



**NTTG 2018-2019 Stressed Conditions Change Case Matrix
Stakeholder Comment Form**

Open Comment period August 15, 2018 through 5:00 p.m. (MDT) August 24, 2018

Please submit comments to info@nttg.biz

Commenter Contact Information

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Stakeholder Comments:

On the system stressed conditions and combinations of projects and flows to be studied for the NTTG 2018-2019 cycle.

Slide #: Comment:

2	<p>The NTTG Technical Work Group (TWG) has added 3 additional stressed conditions to study. This represents 50% more stress cases than were identified in the approved NTTG 2018-2019 Biennial Study Plan (Study Plan), and the 2016-2017 Final NTTG Regional Transmission Plan (2016-2017 RTP).</p> <p>Please provide the justification for including these additional new stress conditions in the study plan.</p> <p>UAE is concerned that these new study cases may result in analyses that are overly conservative or represent system conditions that are very infrequent and easily mitigated through typical utility best practices, that do not require new transmission.</p> <p>UAE is also concerned that these additional stress cases will consume limited time and resources that could otherwise be spent on different analyses, such as evaluating change case matrices (as discussed below), that would provide more information and value to the NTTG planning process.</p> <p>UAE's understanding of the process to develop the stressed conditions is that the TWG runs a production cost model (PCM) simulation, based on the WECC 2028 Anchor Data Set, which includes planned projects identified in the prior Regional Transmission Plan (pRTP). UAE is concerned that this methodology of including planned projects in the PCM simulation results in a PCM optimization that utilizes transmission capacity on those planned transmission projects. This would necessarily drive results that require</p>
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	<p>those same planned projects to maintain reliability.</p> <p>In other words, the methodology is potentially flawed because the assumptions for planned transmission projects to be included in the PCM simulation would result in stress conditions that require those same projects for reliability. UAE understands that other utilities, such as Bonneville Power Administration, start with a data set that only includes projects that are currently in-service, then identifies reliability violations, and then evaluates which transmission solutions could mitigate those violations.</p> <p>Please explain why the TWG chooses to include planned projects in the PCM simulations that it uses to develop stress conditions in the study plan, rather than performing PCM simulations with only in-service projects.</p>
16	<p>The TWG indicates that Case D - High B2H Export seed case is "not terribly stressed, will require tuning or selecting a new hour." If this condition is not stressed, UAE believes that it should be eliminated from the study plan, rather than tuned to create stress on the system. This would free up limited time and resources to perform other more valuable analyses.</p>
28	<p>Please explain why the TWG selected this new stress condition Case G - High Borah West. How frequently does the TWG expect this condition, or a similar condition to occur (i.e. how many hours in the PCM simulation did this condition or more extreme Borah West flows occur)?</p> <p>Does the Borah West Path rating of 2557 MW assume the null case (i.e. in-service transmission facilities only), or the pRTP* case which includes segments of Gateway West. If it includes segments of Gateway West, please confirm which segments of Gateway West are required to achieve that path rating of 2557 MW. If it does not include the pRTP segments of Gateway West, what is the path rating that does include those segments?</p> <p>*pRTP includes Gateway West without Midpoint-Hemingway #2, Cedar Hill-Midpoint and Populus-Borah.</p>
32	<p>Please explain why the TWG selected this new stress condition Case H - Max NTTG Import Case.</p> <p>How frequently does the TWG expect this condition, or a similar more extreme condition to occur?</p> <p>How many hours occurred in the PCM simulation with NTTG imports greater than 6000 MW?</p> <p>How many hours occurred with NTTG imports greater than 5000 MW?</p>
36-38	<p>Please explain why the TWG selected this new stress condition Case I - High Aeolus South & West Case.</p> <p>How frequently does the TWG expect this condition, or a similar condition to occur?</p> <p>How many hours in the PCM simulation occurred where Wyoming Wind generated at</p>

	<p>96% or greater of the total Wyoming Wind Capacity?</p> <p>Attachment 2 of the approved Study Plan indicates that the 2675 MW study level of Wyoming Wind generation is about 90% of the peak capacity, which implies a total Wyoming Wind maximum capacity of ~2972 MW.</p> <p>Case I indicates a 3058 MW Wyoming Wind generation study level at 96% of maximum capacity which implies a total Wyoming Wind maximum capacity of ~3185 MW.</p> <p>What is the maximum capacity of Wyoming Wind in the study resource assumptions?</p> <p>What is the reason for this apparent ~213 MW difference between the levels of Wyoming Wind implied by this stressed condition and the peak Wyoming Wind capacity in the approved Study Plan?</p> <p>Was a new Wyoming Wind resource added or modified since the Study Plan was approved? If so, please identify that specific resource and the reason for its inclusion now.</p>
41	<p>The pRTP change case is the only change case where Gateway West is included without the entirety of all of its segments. All of the other change cases include the entire Gateway West as a single project, meaning that even if just a single segment is needed for reliability, the absence of that segment would cause the entire change case to fail to meet reliability needs, and only the entirety of the Gateway West project could mitigate that reliability issue. Given the magnitude of Gateway West and the multi-billion dollar cost estimate, UAE believes that Gateway West needs to be segmented into several smaller sections in order to perform robust testing.</p> <p>More granular segmentation of Gateway West would be ideal, but at a minimum, the change case matrix should include the same variations on Gateway West that were used in the 2016-2017 RTP. Similar to the method in change cases 11-30 where each change case is run with and without B2H, each of the change cases that include Gateway West should also be run with the same configurations that were used in the 2016-2017 RTP.</p> <ul style="list-style-type: none"> a - Gateway West without Midpoint - Hemingway #2 and Cedar Hill - Midpoint b - Gateway West without Borah - Midpoint uprate and Populus - Borah c - Gateway West without Midpoint - Hemingway #2, Cedar Hill - Midpoint, and Populus - Borah d- Gateway West without Midpoint - Hemingway #2, Cedar Hill - Midpoint, Populus - Cedar Hill - Hemingway, Populus - Borah, and Midpoint - Borah Uprate <p>Additionally, UAE understands that the Antelope Projects are driven by a UAMPS interconnection request for a generation project located at the Idaho National Laboratory. Given that the UAMPS requested resource is part of the Study Plan resource assumptions, that would indicate that the Antelope facilities required for that interconnection are needed. The NTTG regional planning process is not the appropriate forum to test whether these interconnection driven facilities are required for interconnection, nor is it an efficient use of time and resources that could otherwise be spent on more valuable analyses. Further, the absence of these facilities might cause an otherwise reliable change case to appear unreliable. UAE requests that the Antelope project be removed from the Change Case matrix and included in the</p>

	<p>base model. This will also free up valuable resources to test the Gateway West project in more granular segments.</p>
<p>xx</p>	<p>NTTG Planning Committee Meeting Presentation, August 15, 2018 slides 15-17.</p> <p>The TWG presentation shows different coal and gas generation dispatch results based on changes to coal prices.</p> <p>Did the TWG make adjustments to coal prices that are included in the PCM simulation used to develop the stressed conditions? If so, please explain the reason for making these adjustments.</p> <p>The TWG indicates that adjustments to coal prices do not result in significantly different dispatch for the selected cases. Please explain why. Do the adjusted coal prices impact the frequency of similar or more extreme stress conditions?</p>