U.S. Department of Energy
Office of Nuclear Energy
National Environmental Policy Act
Determination

NEPA Identification: DOE-ID-INL-26-027

Proposed Action Title: Substation 7 — New 138kV/13.8kV Substation

Location(s) (City/County/State):

Proposed Action Description:

Power Management is updating its infrastructure to support the growing electrical demands of INL, industry partners, and other customers. As part of these Transmission and Distribution (T&D) updates, Substation 7 will be constructed south and west of Portland Ave on the INL site, serving Launchpad-INL and the Proving Grounds. The project will be owned by INL Facility & Site Services / INL Power Management, with GFE consisting of transformers and 138kV circuit breakers.

The substation will feature a new greenfield 138kV two-bay breaker-and-a-half configuration designed for future expansion, providing 138kV transmission terminals for the OWL line, the Scoville line, and the AMWTP/RWMC line. It will include 138kV circuit breakers (government-furnished equipment) and disconnect switches.

Two 15/20/25 MVA 138kV–13.8kV transformers (also GFE) will be installed, with the substation designed to accommodate up to eight transformers total. The transformers will operate in parallel to provide redundant power delivery, and procurement is already underway.

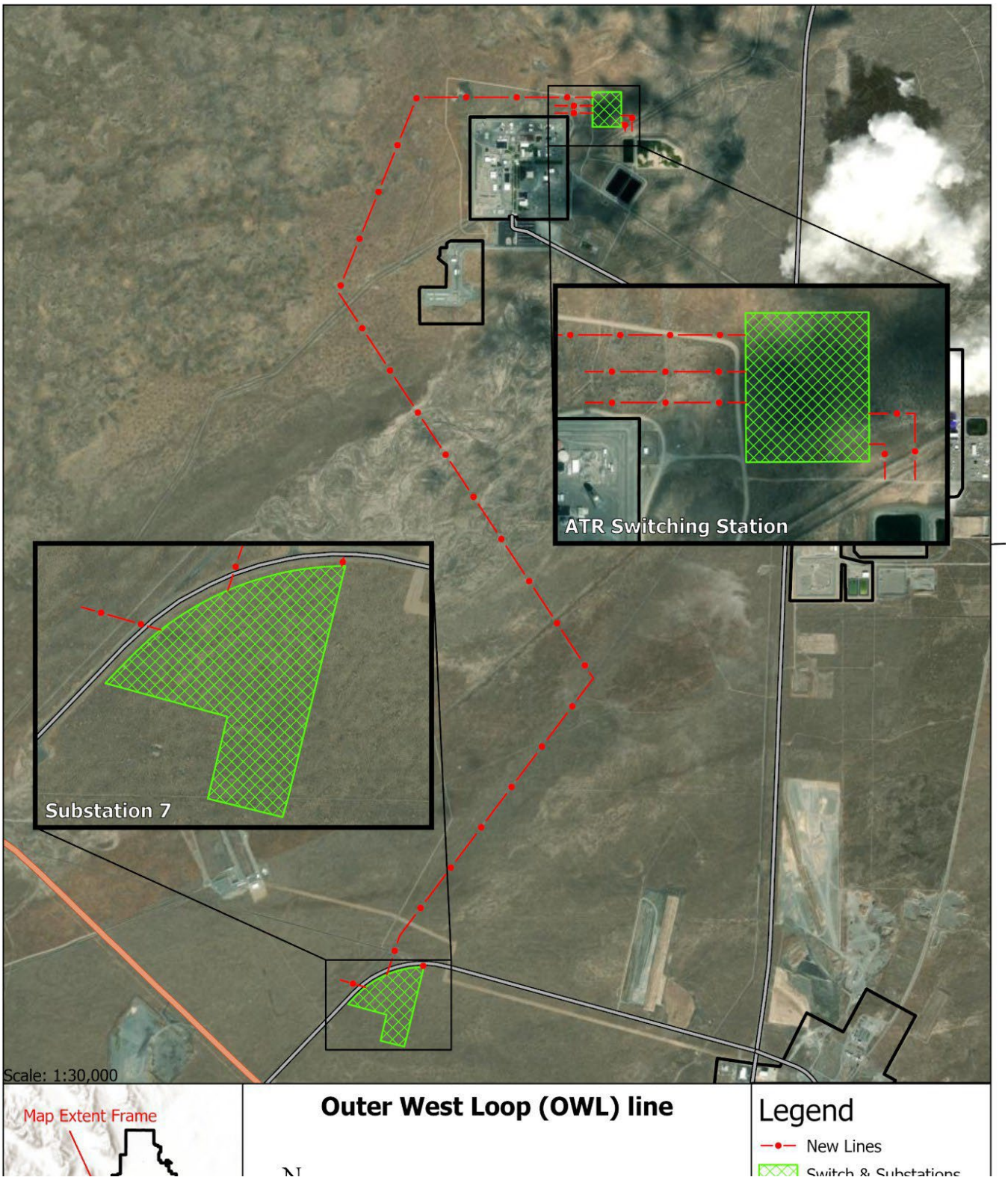
On the distribution side, a new Pre-Engineered Electrical Building (PEEB) will handle 13.8kV distribution switching, with the site designed to expand to four PEEBs total. Six distribution circuits will be fed from the PEEB to serve new loads at Launchpad-INL and the Proving Grounds.

