EXHIBIT NO. _____ (CBY-12) DOCKET NOS. UE-170033/UG-170034 2017 PSE GENERAL RATE CASE WITNESS: CAMERON B. YOURKOWSKI

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

DOCKETS UE-170033 and UG-170034 (Consolidated)

Complainant,

v.

PUGET SOUND ENERGY,

Respondent.

EXHIBIT CBY-12 TO PREFILED RESPONSE TESTIMONY (NON-CONFIDENTIAL) OF CAMERON B. YOURKOWSKI ON BEHALF OF NW ENERGY COALITION

JUNE 30, 2017

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Dockets UE-170033 and UG-170034 Puget Sound Energy 2018 General Rate Case

NWEC-RNW-NRDC DATA REQUEST NO. 018

NWEC-RNW-NRDC DATA REQUEST NO. 018:

Do Colstrip Units 1 and 2 have a Remedial Action Scheme associated with them? If the answer is "yes," is the Path Rating of Path 8 (Montana to the Northwest) dependent on this Remedial Action Scheme? Please provide any applicable documentation regarding the terms and conditions associated with any such Remedial Action Scheme.

Response:

The Colstrip Units are part of a unique form of a remedial action scheme ("RAS") for the Colstrip Transmission System. The Acceleration Trend Relay ("ATR") is a special protection scheme designed to detect acceleration in the generation shafts of the Colstrip Units and provide protection from service interruptions and to prevent unstable events from disrupting the interconnected grid in Montana and Wyoming when faults and line outages occur on the Montana 500 kV transmission system. The device consists of a computer based relay which monitors the real-time speed, acceleration, and angle of the four Colstrip Units. It uses this information to assess the dynamic performance of the system and is able to detect unstable events in progress. The ATR will trip generators as necessary to restore the system to a stable operating condition when instability occurs.

Path 8 consists of the lines running between Western Montana and the Northwest. The path (westbound) assumes tripping of the Colstrip ATR to assist in maintaining voltage in response to critical contingencies. The ATR works with other RAS schemes for Path 8.

Please see also Puget Sound Energy's Response to NWEC-RNW-NRDC Data Request No. 014.