

## NTTG 2014-2015 PPC Draft Study Plan Stakeholder Comment and NTTG Response

Name: Carl Zichella Organization: NRDC  Comments  Study Plan Page / 1 Comment		NTTG Tracking Info  Date Received: December 23, 2014  Committee Assignment: NTTG Technical Workgroup  NTTG Response  Response Date Response	
All specifica page 5	I'm writing on behalf of the Natural Resources Defense Council in support of the Draft NTTG Study Plan for the 2014-2015 Public Policy Consideration Scenario"  NRDC is a national, non-profit organization of scientists, lawyers, and environmental specialists, dedicated to protecting public health and the environment. Founded in 1970, NRDC serves more than one million members, supporters and environmental activists with offices in New York, Washington, Los Angeles, San Francisco, Chicago and Beijing. NRDC has a long history of efforts to protect and conserve the nation's natural resources, including in particular the nation's air, water, lands and resources. NRDC also has a long history of advocacy promoting the increased use of energy efficiency and renewable energy sources to meet America's energy needs.  "Understanding the transmission issues surrounding the retirement of Colstrip 1&2 is important because this infrastructure is crucial to providing transmission access to renewable energy resources.	1/20/2015	NTTG will work with the sponsor of the Public Policy Consideration request to determine next steps, if any, if the results of the power flow analysis suggest a dynamic analysis study.

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Commenter Contact Information  Date: January 5, 2015  Name: Doug Howell  Organization: Sierra Club Northwest Office			NTTG Tracking Info  Date Received: January 5, 2015  Committee Assignment: NTTG Technical Workgroup	
Comments  Study Plan Section  Section  Comment		Response Date Response		
Northern Tier Transmission Group ("NTTG") Draft Study Plan for the 2014-2015 Public Policy Consideration (PPC)	General comment	Understanding the transmission issues surrounding the retirement of Colstrip 1&2 is important because there is clear movement toward the early retirement of these units. Puget Sound Energy which ones half of these two units, modeled a 2017 retirement for the Washington Utilities and Transportation Commission. This retirement year was chosen because of the confluence of regulatory pressures from federal regional haze and the Mercury and Air Toxic Standards. In addition, Colstrip Units 1 and 2 are plagued with a number of additional liabilities which are the subject of four legal actions. As a result of these legal and regulatory pressures, the WA UTC seriously questions the efficacy of continued ratepayer financing of these units. As such, we need to now prepare for the effects on transmission.	1/20/2015	No response required.
Northern Tier Transmission Group ("NTTG") Draft Study Plan for the 2014-2015 Public Policy Consideration (PPC)	Page 5 / bottom of page	If this initial study suggests that it would be necessary, we support the "dynamic analysis" discussed at the bottom of page 5 of the Draft Study Plan." Page 5 of the study proposal gives a good summary of the transmission issues surrounding Colstrip retirement. This initial study should answer most of our questions in a positive manner, but if we would need an engineering level dynamic analysis to confirm the reliability of retiring colstrip then we should proceed with one. Hopefully, this won't be necessary.	1/20/2015	NTTG will work with the sponsor of the Public Policy Consideration request to determine next steps, if any, if the results of the power flow analysis suggest a dynamic analysis study.

Commenter Contact Information  Date: January 9, 2015			NTTG Tracking Info Date Received: January 9, 2015	
Name: Fred Heutte Organization: NW Energy Coalition		Committee Assignment: NTTG Technical Workgroup		
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1	Page 1/ Line# 1	NWEC supports the proposal made by Renewable Northwest and the proposed implementation study plan described in this draft to assess the 2020 retirement of Colstrip units 1 and 2 and integration of replacement wind resources at the Broadview substation. This is an important initial study to assess one of several potential scenarios involving implementation federal and state laws and regulations including the Clean Air Act (especially Sec. 111), relevant state renewable portfolio standards, and other public policy requirements and public policy considerations. We expect that in addition to helping accomplishment Order 1000 planning requirements, this study will provide informative results for a variety of other planning processes, including utility integrated resource plans and the 7th Plan of the Northwest Power and Conservation Council.	1/20/2015	No response required.

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4	Page 5/ Line# 105	We suggest that a general description be provided in the study report concerning how the ATR RAS is configured and operates, recognizing any required confidentiality constraints. This will help readers understand the locally important operating context and the conditions for the Performance Violation Mitigation Method in this study plan.	1/20/2015	Acknowledged. From the Study Plan, "The ATR is a computer based relay which is designed to protect the Colstrip generators and to prevent unstable events from disrupting the interconnected grid in the Western Interconnection when faults and line outages occur on the Colstrip transmission system. The ATR is calibrated to prevent the violation of the WECC dynamic voltage dip performance criterion which assures stable performance. The device monitors the real-time speed and acceleration of the four Colstrip units. It uses this information to assess the dynamic performance of the units and thus detect unstable events in progress. When a contingency occurs that could cause an unstable result, the ATR trips generators as necessary to restore the system to a stable operating condition."
4	Page 5/ Line# 114	We concur with the proposal to conduct follow-up dynamic analysis to verify ATR RAS performance any contingencies that result in performance violations within the study. It would be helpful in both the final study plan and in the study report, as appropriate, to provide a brief description of the approach used for dynamic analysis, noting any limitations or aspects that may not be fully investigated given available time and resources.	1/20/2015	Acknowledged. The proposed language for the Study Report is: The approach used for dynamics, if necessary, would be to utilize a case that is already prepared for dynamics analysis, such as a current dynamics-ready WECC base case. The reasoning behind this suggestion is two-fold: By using a dynamics-ready case, there is no time spent converting a TEPPC case to be dynamics-ready, a process that is speculated to take at least 2 person-months. Dynamics data is much more extensive than powerflow data and as such, would take a significant amount of time to both track down and enter the appropriate data for the entire WECC system. The ATR simulation program used by NWE is internal to NWE at this time and relies on a dynamics-ready PSS/e case. The ATR software is not yet available to all WECC members. The limitation to using a dynamics-ready case instead of the 2024 TEPPC case is that a current dynamics-ready case may not have all the projects that are included in the 2024 TEPPC case. However, because the ATR helps to ensure the full capacity on Path 8 and none of the suggested projects are on Path 8, it is reasonable to conclude that the findings in a current case would be analogous to the findings in a 2024 case.

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