**Description of the Project**

The Western Area Power Administration (WAPA), Sierra Nevada Region (SNR), is proposing to upgrade security measures at the Folsom Lake Dam Substation in order to provide the most updated and secure critical infrastructure protection (CIP) for all DOE WAPA SNR maintained facilities. This security upgrade work includes the following:

1. Install a new entrance card reader and protective bollard barriers around the card reader located on the existing asphalt driveway/entrance of the substation. Repair the existing chain link fence surrounding the perimeter of the substation.
2. Fill in gaps between the bottom of the fence fabric and the earth grade that are larger than a space of 6-inches around the entire perimeter fence line. Gaps may be filled using one strand of tensioned barbed wire or by placing aggregate in the voids as specified in the products section. In some cases to fill the void barbed wire and aggregate may be used.
3. Install ladder guards designed to prevent use of the ladder without removal of the ladder guard.
4. Install government furnished signs at locations and intervals.
5. Install fragmentation film on perimeter windows
6. Install astragals on doors to protect locks from forced entry
7. Install heavy duty automatic door closers.
8. Install new LED lighting upgrades including light fixtures, bulbs, photo cells, wiring and control components necessary to allow for automatic operation of all exterior substation lighting, parameter, building mounted, and yard lights
9. Additional work involves minor earthwork such as trenching above the ground mat for burying conduits and conductors, placement of light gravel for even layer of surface if necessary, and re-paving a portion of the entrance areas after construction.

Folsom Dam substation is owned and operated by WAPA, however the land which SNR will be conducting the security upgrades is owned by the U.S. Bureau of Reclamation.

- Map(s)
  See attached Maps
- Figures(s)
  See attached Figures
- Work Order Number - 100389255
Integral Elements

Project Title: WAPA Sierra Nevada Region: Folsom Lake Dam Substation Security Upgrades Project

- **B2.2 Building and Equipment Instrumentation**
  Installation of, or improvements to, building and equipment instrumentation (including, but not limited to, remote control panels, remote monitoring capability, alarm and surveillance systems, control systems to provide automatic shutdown, fire detection and protection systems, water consumption monitors and flow control systems, announcement and emergency warning systems, criticality and radiation monitors and alarms, and safeguards and security equipment).

**Regulatory Requirements for a Categorical Exclusion Determination**: The Department of Energy (DOE), National Environmental Policy Act (NEPA) Implementing Procedures, 10 CFR 1021.410(b) require the following determinations be made in order for a proposed action to be categorically excluded (see full text in regulation).

1. The proposed action fits within a class of actions listed in Appendices A and B to Subpart D. For classes of actions listed in Appendix B, the following conditions are integral elements; i.e., to fit within a class, the proposal must not:
   a. Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including requirements of DOE and/or Executive Orders;
   b. Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities, but may include categorically excluded facilities;
c. 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; or

d. 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, Subpart D, Appendix B;

e. 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, Subpart D, Appendix B. There are no extraordinary circumstances related to the proposal which may affect the significance of the environmental effects of the proposal;

2. The proposal has not been segmented to meet the definition of a categorical exclusion. The proposal is not connected to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions requiring preparation of an environmental impact statement.

**Results of Review:** In accordance with DOE environmental regulations (10 CFR 1021), WAPA has reviewed the proposed action in terms of the level of NEPA review needed. Based on this review, WAPA has determined the proposal is encompassed within a class of actions listed in Appendix B to Subpart D (10 CFR 1021.410) which do not require preparation of either an environmental impact statement (EIS) or an environmental assessment (EA).

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.
### Affected Environment

| Folsom Dam substation is located adjacent to the lake it serves for hydropower. The substation is just below Folsom Dam and Lake. This area has a Mediterranean climate, which is characterized by hot, dry summers and damp to wet, mild winters. The substation is composed of mostly flat terrain immediately surrounded by steep hills of non-native annual/natural grassland and oak trees and shrubs with rock outcrops created by dam and reservoir construction. |

### Review Action

| Habitat type within the facility was compared to the California Natural Diversity Database (CNDDB) and U.S. Fish and Wildlife sensitive species lists for species that may occur in the area. Based on habitat type within the facility and the perimeter of the facility, sensitive species are unlikely to occur within the project areas themselves, but may occur in the surrounding areas. With the avoidance measures specified below, no effects are anticipated to sensitive species. Migratory Bird Treaty Act requirements are in effect and are detailed below. |

### Cultural and Historic Results

- The Folsom Substation is a facility that meets the eligibility requirements for the National Register of Historic Places for its association with the development of the Central Valley Project. A letter seeking concurrence with a No Adverse Effects determination was submitted to the CA SHPO on March 3, 2017. SHPO replied via letter dated April 4, 2017 concurring with SNR’s determination.

