



**Climate Solutions.**  
PRACTICAL SOLUTIONS TO GLOBAL WARMING

February 1, 2016

Washington Utilities and Transportation Commission  
P.O. Box 47250  
1300 S. Evergreen Park Dr. SW  
Olympia, WA 98504-7250  
Docket #UE-141169 (and UG-141170)  
RE: Comments on Puget Sound Energy's Integrated Resource Plan

STATE OF WASHINGTON  
UTIL. AND TRANSP.  
COMMISSION  
RECEIVED  
PROGRAMS MANAGEMENT  
2016 FEB - 1 AM 9:52

Dear Chairman Danner and Commission Members:

Thank you for the opportunity to provide written comments to the Washington State Utilities and Transportation Commission (UTC) on Puget Sound Energy's (PSE) draft 2015 Integrated Resource Plan (IRP). Climate Solutions is a Northwest-based clean energy nonprofit organization whose mission is to accelerate practical and profitable solutions to global warming. Climate Solutions appreciates the depth of work that PSE staff have undertaken to produce this IRP.

We offer these comments a month after leaders from around the world gathered in Paris for international climate negotiations, and sent clear and powerful signals that they intend to transition the world's economy off of fossil fuels that are warming our planet. Based on climate and clean energy leadership emerging in states and local governments across the U.S., we are optimistic about the promise of achieving these goals.

However, we are also gravely aware of how climate change is affecting our region, and how fossil fuels put our livelihoods and quality of life at risk. Thus we feel even greater urgency than ever to accelerate our region's transition to carbon neutrality, and PSE's long-term commitment to renewable energy must be part of that solution.

The IRP is an important document that could chart the course toward a low-carbon economy for our region. It determines how our energy dollars will be spent for a significant part of the population of the state and whether our energy investments will be consistent with the imperative of climate stabilization or lock us in to emission pathways that make it impossible to succeed. While the draft plan makes progress toward that imperative in some areas, it falls short in others.

**Transitioning from Coal to Clean Energy**

First, the IRP does not sufficiently address retiring Colstrip's four coal plants. In response to a July 31, 2015 petition from the Sierra Club, Climate Solutions, and Washington Environmental Council requesting a proceeding on Colstrip, the UTC pointed to the IRP and the upcoming rate case as opportunities to have more dialogue about the costs of Colstrip operations. However, the IRP does not offer an accounting of Colstrip operations, nor does it reflect the true cost of coal. If current efforts in the 2016

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Washington State Legislative Session fail to address these concerns, we strongly recommend that the UTC open a proceeding in the forthcoming rate case to resolve this issue and address not only the financial risk to ratepayers but also retirement dates for the four plants and replacement power with greater specificity and with a focus on avoiding natural gas as the predominant source of that replacement power.

Climate Solutions has worked for nearly 18 years at the regional, state, and local levels to replace fossil fuels with renewable energy. The transition from coal to clean power in our electricity supply is among three critical policies for which our West Coast Climate Campaign advocates. In Oregon, we are part of the effort to transition that state off of coal-fired power while doubling its commitment to new renewable energy. Since 2009, our New Energy Cities program has worked with urban communities to achieve deep carbon reduction, which require phasing out coal power and replacing it with renewable energy, not new natural gas. As a result of this work, we know that replacing fossil fuel with renewable energy is not only possible but already underway.

#### **True Costs of Natural Gas and Methane Emissions**

Second, the IRP fails to account for the true social, environmental, and public health costs of natural gas, related greenhouse gas emissions, and leakage risks. Methane is the primary component of natural gas (between 70 and 90 percent by volume) and has a high global warming potential over a 20-year timeframe. Natural gas delivery systems have methane leakage at all life cycle phases. Making a long-term capital commitment to natural gas would lock in both carbon emissions and methane emissions that preclude achieving the state's science-based climate goals. Such investments would squander the benefits of coal transition on a resource with comparably deleterious impacts.

Indeed, the disastrous Porter Ranch methane leak from Southern California Gas and Electric's storage facility is so serious that it may prevent the State of California from achieving its climate change targets.<sup>1</sup> As of December 2015, the California Air Resources Board estimated that the well had released up to 1.9 billion standard cubic feet of natural gas, or the equivalent of 1.6 million metric tons of carbon dioxide—approximately a quarter of the state's methane emissions.<sup>2</sup> Residents, ratepayers, and government are bearing the direct costs of this emergency, arguably outweighing the short-term financial benefits that the utility and ratepayers initially enjoyed from natural gas.

We understand that natural gas currently plays an important role in addressing peak demand, and that PSE's business model depends on rate-basing capital investments. However, we strongly recommend looking more broadly to alternatives, such as demand response, storage, and renewable energy, which do not carry the same climate and public health risks as natural gas. As the Rocky Mountain Institute outlined in a July 2014 YouTube post, "The Storage Necessity Myth: How to Choreograph High-Renewables Electricity Systems," utilities can integrate variable renewable generation through improved

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<sup>1</sup> Spotts, Pete. "Huge gas leak undermines California's climate change plans." *The Christian Science Monitor*. December 24, 2015. Online at: <http://www.csmonitor.com/Environment/2015/1224/Huge-gas-leak-undermines-California-s-climate-change-plans>.

<sup>2</sup> Roberts, David. "The California gas leak that prompted a state of emergency, explained." *Vox*. January 11, 2016. Online at: <http://www.vox.com/2016/1/11/10749602/california-gas-leak-explained>.

supply forecasting and demand response, and can match resources to loads and peaks with high-renewable portfolios and limited *existing* natural gas infrastructure.<sup>3</sup>

Capital investment in *new* gas infrastructure exposes consumers to greater fuel price and regulatory risk while foreclosing critically needed investment in clean and affordable resources. Existing generation capacity can help to meet PSE's power needs in the short term without these risks to ratepayers. We strongly encourage PSE to be more explicit about how to meet demand without assuming that new natural gas is the only reasonable replacement option, such as through an all-source procurement that enables renewable energy providers and existing power producers to compete on a level playing field.

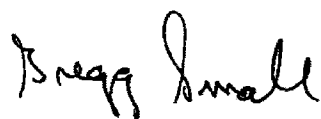
#### **Greater Emphasis on Renewable Energy, Enabling Grid Technologies, and Vehicle Electrification**

Finally, the IRP lacks emphasis on renewable energy and grid management approaches that could enable greater integration of renewable energy without, or with limited, natural gas. In the short term these include demand response, improved renewable energy forecasting, and exploration of participation in a West Coast energy imbalance market.

In the long term these include transmission improvements, thermal energy storage, grid-scale battery storage, and widespread transportation electrification. For example, in January 2016 California utilities acquired more than 40 MW in demand response from sources ranging from customer battery storage to electric vehicles.<sup>4</sup> In the Northwest, transportation electrification in particular offers a strategic opportunity to reduce our collective oil use – our biggest statewide carbon liability – while also serving as a load-balancing resource for utilities. In our view, the IRP does not make a sufficiently bold commitment to these priorities, nor does it address the rapid cost reduction that these technologies are already experiencing.

Thank you for the opportunity to provide comments on this important document.

Sincerely,



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<sup>3</sup> Rocky Mountain Institute. "The storage necessity myth: how to choreograph high-renewables electricity systems." YouTube post. July 8, 2014. Online at: <https://www.youtube.com/watch?v=MsgrahFln0s>

<sup>4</sup> Walton, Robert. "California utilities tap 40 MW in auction for demand response capacity." *Utility Dive*. January 13, 2016. Online at: <http://www.utilitydive.com/news/california-utilities-tap-40-mw-in-auction-for-demand-response-capacity/412019/>.

