DATE: August 31, 2011

REPLY TO ATTN OF: KEPR-4

SUBJECT: Environmental Clearance Memorandum

TO: Lawrence Carter
Electrical Engineer – TEP-TPP-1

Proposed Action: Installation of new synchrophasor equipment at up to 56 control houses within Bonneville Power Administration’s (BPA) transmission system

Budget Information: N/A PP&A Project Number: N/A

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B4.6 Additions or modifications to electric power transmission facilities that would not affect the environment beyond the previously developed facility area...

Location: The project area consists of up to 56 BPA control houses or relay houses including:

- Paul 500-kV
- Troutdale 230-kV
- Allston 500-kV
- Marion 500-kV
- Pearl 500-kV
- Keeler 500-kV
- Keeler 230-kV
- Big Eddy 500-kV
- Big Eddy 230-kV
- Wautoma 500-kV
- North Bonneville 230-kV
- Rock Creek 500-kV
- Rock Creek 230-kV
- Slatt 500-kV
- Custer 500-kV
- Monroe 500-kV
- Maple Valley 230-kV
- Garrison 500-kV
- Malin 500-kV
- Captain Jack 500-kV
- Summer Lake 500-kV
- Grizzly 500-kV
- John Day 500-kV
- John Day 230-kV
- McNary 500-kV
- McNary 230-kV
- Hanford 500-kV
- Lower Monumental 500-kV
- Chief Joseph 500-kV
- Chief Joseph 230-kV
- Grand Coulee 500-kV
- Grand Coulee 230-kV
- Schultz 500-kV
- Ashe 500-kV
- Raver 500-kV
- Ostrander 500-kV
- Alvey 500-kV
- Jones Canyon 230-kV
- Snohomish 230-kV
- Napavine 500-kV
- Echo Lake 500-kV
- Olympia 230-kV
- Taft 500-kV
- Bell 500-kV
- Vantage 500-kV
- Sickler 500-kV
- Klamath Falls 500-kV
- Buckley 500-kV
- Lower Granite 500-kV
- Hatwai 500-kV
- Dworshak 500-kV
- Bell 230-kV
- Little Goose 500-kV
- Columbia 230-kV
- Knight 500-kV
- Central Ferry 500-kV

Proposed by: BPA
Description of the Proposed Action: BPA proposes to install new synchrophasor equipment at numerous (see above) BPA owned facilities throughout BPA’s transmission system. Synchrophasor equipment enables the transmission of power from multiple sources to be time-aligned and combined together to provide a precise and comprehensive view of the entire grid which, in turn, enables a better indication of grid stress, and can be used to trigger corrective actions to help maintain grid reliability. The scope of this project is limited to the installation of new equipment inside the control house buildings and to the installation of a 2-foot-tall GPS antenna onto the roof of each building. No new access roads, staging areas, or other ground disturbing activities would occur as a result of the proposed actions.

Findings: BPA has determined that the proposed action complies with Section 1021.410 and Appendix B of Subpart D of the Department of Energy’s National Environmental Policy Act (NEPA) Regulations (57 Fed. Reg. 1512.2, April 24, 1992), as amended at 61 FR 36221-36243, July 9, 1996; 61 FR 64608, Dec. 6, 1996). The proposed action does not present any extraordinary circumstances that may affect the significance of the environmental effects of the proposal. The proposal is not connected (40 C.F.R. 1508.25 (a)(1)) to other actions with potentially significant impacts, is not related to other proposed actions with cumulatively significant impacts (40 C.F.R. 1508.25 (a)(2)), and is not precluded by 40 C.F.R. 1506.1 or 10 C.F.R. 1021.211.

Moreover, the proposed action would not (i) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, (ii) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities, (iii) disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation and Liability Act-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or un-permitted releases, or (iv) adversely affect environmentally sensitive resources. The proposal will not affect any listed threatened or endangered species, or critical habitat under the Endangered Species Act, or Essential Fish Habitat under the Magnuson-Stevens Fishery Conservation and Management Act, or historic properties under the National Historic Preservation Act.

This proposed action meets the requirements for the Categorical Exclusion referenced above. We therefore determine that the proposed action may be categorically excluded from further NEPA review and documentation.

/s/ Philip W. Smith, for:
Michael Henjum
Physical Scientist

Concur: /s/ Katherine S. Pierce Date: August 31, 2011
Katherine S. Pierce
NEPA Compliance Officer

Attachment
Environmental Checklist for Categorical Exclusions
**Environmental Checklist for Categorical Exclusions**

Name of Proposed Project:  Programmatic Synchrophasor Installations

Work Order #: N/A  PP&A Project No.: N/A

Prepared by:  Michael Henjum  Routing:  KEPR  Date:  8/29/11

This project has been found to **not** adversely affect the following environmentally sensitive resources, laws, and regulations:

<table>
<thead>
<tr>
<th>Environmental Resources</th>
<th>No Effect</th>
<th>No Effect with conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cultural Resources</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2. T &amp; E Species, or their habitat(s)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3. Floodplains or wetlands</td>
<td>X</td>
<td></td>
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<tr>
<td>4. Areas of special designation</td>
<td>X</td>
<td></td>
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<td>5. Health &amp; safety</td>
<td>X</td>
<td></td>
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<tr>
<td>6. Prime agricultural lands</td>
<td>X</td>
<td></td>
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<td>7. Special sources of water</td>
<td>X</td>
<td></td>
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<tr>
<td>8. Consistency with state and local laws and regulations</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>9. Pollution control at Federal facilities</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>10. Other</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

List supporting documentation attached (if needed):

- None