**October 25, 2024**

**From:** John Smallwood

 Santa Fe area

**To:** NNSA Los Alamos Field Office
ATTN: EPCU Project NEPA
3747 West Jemez Road
Los Alamos, NM 87544

**Re:** Objection to Los Alamos National Laboratory Electrical Power Capacity Upgrade Project Draft Environmental Assessment(DOE/EA-2199) (EA)

Greetings,

I am writing to formally object to the Department of Energy–National Nuclear Security Administration (NNSA) Electrical Power Upgrade Project (EPCU), as outlined in Draft Environmental Assessment (DOE/EA-2199). Given the potential cultural, ecological, and wildfire risks associated with this sensitive area, I respectfully request that an Environmental Impact Statement (EIS) be conducted to comprehensively address these concerns.

**Wildlife Habitat:** As other concerned citizens have mentioned, this project threatens many species that are already facing multiple headwinds in the form of crippling heat, devastating multidecadal droughts, and gargantuan megafires. Any refugia our threatened species can find should be treasured and protected.

The project’s Wildlife Report (Appendix E) states that over 100 acres of piñon communities will be impacted by this project. *Pinus edulis* has only spread into Utah, Colorado, and Northern New Mexico in the last 10,000 years (Cole et al., 2013). The pinon nut has supported Indigenous cultures for most if not all of those 10,000 years. In the 400 years since Santa Fe was settled by Spanish explorers, not much has changed as far as the pinon is concerned. Its use remains pervasive and woodsmoke in the area famously carries its scent.

In the last two centuries, old-growth pinon forests were extensively removed for various purposes. A severe drought began in the Southwest in the 1990s, and we now know the last two decades have been the driest in over 1200 years (Williams et al., 2022), which is an ominous sign for remaining piñon trees. In 2003, the piñon ips beetle killed over 90% of the piñon trees in the Santa Fe Area (Gorelik, 2017). The event killed nearly 350 million piñon trees in the southwestern United States, with hardest impacts in the Santa Fe area (Hicke & Zeppel, 2013).

The piñon jay (*Gymnorhinus cyanocephalus*) is a keystone species in piñon-juniper woodlands, forming a mutualistic relationship with threatened piñon trees. This threatened species, according to Johnson et al. (2018), is not adequately considered in fuel reduction projects in Piñon-Juniper woodlands. The birds gain nutritious food source from piñon nuts, which they can eat with specialized beaks. Piñon jays cache seeds up to 11 km away, helping to disperse the tree’s offspring over a wide area. This has increased the total range of piñon pines while sustaining population stability and genetic diversity. (Pesendorfer et al., 2016).

Piñon jays are vanishing faster than any other bird species in New Mexico, where 80% of the species has vanished since the 1970s at a rate of 2% per year, leading many conservation organizations to call for their protection under the Endangered Species Act (Darr et al., 2022; Sadoti & Johnson, 2022). The likelihood of the species being listed, based on declines, means that agencies could save time and resources by placing piñon jays under higher consideration during management plans (Sadoti & Johnson, 2022). Old-growth piñon trees, generally over 150 years old, are preferred habitat for piñon jays (Floyd et al., 2015; Darr et al., 2022; Floyd-Hanna, 2022). I implore decisionmakers to consider the fact that the US Fish and Wildlife Service has stated on August 17, 2023:

“Based on our review, we find that the petitions to list the bleached sandhill skipper ( *Polites sabuleti sinemaculata*), blue tree monitor lizard ( *Varanus macraei*), Bornean earless monitor lizard ( *Lanthanotus borneensis*), and *pinyon jay ( Gymnorhinus cyanocephalus) present substantial scientific or commercial information indicating that the petitioned actions may be warranted*” (USFWS, 2023).

A 2022 Nest Habitat Model for *Gymnorhinus cyanocephalus* performed by Sadoti and Johnson found low to high probability for the species to nest in various parts of the project area, which makes sense because we have so little habitat remaining after losing so many piñon trees in the Santa Fe area. In fact, the project goes through some of the most probably areas in the Caja del Rio area. This means that it is conceivable that the proposed project would not be possible in the near future due to newly designated critical habitat protection under the Endangered Species Act, which I think warrants further consideration. In addition, Table 3-1 of Appendix E in the project EA- the Avian Point Survey Results (Spring 2021)- found 87 *Gymnorhinus cyanocephalus,* more than any other bird species.

**Cultural Significance:** Multiple experts have highlighted the cultural significance of the project area, which has supported humans for over 10,000 years. The All Pueblo Council of Governors, a body representing 20 pueblos in New Mexico and Texas, passed resolution APCG 2021-13 in opposition to this project. In a press release on the resolution, the APCG stated that the area has high concentrations of cultural sites, including ceremonial kivas, ancient agricultural systems, petroglyphs and more (2022).

