

Categorical Exclusion Determination

Bonneville Power Administration

Department of Energy



Proposed Action: Testing Unmanned Aircraft Systems for Transmission Line Inspections

Project Manager: Judith Estep, Technology Innovation Portfolio Manager – ST-3

Location: Corvallis, Oregon; test sites in BPA's service territory

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B3.2 – Aviation activities

Description of the Proposed Action: BPA proposes to partially fund Oregon State University to research and test procedures for inspecting, monitoring, and mapping transmission-line infrastructure using small unmanned aircraft systems. BPA would fund these activities as part of its Fiscal Year 2017 Technology Innovation Portfolio.

Research efforts would involve about 10 low-elevation test flights at one or more locations along transmission lines in BPA's service territory. During test flights, a research team would control small unmanned aircraft from on-the-ground locations that would allow operators to maintain a clear line of sight to the aircraft. Upon identifying potential test sites, BPA will evaluate those locations and conduct further environmental review as appropriate.

Findings: In accordance with Section 1021.410(b) of the Department of Energy's (DOE) National Environmental Policy Act (NEPA) Regulations (57 FR 15144, Apr. 24, 1992, as amended at 61 FR 36221-36243, July 9, 1996; 61 FR 64608, Dec. 6, 1996, 76 FR 63764, Nov. 14, 2011), BPA has determined that the proposed action:

- (1) fits within a class of actions listed in Appendix B of 10 CFR 1021, Subpart D (see attached Environmental Checklist);
- (2) does not present any extraordinary circumstances that may affect the significance of the environmental effects of the proposal; and
- (3) has not been segmented to meet the definition of a categorical exclusion.

Based on these determinations, BPA finds that the proposed action is categorically excluded from further NEPA review.

/s/ Jeffrey J. Maslow

Jeffrey J. Maslow

Environmental Protection Specialist

Concur:

/s/ Stacy L. Mason

Stacy L. Mason

NEPA Compliance Officer

Date: July 11, 2016

Attachment(s): Environmental Checklist

Categorical Exclusion Environmental Checklist

This checklist documents environmental considerations for the proposed project and explains why the project would not have the potential to cause significant impacts on environmentally sensitive resources and would meet other integral elements of the applied categorical exclusion.

Proposed Action: Testing Unmanned Aircraft Systems for Transmission Line Inspections

Project Site Description

Test sites located within existing transmission-line corridors in BPA’s service territory.

Evaluation of Potential Impacts to Environmental Resources

Environmental Resource Impacts	No Potential for Significance	No Potential for Significance, with Conditions
1. Historic and Cultural Resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Explanation:</u> Because the undertaking does not involve a type of activity with the potential to cause effects on historic properties, there would be no effect on historic and cultural resources.		
2. Geology and Soils	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Explanation:</u> Because the research and test flights would not involve ground-disturbing activities, there would be no effect on geology and soils.		
3. Plants (including federal/state special-status species)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Explanation:</u> Because the research and test flights would not involve ground-disturbing activities, there would be no effect on plants.		
4. Wildlife (including federal/state special-status species and habitats)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Explanation:</u> BPA will evaluate proposed test sites to determine the presence of wildlife, including federal/state special-status species, and habitats to determine appropriate steps to comply with the applicable wildlife laws and regulations.		
5. Water Bodies, Floodplains, and Fish (including federal/state special-status species and ESUs)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Explanation:</u> Because the research and test flights would primarily involve aerial activities that would not occur in or around water-dependent resources, there would be no effect on waterbodies, floodplains, and fish.		
6. Wetlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Explanation:</u> Because the research and test flights would primarily involve aerial activities that would not occur in or around water-dependent resources, there would be no effect on wetlands.		

7. **Groundwater and Aquifers**



Explanation: Because the research and test flights would not involve ground-disturbing activities, there would be no effect on groundwater and aquifers.

8. **Land Use and Specially Designated Areas**



Explanation: Because the research and test flights would not involve ground-disturbing activities, there would be no effect on land use and specially designated areas.

9. **Visual Quality**



Explanation: Because the research and testing activities would result a temporary low-level aerial disturbance and not require the construction of a permanent facility, there would be no effect on visual quality.

10. **Air Quality**



Explanation: All aircraft are electric powered and do not produce emissions, therefore there would be no effect on air quality.

11. **Noise**



Explanation: BPA will evaluate proposed test sites to determine the potential for noise impacts. If BPA identifies potential noise impacts from test flights, BPA will identify appropriate mitigation measures that will be required during testing to reduce those impacts.

12. **Human Health and Safety**



Explanation: Test flights must comply with all operational limitations required under Federal Aviation Administration regulations for small unmanned aircraft. Consistent with those regulations: (1) at all times the small unmanned aircraft must remain close enough for the operator to see the aircraft; and (2) aircraft may not operate over any person not directly involved with test flights. In addition, all research and test-flight activities must utilize the best management practices that protect human health and safety.

Evaluation of Other Integral Elements

The proposed project would also meet conditions that are integral elements of the categorical exclusion. The project would not:

- Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders.

Explanation, if necessary: The project will comply with all applicable Federal Aviation Administration regulations for the operation of small unmanned aircraft.

- Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators) that are not otherwise categorically excluded.

Explanation, if necessary:

- Disturb hazardous substances, pollutants, contaminants, or CERCLA excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases.

Explanation, if necessary:

- Involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.

Explanation, if necessary:

Landowner Notification, Involvement, or Coordination

Description: After evaluating proposed test sites, BPA will determine whether landowner notification of test flights along a specific transmission line would be appropriate.

Based on the foregoing, this proposed project does not have the potential to cause significant impacts on any environmentally sensitive resources.

Signed: /s/ Jeffrey J. Maslow
Jeffrey J. Maslow

Date: July 11, 2016