

August 3, 2004

Bonneville Power Administration's response to Ms. Dulane Crist April 29 public meeting letter

Specific Question and Answer

- ***Do you currently have other 500-kV lines cleverly disguised as 230-kV lines?***

BPA has a small amount of 500-kV transmission lines on our system which operate at 230-kV for technical reasons. These could be upgraded if there is a system need or change in load demand. The safety and reliability of our transmission system is a major focus for our agency. Given our new experience with the SnoKing Tap project, we will investigate conductors prior to upgrades for determining necessity of cleaning.

- ***Will you let those neighbors know of your intentions before you upgrade them, or will you attempt to use a Categorical Exclusion again?***

BPA will notify landowners before we conduct any construction on our transmission lines, including upgrades. Our goal is to work closely with landowners adjacent to our transmission lines, including notification of construction and maintenance activity. We learned a great deal from the upgrade of the SnoKing Tap and realize now that noise is an impact we need to advise landowners about. We intend to follow the guidelines of the National Environmental Protection Act in terms of the amount of analysis needed for our actions.

- ***Will you do cleaning and maintenance on the lines previous to the upgrade or after the complaining starts?***

BPA is in the process of developing guidelines for cleaning transmission lines. The March 2003 transmission line cleaning was the first in BPA history, and in the industry. It is not our policy to clean transmission lines as we did for the SnoKing Tap to Monroe-Echo Lake transmission line. This was a special circumstance and we would evaluate whether to clean a particular transmission line on a case-by-case basis in the future.

BPA has an extensive maintenance policy, which includes vegetation management, danger tree removal and right-of-way patrols. Crews frequently monitor the condition of our system and respond to any needed maintenance to ensure safety of our crews and the public.

- ***Will you do sound metering and EMF testing prior to upgrading the line?***

BPA will take noise measurements or perform calculations on projects depending on the location of the transmission line (rural, residential or industrial). New BPA transmission lines are designed to meet local audible noise regulations. Old lines will not be upgraded if the result violates regulations. Regarding EMF, our transmission lines have been and will continue to be designed to meet electric field standards according to BPA electric field policy as well as to be in compliance with the NESC (National Electric Safety Code); there are no applicable standards for magnetic fields in our service area. If you are interested, especially in magnetic fields, additional information associated with federally funded EMF research programs and related findings can be obtained at the following Web site:

<http://www.niehs.nih.gov/emfrapid/home.htm>.

- ***We are concerned about health effects. The result of EMF testing done by Snohomish PUD does not show that there are less EMF's than prior to the upgrade on our properties.***

We are not aware of the Snohomish studies. Magnetic fields, which depend on line current, could be less for the same loading conditions. In time, with increased population, loads will increase and so will magnetic fields. Electric fields, a direction function of voltage, have increased (see above comment regarding electric and magnetic field standards).

- ***Will you test your transformers prior to activating them, before you remove the old transformers, taking away the only timely option to restore the peace and quiet?***

BPA pays a considerable premium for low noise transformers. The transformers are tested in the factory to assure that specifications, including noise level, are met before the transformer is shipped. Most of our transformer installations are additions to existing substations to increase capacity rather than replacements of older transformers. In the case of the new SnoKing bank, the factory test results were 5 dbA below our 70 dbA specification. When the transformer bank was installed and energized in September 2003, the noise level was over 90 dbA because of the effect of low-level DC currents flowing in the system. This particular transformer design is much more sensitive to DC current than any other transformers installed on the system. No other transformer on the system has exhibited this sort of sensitivity to DC current. We have revised our transformer specification to require that noise standards be met in the presence of low-level DC currents like those seen at SnoKing.

- ***Have your policies and procedures been revised?***

BPA is taking extra steps to identify potential risks or issues when we upgrade our transmission lines. Our policies and procedures have changed in a number of areas since the SnoKing project including; landowner notification, line cleaning, levels of analysis needed for upgrading older conductor, etc.

- ***We know that you are required to have a 150ft easement to put up another set of towers. And we know that in areas, the current easement is 285ft or less. Doesn't that mean that you can't put another 500-kV line in our corridor?***

It is possible that BPA could work within those right-of-way restrictions if system needs require more power generation.