



## Department of Energy

Bonneville Power Administration  
P.O. Box 491  
Vancouver, Washington 98666-0491

TRANSMISSION BUSINESS LINE

December 30, 2003

In reply refer to: T-DITT-2

### **To: Landowners interested in the SnoKing Tap to Monroe-Echo Lake Line Voltage Increase**

Bonneville Power Administration (BPA) has completed its scheduled cleaning activity on the SnoKing Tap to Monroe-Echo Lake 500-kilovolt (kV) transmission line located in Monroe, Wash. This letter provides information about the recent conductor cleaning activities, measurements taken, and invites you to a public meeting to learn more about BPA's efforts.

#### **Public Meeting**

BPA will hold a public meeting in January 2004 to discuss recent cleaning activities, noise measurement results, ongoing BPA efforts and to answer any questions that you may have. The meeting will be held:

**Tuesday, Jan. 27, 2004**  
7 p.m. to 9 p.m.  
Skyview Junior High School  
21404 35<sup>th</sup> Avenue SE  
Bothell, Wash. 98021

#### **Background**

On Dec. 6, 2003, BPA transmission line maintenance crews cleaned a span of the SnoKing Tap to Monroe-Echo Lake transmission line where corona levels appeared high. The cleaning was performed during a scheduled 10-hour outage. Six BPA linemen spent nearly seven hours scrubbing the conductor with steel brushes and using an environmentally approved moss-killing agent.

During the cleaning, noise measurements at various locations along the line ranged approximately between 35 - 40 dBA. This range characterizes background noise when the line is turned off. Immediately following the outage, the newly cleaned span measured 5 - 6 dBA lower than the adjacent spans in that particular weather condition (clear skies but slightly damp).

In addition to the conductor cleaning, BPA also replaced two transmission line jumpers in that line section. Those jumpers are being tested at a BPA laboratory. BPA did observe some dirt, mold, or contamination on the jumpers that had not been noticeable previously.

**Next Steps**

BPA will continue to collect and analyze measurements near the SnoKing Substation and along the transmission line. Additional measurements are needed over time, during various weather conditions to determine the effectiveness of the cleaning.

BPA is also pursuing the affect of direct-current (DC) on the transformer noise. Several noise readings show a correlation with DC current. BPA is currently fabricating a device to test this phenomenon. This test should tell us if blocking the DC current would help in reducing transformer noise.

**For More Information**

If you have questions or would like more information about the project, please call our toll-free number 1-888-276-7790. Additional information, including photos and a video of the cleaning are on our Web site at: [http://www2.transmission.bpa.gov/PlanProj/Transmission\\_Projects/](http://www2.transmission.bpa.gov/PlanProj/Transmission_Projects/).

BPA will continue to inform the public on any new developments.

Sincerely,

/s/ Doug Riehl, Dec. 30, 2003

Doug Riehl  
Project Manager