

# Categorical Exclusion Determination

Bonneville Power Administration  
Department of Energy



**Proposed Action:** Fixed Wing Aircraft Replacement

**Project Manager:** James May – TAA-HANGR

**Location:** Portland, OR

**Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021):** B1.24 Property transfers

**Description of the Proposed Action:** BPA proposes to replace its existing fixed wing aircraft, a 15-year old Beechcraft twin prop King Air 350 (King Air 350), with a new Pilatus PC-24 twin turbine jet (PC-24). After purchase of the PC-24, the King Air 350 would be sold. The existing King Air 350 is 15 years old, well beyond its expected economic life of 9 years and would require a substantial overhaul of electronics and wiring in the near future, in addition to increased routine maintenance costs and downtime. Because of its age and maintenance requirements, the current aircraft is not able to meet BPA's 97% availability rate objective to support all missions (typical and Continuity of Operations [COOP]), and would force the use of more costly commercial airline services or the increase in time and miles spent driving by BPA employees (or a combination of both).

The purchase of the new PC-24 would improve flight safety, reduce the annual operating costs compared to the current aircraft, and have improved speed and efficiency over the existing King Air 350 or a new equivalent King Air. The PC-24 also has the ability to transport 10 passengers instead of 9, and has an approximately 400-foot shorter take-off and landing distance than the King Air 350 or a new equivalent King Air, which means it could operate on approximately 127 additional runways in BPA's service area than the King Air 350 currently can. The PC-24's reduced take-off and landing distances would also provide a greater safety margin than the King Air 350 or a new equivalent King Air at the shorter runways where BPA routinely operates.,

The PC-24 can also carry palletized cargo and access more locations to improve mission flexibility and help meet COOP needs such as Essential Supporting Activity TAA 2 – Power Line Maintenance and System Reliability, which includes power line patrol (regular, emergency and detail) and power line construction support for BPA's Transmission Line Maintenance organization.

No modifications to BPA's existing aircraft hangar or facilities would be required to accommodate the PC-24.

Aircraft use, operations and safety protocols would remain essentially the same between the King Air 350 and the PC-24. Therefore; there would be no potential for release of substances at a level, or in a form, that could pose a threat to public health or the environment, and the covered actions would not have the potential to cause a significant change in impacts from before the acquisition of the PC-24.

**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, Jul. 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/ Carol Leiter for  
Douglas Corkran  
Environmental Protection Specialist

Concur:

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Katey C. Grange  
NEPA Compliance Officer

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: Fixed Wing Aircraft Replacement**

## **Project Site Description**

The new aircraft would be housed at BPA's existing hangar at the Portland International Airport and fly to various airports within BPA's service area.

## **Evaluation of Potential Impacts to Environmental Resources**

### **1. Historic and Cultural Resources**

Potential for Significance: No

Explanation: The existing aircraft is 15 years old and is not considered to be a historic resource. There would be no building modifications or ground disturbance associated with the plane replacement. There would be no potential to affect cultural resources.

### **2. Geology and Soils**

Potential for Significance: No

Explanation: There would be no building modifications or ground disturbance associated with the plane replacement; therefore, there would be no impact to geology and soils.

### **3. Plants (including Federal/state special-status species and habitats)**

Potential for Significance: No

Explanation: There would be no building modifications or ground disturbance associated with the plane replacement; therefore, there would be no impact to plants.

### **4. Wildlife (including Federal/state special-status species and habitats)**

Potential for Significance: No

Explanation: There would be no habitat removal associated with the plane replacement; and no changes to current flight operations. Any wildlife restrictions associated with flight operations would continue to be adhered to, therefore, there would be no impact to wildlife or wildlife habitat.

### **5. Water Bodies, Floodplains, and Fish (including Federal/state special-status species, ESUs, and habitats)**

Potential for Significance: No

Explanation: There would be no building modifications or ground disturbance associated with the plane replacement; therefore, there would be no impact to water bodies, floodplains or fish.

## 6. Wetlands

Potential for Significance: No

Explanation: There would be no building modifications or ground disturbance associated with the plane replacement; therefore, there would be no impact to wetlands.

## 7. Groundwater and Aquifers

Potential for Significance: No

Explanation: There would be no building modifications or ground disturbance associated with the plane replacement; therefore, there would be no impact to groundwater or aquifers.

## 8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: There would be no changes to land uses or specially-designated areas associated with the plane replacement and future use; therefore, there would be no impact to land use or specially-designated areas.

## 9. Visual Quality

Potential for Significance: No

Explanation: There would be no building modifications or additional infrastructure associated with the plane replacement; therefore, there would be no impact to visual quality.

## 10. Air Quality

Potential for Significance: No

Explanation: The existing King Air 350 emits approximately 1.31 Metric Tonnes of carbon dioxide equivalent (CO<sub>2</sub>e) per hour, or 590 metric tonnes per year given its average use of 450 hours per year.<sup>1</sup> The new Pilatus PC-24 emits approximately 1.83 metric tonnes of CO<sub>2</sub>e per hour or 824 metric tonnes per year, representing approximately a 40% increase in CO<sub>2</sub>e emissions. This increase would likely be reduced somewhat due to the ability of the PC-24 to carry more passengers and cargo as well as faster flight times than the King Air, leading to a potential decrease in necessary trips and thus, emissions. The additional 234 metric tonnes of CO<sub>2</sub>e per year is the equivalent to about 52 gasoline-powered passenger vehicles driven for one year.<sup>2</sup> This represents a minor overall increase in contribution to total CO<sub>2</sub>e emissions

## 11. Noise

Potential for Significance: No

Explanation: The existing King Air 350 and the new Pilatus PC-24 both create noise when taking off, landing, and flying. This noise is focused around airports and is not expected to be

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<sup>1</sup> Aircraft emission estimates were calculated with the CO<sub>2</sub> Calculator for Aircraft - Aircraft Operating Cost and Performance Guide accessed at <https://conklindedecker.jetssupport.com/co2-calculator> on April 11, 2023.

<sup>2</sup> Vehicle emission equivalency was calculated with US Environmental Protection Agency (EPA) Greenhouse Gas Equivalencies Calculator accessed at: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator> on April 11, 2023.

substantially louder or more obtrusive than other airplanes operating at the same airports. No additional impacts are expected.

## 12. Human Health and Safety

Potential for Significance: No

Explanation: The new aircraft would not create any new or increased risks to health and human safety. No impacts are expected.

### 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: N/A

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

Explanation: N/A

**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: N/A

**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: N/A

### Landowner Notification, Involvement, or Coordination

Description: The PC-24 would be used at existing facilities and airports where BPA already has permission to operate. No additional permissions are necessary.

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

Signed: /s/ Carol Leiter for May 26, 2023  
Douglas Corkran Date  
Environmental Protection Specialist