- Tribal consultation was initiated March 3, 2017 with potentially interested tribes. The United Indian Community of the Auburn Rancheria responded with a request for additional consultation. SNR sent additional information concerning the security upgrade activities and arranged to meet with the tribe. The tribe cancelled the meeting later but stated that they believe a visit to the Folsom Substation was not necessary. No further correspondence from Tribe. The Wilton Rancheria initially contacted SNR but never responded to a second request from SNR to meet and discuss the Folsom Substation security upgrade project.

- Consultation on this project was completed on: April 4, 2017

- This action is covered by Western's Programmatic Agreement, “Programmatic Agreement Among the Western Area Power Administration, the Advisory Council on Historic Preservation, and the California State Historic Preservation Officer Concerning Emergency and Routine Maintenance Activities and Other Routine Activities at Western Facilities in California,” revised March, 2010.

- Mitigation required: None

- Include in WAPA annual report
### BIOLOGICAL RESULTS

- Studies conducted, in order to evaluate potential impacts of the proposed project on special status species and/or their habitats, included background research to determine which special-status species and their habitats may occur within the project area and a review of habitat types in the project area. The footprint of the project lies entirely within developed areas. However, elderberry shrubs (habitat for the federally listed valley elderberry longhorn beetle; VELB) occur in proximity to the substation fence and there is habitat for avian species in the vicinity. This project is considered an Operation and Maintenance Activity covered under the 2009 Letter of Concurrence from the U.S. Fish and Wildlife Service for the Programmatic Informal Consultation for the Western Area Power Administration North Area Right of Way Operations and Maintenance Project, from Klamath County, Oregon through Alameda County, California and Amendments.

- Mitigation required (see below)

### COMPLIANCE RESULTS

- **Recycled Materials Quantities:** All materials generated from the project that can be recycled, shall be recycled. Submit quantities of all recycled material by category to the COR within 30 days of recycling and prior to submittal of final invoice. Record quantities of material by category that is salvaged, recycled, reused, or reprocessed.

- **Disposal of Waste Material:** Dispose or recycle waste material in accordance with applicable Federal, State, and local regulations and ordinances. Coordinate with COR regarding sampling and signatures on manifests for wastes materials if required. Submit quantities of total project waste material disposal as listed below to the COR prior to submittal of final invoice.

  1. Unregulated Wastes (i.e., trash): Volume in cubic yards or weight in pounds.
  2. Hazardous or Universal Wastes: Weight in pounds.
  3. PCB Wastes (If applicable): Weight in pounds.
  4. Other regulated wastes (e.g., lead-based paint or asbestos): Weight in pounds (specify type of waste in report).

- **Pollutant Spill Prevention, Notification, and Cleanup:** The Spill Prevention, Notification, and Cleanup Plan is expected to be a brief description of the measures taken by the contractor to prevent spills, to notify in the event of a spill, to train personnel, and to describe the company’s commitment of manpower, equipment, and material which would be mobilized in the event of a spill. The plan should describe those elements in proportion to the risks posed by the project. This is not intended to be the Spill Prevention, Control and Countermeasures Plan, as specified in 40 CFR 112. Those plans are required by law for facilities with ≥1320 gallons of oil storage.

- **Prevention of Air Pollution:** In addition to complying with Federal and State air quality regulations, the project must also comply with the respective Sacramento Metropolitan Air Quality Management Rules.

