U.S. DEPARTMENT OF ENERGY

November 2, 2005

2:00 p.m.

ORIGINAL

OR01- OR06

Location: The Holiday Inn, Downtown Portland

1441 N.E. Second Avenue

Portland, OR 97232

14:21:48 wildlife management.

Thank you for the opportunity today, and that's all I have.

MS. SOUDER: Thank you. Is there anyone
14:21:57 else that would like to come up and give oral comments?

MR. KUEHNE: Yes. ΘR05

MS. SOUDER: Just please state your name.

MR. KUEHNE: Hi, my name is Brian Kuehne.
14:22:15 I am also with Portland General Electric. I manage the Integrated Resource Planning for that company.

PGE has contracts with Bonneville Power Administration for the majority of its
14:22:28 transmission requirements. We also own transmission lines for the delivery of electricity to our service territory. We thank you for this effort you're undertaking to assess the energy corridors in the western
14:22:44 states.

In the west, electric transmission can cross multiple states, as well as a number of public lands that are under different federal jurisdictions. However, unlike gas pipelines,
14:22:56 the siting authority for interstate electric

14:22:59 transmission still resides with individual states. Hence, the permitting process can add substantial time. Large transmission projects can take as long as ten years to implement,
14:23:10 exceeding the time required to site and construct most power plants.

The bulk power grid in the Pacific Northwest has become congested over time. Little new transmission capacity has been added
14:23:23 and the demands continue to increase. Several electrical flowgates or points of managed congestion have reached their respective limits and have little or no available transfer capacity. These flowgates exist throughout the
14:23:39 Pacific Northwest grid and a given flowgate typically involves the electric facilities in more than one corridor. For PGE, the constraints hamper our ability to move out of new resources mostly located east of the
14:23:51 Cascade Mountain Range to our customers. Renewable resources, primarily wind, have great potential in Eastern Oregon and Washington.

Coal for both conventional and the newer clean-coal or gasification technologies lie
14:24:07 primarily east of the Rockies, and this must be

14:24:10 moved either by wire or by rail. For these resources to reach PGE and other load centers in the Pacific Northwest, both the existing and new transmission corridors will have to be
14:24:23 utilized. This need was reinforced recently in PGEs most recent request for proposals when we received 111 proposals from 43 different counterparties, but the output of comparatively few of these could be brought to Portland.

14:24:39 Corridor utilization will have to be increased to meet the increasing demand for power. Increasing environmental regulations over the past few decades have made existing corridors nearly the only viable option to
14:24:53 expand capacity. However, utilization of existing corridors does have practical limits. The highest operating voltage in the western states is 500 kV. There are still opportunities to convert lines of lower voltage
14:25:07 to higher voltage. Adding new circuits in existing corridors is another practical expansion opportunity, and in some cases the only viable option.

Typical rights-of-way for high voltage
14:25:20 transmission are 150 to 200 feet. Well

14:25:24 utilized corridors can then be in the order of 800 feet or more and contain combinations of different voltages and multiple-circuit structures.

14:25:33 However, from an electric system reliability perspective, placing too much dependance on any given corridor can have unacceptable system reliability consequences. Loss of corridors is a very low probability

14:25:46 event, but history shows that it does happen, typically due to theft, fire, or weather-related hazards. Therefore, corridor diversity can be crucial. The health of the electric system will, in some cases, be

14:25:59 dependent on spreading the power demand among several highly utilized corridors. As a practical matter, upgrading the existing corridors can be difficult because of the possible need to temporarily take the existing

14:26:12 infrastructure out of service. Without spare capacity in the system or more timely upgrades being constructed, the market impact can be potentially severe. Thus the corridor initiative needs to have a long-term

14:26:26 perspective and identify new alternative

14:26:30 corridors for existing paths that are already pushing reliability limits.

We at PGE have just begun a new round of analysis for our next integrated resource plan.

14:26:40 We believe that we will require new electric transmission capacity across the Cascade Mountains in a five to ten year time frame. The entire cross-Cascades transmission system is nearing its capacity to serve peak winter

14:26:55 power needs. In addition, historical, seasonal peaking diversity between California and the Pacific Northwest is diminishing due to more air conditioning load in the Pacific Northwest which moves us closer to a dual peaking, as is

14:27:14 the case with other utilities in the Pacific Northwest.

Procuring new, firm transmission capacity to PGE's load center is unlikely without significant transmission infrastructure

14:27:25 additions. PGE has -- also has a significant corridor across the Cascades, which is not displayed on the initial map, entitled, Examples of Possible Energy Corridors. We will submit more detailed information identifying

14:27:39 this and other proposed -- or existing or

14:27:43 potential corridors which should be considered in this process. And with that, we wish to thank the agencies once again for this opportunity to participate in the scoping
14:27:53 process. Thank you.

OR06

MS. SOUDER: I saw a hand go up. Thanks.

MR. THORTON: Thank you for the opportunity. My name is Jim Thorton. I am with -- senior consultant with the consulting
14:28:11 firm of College (sic) Environment. But I am here today to speak privately and as a former Washington State director of the Rails to Trails Conservancy. And I would urge you to look at abandoned railroad right-of-ways.
14:28:29 There are ways that you can use those, if they haven't been divided up. But I think that there are corridors all over the western United States, and especially on federal lands, that you should look at as potential right-of-ways
14:28:43 for pipelines and transmission lines. And that's all I have to say today, but I really appreciate the opportunity.

MS. SOUDER: Thank you very much. I noticed there were a couple more people that
14:28:54 came into the room. If you would like to come