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Submitted Electronically to LPT.RFI2015@hq.doe

August 24, 2015

Patricia A. Hoffman
Assistant Secretary
U.S. Department of Energy
Office of Electricity Deliver and Energy Reliability
1000 Independence Avenue SW
Washington, D.C. 20585

RE: "Transformer Reserve"

Dear Assistant Secretary Hoffman:

Portland General Electric Company (PGE) hereby submits these comments in response to the Department of Energy's Request for Information related to the possible establishment of a national reserve of power transformers that support the bulk power grid, specifically on the design and implementation of a National Power Transformer Reserve Program.

PGE is Oregon's largest utility, serving the approximately 1.7 million people living within its 4,000-square-mile service area. As an investor-owned utility, PGE is regulated by the Oregon Public Utility Commission (OPUC), and subject to Oregon's renewable electricity standard. This requires PGE to provide 25% of its retail customers' power requirements from renewable sources by 2025.

PGE has been participating in industry-led initiatives like the Edison Electric Institute's Spare Transformer Equipment Program (STEP) and Spare Connect. We would urge the Department to utilize and build upon these existing programs, which we consider to be effective.

In conjunction with the existing programs cited above, PGE supports the establishment of a system of critical transformer material reserves at key North American manufacturers, along with manufacturing agreements, that would greatly shorten the lead times of large power transformers. This would facilitate building to customer specifications and possibly cover a

much larger population of large power transformers at a much lower cost. Manufacturers could be incentivized to store and rotate these critical materials through a federal tax mechanism.

In addition to the transformer reserve itself, DOE should consider how to ship the reserve transformers quickly following an incident. Establishing a reserve transportation agreement in advance of need would facilitate these shipments, as would ensuring in advance that trucking regulations can accommodate these emergency shipments.

It will also be necessary to establish agreed-upon procedures and protocols to call on the reserves. We would encourage DOE to ensure the program is developed congruent with the NERC reliability standards to facilitate procurement of equipment which is known to be critical to the reliability of the Bulk Electric System.

Finally, it is important that DOE recognize that storing large power transformers for long periods of time is problematic. Age, moisture and other factors can all degrade the equipment, which is why most utilities rotate their spare transformers into their transmission system and replace these spare transformers on a regular basis. It will be critical that spare transformers not be degraded when called upon to perform.

We appreciate the Department's interest in ensuring the integrity of the bulk transmission system and in enhancing the ability of utilities to recover rapidly from a major event. We are committed to maintaining high reliability standards for our customers, and will continue to work with existing industry-led efforts on this issue. Again, we hope that the Department's initiative will complement, rather than duplicate, these ongoing efforts.

If you have any questions concerning our comments, please contact me at 503-464-7329, or Valerie West or Stephen Ward of VH Strategies at 202-534-4920.

Sincerely,

A handwritten signature in cursive script, appearing to read "S. Radcliffe".

Sania Radcliffe
Director, Government Affairs