5 years to construct. 345 kV construction typically costs $2 MM per mile and 138 kV construction typically cost $1 MM per mile, excluding substation costs.

MoPSC Questions of Interest to SPP

Q. V, h) Please explain whether an Independent Operator's control over the dispatch of the generation will affect the utility's ability to control emissions and comply with EPA's proposed 111(d) requirements.

A. SPP's market dispatch designed to reliably dispatch the most economic resources could affect compliance with EPA's requirements unless well-designed market system changes are made. Close coordination between SPP, members, regulators, and the applicable state agencies will be needed to ensure that SPP's Security-Constrained Economic Dispatch system appropriately accounts for emission goals. This will not be a trivial matter and will take considerable time to develop the appropriate protocols and potential market system changes.

MoPSC Questions of Interest to SPP

Q. V, i) Does EPA's proposal give rise to any concerns about reliability? If so, what are those concerns?

A. Yes. SPP expects equipment overloads, low voltages, and dynamic stability issues will result from EPA-assumed fossil fuel generator retirements. Further, EPA's assumed retirements will result in approximately 4.5 GW and 10 GW of new generation being needed by 2020 and 2024, respectively, to comply with SPP's minimum reserve margin requirements. Transmission infrastructure needed to mitigate reliability issues and to support interconnection and delivery of new generation will likely not be available by the time it is needed to facilitate compliance with the EPA's regulations.

MoPSC Questions of Interest to SPP

Q. V, l. Describe in as much detail as possible the comments you intend to submit to EPA. If you have already submitted comments, please provide them.

A. SPP intends to submit comments reflecting the 1) nature and possible significance of reliability concerns, 2) need to recognize transmission upgrade evaluation and construction time, 3) current misalignment of SPP's market system with emission goals and affect of uncoordinated compliance on dispatch costs and real-time reliability, 4) potential value of a coordinated, RTO-wide regional approach, and 5) need for more time to fully evaluate the impacts of the Clean Power Plan.

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