**General Conformity:** According to the US DOE guidance document, Clean Air Act General Conformity Requirements and the National Environmental Policy Act Process, April 2000. “the categorical exclusions listed in DOE’s NEPA regulations in Appendix A to 10 CFR Part 1021, Subpart D, would not have air emissions or would have only very small emissions. Conformity determinations would not be needed for DOE proposed actions that fall within an Appendix A categorical exclusion.” Since the cited categorical exclusion is listed in Appendix A to 10 CFR Part 1021, Subpart D, no general conformity determination is required for this project.
**Prevention of Greenhouse Gas Emissions:** Federal law requires the reporting of emissions under the Greenhouse Gas Regulation 40CFR98. All emissions of sulfur hexafluoride on this project shall be reported to Natural Resources. Installation and maintenance of equipment containing sulfur hexafluoride or any other greenhouse gas shall be in accordance with management practices designed to eliminate emissions.

**Prevention of Water Pollution:**

**Clean Water Act Section 401:** No part of the project area involves waters of the U.S. or waters of the state of California, and project activities do not involve changes to water quality.

**Clean Water Act Section 402(d):**
This project involves trenching with collective ground disturbance totaling less than one acre. While best management practices will apply, the requirements of a General Construction Storm Water Permit are not applicable to the project.

**Clean Water Act Section 404:** No part of the project area involves waters of the U.S. or waters of the state of California, nor does it involve dredging or discharges of fill material to waters of the U.S. or waters of the state of California.

**MITIGATION**

**Other Mitigation: Not Required**

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<th>WAPA Sierra Nevada Region: Folsom Lake Dam Substation Security Upgrades Project</th>
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**ITEMS CHECKED ARE APPLICABLE TO THIS PROJECT.**

**General**

- Under the Migratory Bird Treaty Act of 1918, migratory bird species and their nests and eggs are protected from injury or death. Impacts to migratory bird nests shall be avoided during the nesting season (defined as March 1 through August 31 at Folsom and New Melones Substations). If project activities occur during the nesting season, WAPA will survey the project area for migratory bird nests prior to project activities and establish appropriate buffers around any active nests that may potentially be disturbed. If work must be conducted within these buffers, a WAPA supplied biological monitor will be on site for project activities within the buffers. If the biological monitor determines that activities are likely to cause nest impacts or nest abandonment, then project activities in the area shall be postponed or adjusted until nestlings have fledged, the nest is no longer active, or the activities are not likely to cause nest impacts or nest abandonment.

- Routine maintenance activities will be avoided from mid-March through mid-June in the vicinity of structures.

- Road maintenance operations will be conducted to minimize soil erosion. The United States Forest Service’s Best Management Practices, Forest Practices, and Forest Practices Rules of the California Department of Forestry will be implemented where practical.

- Culverts will be sized to match storms that may occur during the life of the road to minimize the potential for access road washouts under high intensity storms.

- Excavated material will not be stock piled or deposited where they could be washed away by high water or storm run-off.

- Vegetative management plans will be followed as appropriate.

- In areas where excavation is not required, vegetation will be left in place whenever possible and original contours maintained in an undisturbed condition.
Habitat diversity will be maintained to the greatest extent feasible.

Brush blades will be used on bulldozers in clearing operations where such use will help preserve the cover crop of grass, low-growing brush, etc.

Dispose of all cleared vegetation in an appropriate manner.

The biologist will determine whether a sensitive habitat is present at the maintenance site. If special status species are identified in the area, maintenance will receive approval from Natural Resources prior to initiating any maintenance.

Natural Resources will be contacted immediately:
   a. If there is a "take" of a special status species or action affecting their critical habitat, and/or
   b. If archeological, paleontological, or historic evidence is found.

No paint or permanent discoloring agents will be applied to rocks or vegetation.

If used, survey stakes will be removed as a part of the final clean up.

All work on access and maintenance roads must stay within the existing prism of the roads.

Threatened and Endangered Species

Federal law prohibits the taking of endangered, threatened, proposed or candidate wildlife and plants, and destruction or adverse modification of designated Critical Habitat. Federal law also prohibits the taking of birds protected by the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act. “Take” means to pursue, hunt, shoot, wound, kill, trap, capture or collect a protected animal or any part thereof, or attempt to do any of those things. The Contractor must always stay within WAPA’s right-of-way and/or easement or on public roads.

