

2013 SPSC Study Requests

January 31, 2013

20-Year Study Requests

1. **Alternative Futures** –SPSC proposes a study case that explores 20-year alternative futures assuming the following different and independent technological and policy changes. This study case is an alternative to the multi-variable scenario inputs in the SPSC 20-year scenarios. The SPSC alternative futures case examines the impact of changing individual variable inputs to the 2034 Reference Case. We believe this study case will complement the SPSC scenarios and further inform the planning process. SPSC proposes this case with the following specific elements:
 - a. Natural gas supply remains abundant with low prices into the 20-year horizon
 - b. Solar PV continues to decline becoming a low cost resource and widespread adoption of distributed generation resources
 - c. Central station solar with storage becomes a low cost resource with concentrated development in the Desert Southwest
 - d. Wind energy innovations advances wind as the low cost resource
 - e. Carbon capture and sequestration technology innovations make coal a low cost and low carbon resource, prompting new development of coal generation.
 - f. DSM/EE technologies fail to materialize and loads are 10% higher than loads in the 2034 Reference Case
 - g. Electrification accelerates in the transportation and manufacturing sector twice as high as anticipated.
 - h. Changes in state and provincial RPS policies to (a) 33%; (b) 40%

SPSC requests the opportunity to refine these specific elements based on discussions with WECC and other stakeholders during the development of the 2013 Study Program. We anticipate that early modeling results from the Long Term Planning Tool will help guide refinements to the study elements.

10-Year Study Requests

1. **2024 Common Case** -- Develop the baseline reference case for 10-year studies that would be based on existing utility integrated resource plans (IRPs), other utility-level information, and current state, provincial and federal policies.
2. **Stress Test of the Gas-Electric Interface** – To support the SPSC-led effort to perform an assessment of the gas-electric interface in the Western Interconnection, SPSC requests that WECC model multiple sensitivities that stress the gas-electric interface with individual or compounding variable changes based off the Low Hydro Case and the 2024 Common Case:
 - Natural gas supply remains abundant with low prices into the planning future
 - Loads are 10% higher than loads in the 2024 Common Case
 - Assume the San Onofre nuclear plant Unit 3 is not restarted; and assume that Unit 2 is not restarted contingent upon a decision from the NRC this spring.
3. **Contract limits in 2024 Common Case** – Test transmission needs using generation assumptions in the 2024 Common Case, but assume hypothetical contractual commitments that limit the availability of transmission and the type of generation that Promod can dispatch. SPSC will work with Subregional Planning Groups, utilities and PUCs to inquire about existing and hypothetical contracts to model in the 2024 timeframe.

The Promod runs would test alternative contract assumptions in a series of sensitivity cases.