Protection and control systems will include redundant SEL-311L line current differential relays, SEL-352 breaker failure relays on all circuit breakers, and an SEL-Axion RTU paired with an SEL-RTAC SCADA communication system.

Fiber optic communications will be extended to the new substation to support protection relaying and SCADA, with termination panels installed in the substation control building. The new fiber will be compatible with INL Power Management's existing fiber infrastructure.

This project will be executed as a design-build project and bundled with other T&D update projects to attract specialized companies capable of constructing these complex power structures. The bundled projects include:

- Scoville Transformer Replacement & Reliability Upgrades.
- Outer West Loop Switching Station.
- MFC Switching Station.
- MFC East 138kV/13.8kV Substation 13.


ATR Switching Station
Substation 7
Scale: 1:30,000
Map Extent Frame
Outer West Loop (OWL) line
Legend
New Lines
Switch & Substations

Environmental Aspects and Impacts:

Air Emissions

- Project has the potential to generate fugitive dust.
- Other construction related emissions are expected from the operation of fossil fuel burning mobile equipment.

Discharging to Surface, Storm, or Ground Water
NA

Disturbing Cultural or Biological Resources

There is the potential for this work to impact vegetation and for project personnel to interact with various wildlife species. A Biological Resource Review will be arranged within two weeks prior to the initiation of any activities that might disturb soil or vegetation and again following completion of project activities. A nesting bird survey is included with the Biological Resource Review for actions occurring between April 1 - October 1 per compliance with the Migratory Bird Treaty Act. Bat surveys are also included with the Biological Resource Review in accordance with the INL Bat Protection Plan.

CULTURAL - Pursuant to 2023 Programmatic Agreement as amended in 2025, the proposed action is a federal undertaking. CRMO does not have adequate scope to complete the Section 106 review at this time. Refer to Hold Points and Project Specific Instructions.

Generating and Managing Waste

When wastes are generated, how they are disposed can adversely affect the environment. Managing wastes appropriately and responsibly and implementing recycling or reuse practices, where feasible, during project activities can reduce the potential impact on the environment.

Releasing Contaminants

When chemicals are used during the project there is the potential for spills that could impact the environment (air, water, soil).

Using, Reusing, and Conserving Natural Resources

Project activities have the opportunity to reduce the impact on our natural resources by recycling or diverting materials from disposal in the landfill.

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References:

B4.11 "Electric power substations and interconnection facilities"

For Categorical Exclusion Determinations:

The proposal fits within the classes of actions listed in Appendix B to 10 CFR Part 1021 or Appendix B and C of DOE's NEPA Implementing Procedures and satisfies the conditions that are integral elements of the classes of actions therein. The proposal does not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) 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; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Appendix B; (5) 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 listed in paragraph B(5) of 10 CFR Part 1021, Appendix B.

There is no extraordinary circumstance related to the proposal that is likely to cause a reasonably foreseeable significant adverse effect or for which DOE does not know the environmental effect. Extraordinary circumstances are unique situations presented by specific proposals, including, but not limited to, scientific controversy about the environmental effects of the proposal; uncertain effects or effects involving unique or unknown risks; and unresolved conflicts concerning alternative uses of available resources.

The proposal has not been segmented to meet the definition of a categorical exclusion. Segmentation can occur when a proposal is broken down into small parts in order to avoid the appearance of significance of the total action. However, segmentation does not include proposals that are developed and potentially implemented over multiple phases where each phase results in a decision whether to proceed to the subsequent phase.

Based on my review of the proposed action, I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

NEPA Compliance Officer

Signed by: Robert Douglas Herzog, NEPA

Compliance Officer Date Signed: 9/21/2026