**Fire emission and risk:** Regarding wildfire probability, I will briefly state that disturbances from the project will remove late successional communities and leave lands vulnerable to influxes of non-native vegetation (Miller et al., 2014). Non-native species in regional forests have been connected to decreased diversity and increased fire danger in the western US (Floyd et al., 2015; Darr et al., 2022). We know that climate change is going to bring more droughts and more intense storms which will bring more opportunities for a power line to ignite a wildfire like the 2011 Los Conchas Fire. This risk will only increase with more transmission lines through our remaining forests and fire danger increases with warming temperatures (Juang et al., 2022; Dahl., 2023). I think that any potential emissions impacts in your analyses should include potential loss of vegetation due to wildfire.

**Renewable Alternatives:** Other commenters have discussed alternatives to this transmission line project, including the investment in other renewable energy alternatives. I encourage further research into how alternative power configurations and future efficiency gains may allow you to cancel this project. Like the proposed Pebble Mine in Alaska, these projects are some of the last fragments of climate refugia for many species that humans have brought to the brink of extinction. The Las Conchas Fire and Hermit’s Peak/ Calf Canyon fires have mandated protection of every acre possible going forward to ensure the survival of these species.

# Objection

Here is what I believe is inadequately addressed in the EA:

1. **Cultural Impacts:** The EA acknowledges cultural significance of the project area and includes some mitigations like revegetation, monitoring by Tribal entities, and avoidance of physical impacts on cultural sites. However, it does not fully assess the *cumulative impacts* related to increased road access, development, and recreational use which could lead to indirect degradation, as I pointed out in my original comments. This oversight may have significant implications for the long-term preservation of cultural landscape.
2. **Wildlife Habitat and Piñon-Juniper Woodlands:** The EA acknowledges impacts on piñon-juniper woodlands, specifically noting vegetation disturbance, but does not fully assess the *long-term ecological impacts on threatened species like the piñon jay* and other dependent fauna​. The project states that piñon jay habitat losses will be mitigated because:

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| “… project design criteria are incorporated into the proposed action which includes measures to protect milkweed plants for Monarch butterfly, migratory bird project restrictions, presence of a biological monitor during ground disturbing activities and pole placements to protect at-risk vegetation and avoid active burrows and nests, and disturbed areas will be revegetated.”  |

The potential loss of 100 acres of piñon trees represents a devastating blow to an already declining population, with impacts cascading to dependent species like the piñon jay and beyond. We know that *piñon jays* require old-growth trees to survive and this project is going through some of the oldest piñon trees left after the 2003 piñon ips beetle attack. These protective measures for piñon jays suggest that the author is wholly uninformed about protection of this threatened species. *Piñon trees and their mutualistic relationship with piñon jays underscores the necessity for a more robust evaluation of* ***species-specific impacts*** *and the potential for critical habitat designation, which was not comprehensively considered in the EA.*

1. **Increased Emissions and Wildfire Hazard:** While the EA does consider wildfire risks and mentions some design features aimed at resilience, it lacks a detailed analysis of **how increased temperatures and drought, exacerbated by climate change**, could lead to elevated wildfire risks, particularly along the transmission corridor. Transmission lines are among the top offenders for area wildfires and that was before the Vapor Pressure Deficit increased to current levels, and before we knew it is drier now than it has been in 1,200 years (Williams et al., 2022). The potential for increased fire risk due to non-native vegetation influx and the possibility of additional large-scale GHG emissions from vegetation loss are areas that may need more comprehensive evaluation. It is unclear whether the authors are factoring in vegetation loss in the project’s cumulative Greenhouse Gas (GHG) emissions. Any such estimates should also include a massive fire started by this project to provide accurate estimates of high-end GHG emissions from this project.
2. **Renewable Energy and Alternative Solutions**: The EA briefly considers certain alternative energy options (e.g., onsite generation, microgrids, renewables) but seems to dismiss them primarily due to site capacity and cost concerns. However, some of these alternatives might warrant more thorough evaluation than the EA provides, given recent advancements in these technologies.

**Given the enduring cultural and ecological significance of the Caja del Rio landscape, it is imperative to take every precaution to protect these irreplaceable resources. As a graduate in environmental science and policy, I have committed my career to advancing thoughtful environmental stewardship, and I am deeply concerned about the precedent set by permitting such extensive impacts without a full Environmental Impact Statement (EIS).**

**I urge the decision-makers to consider the irreversible losses that could occur under the current assessment, as well as the opportunity to lead by example by prioritizing the protection of fragile landscapes and cultural heritage. I respectfully ask that an EIS be conducted, supported by further consultations with Tribal leaders, ecological experts, and the public, to ensure that the proposed actions reflect our shared commitment to environmental and cultural preservation for generations to come.**

**Thank you for your consideration of these critical issues.**

Sincerely,

Joey Smallwood, MS

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