SPP Regional Transmission Planning
Survey of Planning Study Assumptions

The purpose of this survey is to ascertain the SPP stakeholders' views on the future regulatory and operational constraints that should be factored into any long-term planning study for the region. This particular survey focuses on assumptions related to the region's future supply and demand. Future investments in the region's transmission system will be highly dependent on these study assumptions. We seek your views on areas including the likelihood of new nuclear generation in the region, the anticipated level of wind generation, and the potential impact of future environmental policies.

Directions: For each question below, we ask that you select the one response that you believe is the most likely outcome. Most questions ask for a response related to two time horizons. Your responses do not have to be the same for each time horizon. For instance, you may believe a policy direction may not be achievable in the next 3-5 years but would be achievable in the 5-10 year window. Space for additional comments is also provided at the end of the survey. We ask that you use this space to provide specific comment on other assumptions or clarifications you wish to offer on the survey responses.

Supply and Demand Factors

The following items relate to the potential impact on the future supply and demand assumptions of Renewable Portfolio Standards (RPS), demand management programs and exports. In answering these questions, we ask that you answer from an SPP regional perspective and not just the perspective of your particular state or jurisdiction.

1. What do you consider the likelihood that a federal RPS standard will be approved by 2010? By 2020?
   a. 2010 - Highly unlikely, Not Likely, Likely, Highly Probably, Certain
   b. 2020 - Highly unlikely, Not Likely, Likely, Highly Probably, Certain

2. Whether or not a federal mandate exists, what percentage of the region's total supply do you believe will be subject to an RPS mandate or the equivalent thereof?
   a. 2010 - <5%, 5-10%, 10-15%, 15%-20%, >20%
   b. 2020 - <5%, 5-10%, 10-15%, 15%-20%, >20%

3. Do you believe that your state or the SPP region has or will have an RPS standard independent of the federal standards addressed in questions 1 and 2, no matter what transpires at the federal level?
   a. No
   b. Yes.
4. Wind generation currently makes up approximately 3% (roughly 1,600 MW out of a total of 48,000 MW) of the region’s installed capacity today. What do you believe is the maximum sustainable percentage for wind generation in 2010? In 2020?
   a. 2010 - <5%, 5-10%, 10-15%, 15%-20%, >20%, No Explicit Limit
   b. 2020 - <5%, 5-10%, 10-15%, 15%-20%, >20%, No Explicit Limit

5. The SPP region is currently experiencing significant activity with respect to investment in wind generation, which may also be of interest as a supply resource to neighboring regions in the Eastern Interconnection. Today, SPP makes certain assumptions in its planning with respect to exports off the system based on information related to long-term transactions and inter-regional reliability requirements. In looking ahead, should SPP modify these assumptions and plan its transmission system to explicitly support exports for the anticipated levels of wind generation to the broader regions?
   a. Change current assumptions and proactively plan for exports of wind generation to neighboring regions
   b. Maintain current approach for export assumptions from the region regardless of resource type.

6. The latest data available indicates SPP has approximately 1650 MW (approx 3% of peak load) of demand response capability in the region. What percentage of the region’s load do you think will be part of a utility operated Demand Side Management program (e.g. incentive programs, time-of-use rates)?
   a. by 2010: <2%, 3-6%, 7-10%, >10%
   b. by 2020: <2%, 3-6%, 7-10%, >10%

7. What percentage of the region’s load do you think could be considered price sensitive load as a result of Demand Response programs (these include programs that are not focused solely on peak load reduction)? In responding to this question, we are seeking to identify loads that would be directly responsive to the wholesale market price signals or participating in a regional demand response program. The answer here should be load that is incremental demand reduction capability to that in Question 6 above.
   a. by 2010: <2%, 3-6%, 7-10%, >10%
   b. by 2020: <2%, 3-6%, 7-10%, >10%

8. Energy efficiency design improvements in appliances, equipment and a number of other consumer goods are required by the EPAct 2005. Do you believe these changes will have a substantial change to the expected load growth in the region?
   a. By 2010 – Little to no reduction, some reduction, significant reduction
   b. by 2020 – Little to no reduction, some reduction, significant reduction
9. Nuclear generation currently makes up slightly more than 2% of the region’s installed capacity base with a total capacity of 1,166 MW. Do you believe the total MW of nuclear capacity will increase, decrease, or stay the same over time?

   a. by 2010 – increase by 1 new unit or incremental capacity only, increase by 2-4 units, stay the same (i.e. no new resources), decrease as a result of retirements
   b. by 2020 – increase by 1 new unit or incremental capacity only, increase by 2-4 units, stay the same (i.e. no new resources), decrease as a result of retirements

10. Historically, SPP has been a net importer during certain seasons and yet a net exporter during other seasons of the year. Do you believe the region’s import levels and export levels will increase, decrease or stay roughly the same over time?

   a. by 2010 –
      i. imports - stay roughly the same, significant increase during importing hours, significant decrease in importing hours
      ii. exports - stay roughly the same, significant increase during exporting hours, significant decrease in importing hours
      iii. net – remain roughly the same as today, increase as net exporter, increase as net importer

   b. by 2020 –
      i. imports - stay roughly the same, significant increase during importing hours, significant decrease in importing hours
      ii. exports - stay roughly the same, significant increase during exporting hours, significant decrease in importing hours
      iii. net – remain roughly the same as today, increase as net exporter, increase as net importer

Fuel and Environmental Considerations

The following items relate to the potential impact certain environmental policies or constraints may have on the region’s requirements. Again, in answering these questions, we ask that you answer from an SPP regional perspective and not just the perspective of your particular state or jurisdiction.

11. With respect to policies on emissions constraints, do you believe we are more likely to see a cap and trade based policy or a tax based policy?

   a. Cap and trade based system that would establish a total limit for the region and allow participants to trade credits.
   b. Tax based system that would establish a tax schedule on emissions
12. In the case of a cap and trade system, this value would establish a price at which units with excessive emissions would have to purchase credits. In the case of a tax-based system, this value would effectively be an adder to the unit’s cost of operations. Under either scenario for emissions credits policy (Question 10), what do you believe is an appropriate value to assign to emissions? For purposes of this question, assume current emissions credits trade at an average of $40/ton.

a. (Select one) Under a cap and trade based system, the value of emissions credits would be:
   i. significantly less than today’s prices
   ii. increase with rate of inflation
   iii. increase faster than rate of inflation.

b. (Select one) Under a tax based system – the tax impact would be:
   i. Less than the market price for emissions
   ii. About the same impact
   iii. Greater than the market price for emissions

13. Natural gas prices have experienced significant changes over the past several years. How would you characterize the future trend of natural gas prices?

a. 2008 to 2010 – decrease in real terms, increase with rate of inflation, increase faster than inflation
b. beyond 2010 – decrease in real terms, increase with rate of inflation, increase faster than inflation

14. Would you expect that coal prices would change at the same rate, faster, or slower than natural gas?

a. 2008 to 2010 – same rate, slower rate, faster rate
b. Beyond 2010 - same rate, slower rate, faster rate