



**Portland General Electric Company**  
121 SW Salmon Street • Portland, Oregon 97204  
*PortlandGeneral.com*

October 19, 2007

Mark Walker  
Public Affairs Division Director  
Northwest Power & Conservation Council  
851 SW 6<sup>th</sup> Avenue, Suite 1100  
Portland, OR 97204

Dear Mr. Walker,

Thank you for the opportunity to comment on the Council's September 13 study entitled "Carbon Dioxide Footprint of the Northwest Power System." This work provides a timely and necessary context to discuss CO<sub>2</sub> emissions associated with Pacific Northwest electric generation. Such context will better inform state, regional, and federal policy discussions and decision-making regarding CO<sub>2</sub> stabilization and reduction.

PGE generally agrees with the conclusions reached in the study regarding the challenges of stabilizing and reducing CO<sub>2</sub> emissions in an environment of steady economic growth and increasing regional electric demand. Our own integrated resource planning work reached similar conclusions for PGE's CO<sub>2</sub> footprint. CO<sub>2</sub> stabilization and reduction goals may be difficult to achieve in the Pacific Northwest as a whole, although the generation resource mix of individual utilities varies widely.

PGE also found it useful that the Council was willing to examine the impact to regional CO<sub>2</sub> emissions of different hydrosystem modification scenarios. This, along with sensitivities regarding low conservation and high renewables, put in the context of the entire Western Electricity Coordinating Council region, provides valuable benchmarking for emerging climate change mitigation efforts and policy.

We agree with the Pacific Northwest Utilities Conference Committee (PNUCC) suggestion to examine the measures that would be required to reach proposed CO<sub>2</sub> emissions targets using today's existing commercial technologies. We could all benefit from a clear understanding of what changes to the Northwest electric generation mix would be required, as well as potential cost impacts to our customers and implications for the regional economy more broadly.

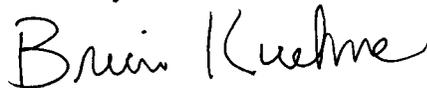
We also share PNUCC's interest in any additional analysis the Council may be able to provide using the emissions targets under discussion as part of the Western Climate

Initiative. Lastly we note, as did PNUCC, that the Council should provide, to the extent possible, an accounting for all generation sources which currently serve Northwest load, regardless of where plants are located.

Finally, we believe that the impact to CO<sub>2</sub> emissions from the ordinary year-to-year variance of hydro conditions should not distract from the larger discussion. PGE recommends normalizing modeling and CO<sub>2</sub> reporting metrics for hydro conditions. This will serve to eliminate a random, but mean-reverting variable from the discussion and will allow underlying trends to be more clearly discerned. Likewise, any one-time events such as extended plant forced outages should be normalized. In addition, for whatever base year is ultimately used for comparison, the base year itself should be adjusted to normal hydro conditions and plant operations. Specifically, if the base year used is 1990, we should consider modifying the 1990 baseline data for the subsequent closure of the Trojan nuclear plant.

Thank you for pursuing the CO<sub>2</sub> study and providing valuable insights for this important issue. We look forward to working with the Council and other regional interests to further examine CO<sub>2</sub> and climate change impacts associated with the electric power industry.

Sincerely,

A handwritten signature in cursive script that reads "Brian Kuehne".

Brian Kuehne  
Manager, Power Supply Resource Strategy