Known Occurrence of Protected Species or Habitat: Following issuance of the notice to proceed, and prior to the start of construction, WAPA will provide training to all contractor and subcontractor personnel involved in the construction activity. Untrained personnel shall not be allowed in the construction area. WAPA will provide two sets of drawings showing known sensitive areas located on or immediately adjacent to the transmission line right-of-way and/or facility. These areas shall be considered avoidance areas. Prior to any construction activity, the avoidance areas shall be marked on the ground in a manner approved by the COR. If access is absolutely necessary, the contractor shall first obtain permission from the COR, noting that a WAPA and/or other government or tribal agency biologist may be required to accompany personnel and equipment. Ground markings shall be maintained through the duration of the contract. WAPA will remove the markings during or following final inspection of the project.

Unknown Occurrence of Protected Species or Habitat: If evidence of a protected species is found in the project area, the contractor shall immediately notify the COR and provide the location and nature of the findings. The contractor shall stop all activity in the vicinity of the protected species or habitat and not proceed until directed to do so by the COR.

Prior to the start of project activities, all personnel will participate in environmental awareness training which will inform them of the sensitive habitats within the project area, the species that have the potential to occur in the project area, and the avoidance and minimization measures that are to be adhered to during project activities. Any new crew members that start after project activities have started will be given the environmental awareness training prior to starting work on site.

General Mitigation/Avoidance Measures: The Contractor shall follow all species specific conservation measures listed below as applicable to each site, in coordination with WAPA’s Natural Resources Point of Contact (POC) and the COR.

Elderberry shrubs occur in proximity to, but outside the substation fence. Prior to the start of work, qualified personnel will clearly flag or fence each elderberry plant that has a stem measuring one inch or greater in diameter at ground level. If an elderberry plant meeting this
criterion is present:
- A minimum buffer zone of 20 feet outside of the dripline of each elderberry plant will be provided during project activities, within which only non-ground disturbing activities and manual methods for vegetation clearing will be allowed.
- No insecticides, herbicides, fertilizers, or other chemicals will be used within 100 feet of an elderberry plant, except direct application to target vegetation (e.g. injection or cut-stump). Trimming, rather than removal of shrubs, will be used where feasible. Directional felling of trees and manual cutting of trees prior to removal will be used to minimize impacts to elderberries.

### Perennial Streams and Rivers

The following activities will be prohibited at all times within 100 feet of a seep, spring, pond, lake, river, stream, or marsh, and their associated habitats:
- Vehicle access, except on existing access and maintenance roads, unless approved by Natural Resources
- Dumping, stockpiling, or burying of any material, except as required for specific O&M activities (e.g., rip-rap)
- Mixing of pesticides, herbicides, or other potentially toxic chemicals
- Open petroleum products

Equipment will be stored, fueled, and maintained in a vehicle staging area 300 feet or the maximum distance possible from any seep, spring, pond, lake, river, stream, marsh, or their associated habitats. Vehicles will be inspected daily for fluid leaks before leaving the staging area.

All spills of fuel or hydraulic fluid would be immediately cleaned up in accordance with the WAPA-approved Pollutant Spill Prevention, Notification and Cleanup Plan.

- Clean Water Act Section 401: The project does not involve waters of the U.S., nor does it involve elements which should alter water quality in waters of the U.S.
- Clean Water Act Section 404: The project does not involve waters of the U.S., nor does it involve dredging or discharges of fill material to waters of the U.S.

### Compliance Regulatory Requirements

- No violations of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including requirements of DOE and/or Executive Orders will be permitted.
- To avoid adversely affecting environmentally sensitive resources there will be no uncontrolled or un-permitted releases of hazardous substances, pollutants, contaminants, or petroleum and natural gas products.
- In the event of a hazardous material/waste spill, Environment and the COR will be contacted, WAPA Dispatch notified, and the appropriate Federal, State, and local regulating authority notified depending on the type and size of the spill.
- Ensure proper management and disposal of hazardous materials/waste (i.e., fuel, concrete and pavement-related materials and waste, etc.).
- Piping and oil sampling required
- Material Analytical Data: See attached results for reference
- Erosion control measures to be taken to prevent sediment from reaching waterways.