Description of the Project

The Western Area Power Administration (WAPA), Sierra Nevada Region (SNR), is proposing to upgrade the existing sanitary facility at the Livermore Substation.

WAPA SNR plans to connect to City of Livermore’s sewer and water system. The existing bathroom inside the substation control room is not connected to any sewer or water lines. Existing facilities consist of a substation control building that contains a non-working restroom and underground utility pipes. The utility pipes extend from the northwest corner of the control building and continue west under the perimeter fencing to a point outside of the substation. Electrical infrastructure and associated equipment are also onsite. Currently, there are no plans to construct additional buildings or to expand the substation. WAPA SNR will connect the sewer and water lines from the substation to the City of Livermore’s exiting sewer and water lines located at the intersection of Greenville Road and Old Patterson Pass Rd (now the substation access road). These lines will be approximately 300 feet long. WAPA will submit a permit application to the City of Livermore with a project description and drawings prior to starting the construction.

☐ Map(s)
See attached Maps
☐ Figures(s)
See attached Figures
☒ Work Order Number - 100373160

To be completed by Environment Only

Action taken
Note: All Documentation is Attached

☒ Categorical Exclusion (CX)
☐ Environmental Assessment (EA)
☐ Environmental Impact Statement (EIS)
☐ Other Determinations: Biological Assessment
☐ Integral Elements
☒ NEPA Attachment Sheet
☐ Environmental Requirements/Mitigation
☐ Maps/Figures

Determination: Based on my review of information provided to me concerning the proposed action as NEPA Compliance Officer, I have determined that the proposed action meets the requirements for the categorical exclusion listed above. Therefore, I have determined that the proposed action may be categorically excluded from further NEPA review and documentation.

Gerald Robbins, Environment Manager

3/21/2018
Date Approved
Integral Elements

WAPA Sierra Nevada Region Livermore Substation Sanitary Facility 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).

B1.3 Routine Maintenance

Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (including, but not limited to, pathways, roads, and railroads), vehicles and equipment, and localized vegetation and pest control, during which operations may be suspended and resumed, provided that the activities would be conducted in a manner in accordance with applicable requirements. Custodial services are activities to preserve facility appearance, working conditions, and sanitation (such as cleaning, window washing, lawn mowing, trash collection, painting, and snow removal). Routine maintenance activities, corrective (that is, repair), preventive, and predictive, are required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable for a facility to be used for its designated purpose. Such maintenance may occur as a result of severe weather (such as hurricanes, floods, and tornados), wildfires, and other such events. Routine maintenance may result in replacement to the extent that replacement is in-kind and is not a substantial upgrade or improvement. In-kind replacement includes installation of new components to replace outmoded components, provided that the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of a major component that significantly extends the originally intended useful life of a facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life). Routine maintenance activities include, but are not limited to:

(a) Repair or replacement of facility equipment, such as lathes, mills, pumps, and presses;
(b) Door and window repair or replacement;
(c) Wall, ceiling, or floor repair or replacement;
(d) Reroofing;
(e) Plumbing, electrical utility, lighting, and telephone service repair or replacement;
(f) Routine replacement of high-efficiency particulate air filters;
(g) Inspection and/or treatment of currently installed utility poles;
(h) Repair of road embankments;
(i) Repair or replacement of fire protection sprinkler systems;
(j) Road and parking area resurfacing, including construction of temporary access to facilitate resurfacing, and scraping and grading of unpaved surfaces;
(k) Erosion control and soil stabilization measures (such as reseeding and revegetation);
(l) Surveillance and maintenance of surplus facilities in accordance with DOE Order 435.1, “Radioactive Waste Management,” or its successor;
(m) Repair and maintenance of transmission facilities, such as replacement of conductors of the same nominal voltage, poles, circuit breakers, transformers, capacitors, crossarms, insulators, and downed transmission lines, in accordance, where appropriate, with 40 CFR part 761 (Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions) or its successor;
(n) Routine testing and calibration of facility components, subsystems, or portable equipment (such as control valves, in-core monitoring devices, transformers, capacitors, monitoring wells, lysimeters, weather stations, and flumes);
(o) Routine decontamination of the surfaces of equipment, rooms, hot cells, or other interior surfaces of buildings (by such activities as wiping with rags, using strippable latex, and minor vacuuming) and removal of contaminated intact equipment and other material (not including spent nuclear fuel or special nuclear material in nuclear reactors); and
(p) Removal of debris.

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 un-permitted 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.
PROJECT TITLE: WAPA Sierra Nevada Region Livermore Substation Sanitary Facility Upgrades Project

**AFFEKTED ENVIRONMENT**

Livermore Substation is located off Greenville Road within the eastern portion of the City of Livermore. The substation is directly across the road from the Lawrence Livermore National Laboratory. 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 rolling hills of small patches of non-native annual grassland and agricultural parcels.

**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 project area, sensitive species, including California red-legged frog and California tiger salamander, may use the area to disperse between patches of more suitable habitat. With the avoidance measures specified, no effects are anticipated to sensitive species. Migratory Bird Treaty Act requirements are in effect and are detailed below.

**CULTURAL AND HISTORIC RESULTS**

- There are no cultural resource sites outside the vicinity of the Livermore Substation. The installation of sewer and water lines outside of the Livermore Substation will be in highly disturbed soils from the original construction of the Substation and other city-installed infrastructure.

- Consultation on this project was completed on

- This action is covered by WAPA Programmatic Agreement, “Programmatic Agreement Among the WAPA the Advisory Council on Historic Preservation, and the California State Historic Preservation Officer Concerning Emergency and Routine Maintenance Activities and Other Routine Activities at WAPA Facilities in California,” revised March, 2010. (PA reference-B.III.11)

- 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. Project conservation measures appearing below will be adhered to in order to avoid potential impacts to listed species.

- 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 Bay Area Air Quality Management District requirements.

**General Conformity Appendix A:** 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.”
General Conformity Appendix B: Since the cited categorical exclusion is listed in Appendix B to 10 CFR Part 1021, Subpart D, a general conformity review is required for this project, pursuant to Clean Air Act General Conformity Requirements and the National Environmental Policy Act Process guidance document published by Department of Energy in April, 2000.

The project is located in Alameda County, and is in the jurisdiction of the Bay Area Air Quality Management District. (BAAQMD). The BAAQMD published Air Quality Guidelines in May 2017, a document intended to outline the procedures preferred for determining the significance of air quality impacts of activities and projects in the BAAQMD. The preliminary screening tool outlined in section 3.5 provides WAPA with a conservative indication of whether construction of the proposed project would result in the generation of construction-related criteria air pollutants and/or precursors that exceed the Thresholds of Significance adopted by the BAAQMD. It is described below:

If all of the following Screening Criteria are met, the construction of the proposed project would result in a less-than-significant impact from criteria air pollutant and precursor emissions.

1. The project is below the applicable screening level size shown in Table 3-1 (relevant portion shown below); and

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Operational Criteria Pollutant Screening Size</th>
<th>Operational GHG Screening Size</th>
<th>Construction Related Screening Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Light Industry*</td>
<td>541,000 ft² (NOx)</td>
<td>121,000 ft²</td>
<td>259,000 ft² (NOx)</td>
</tr>
<tr>
<td>General Light Industry*</td>
<td>72 acres (NOx)</td>
<td>-</td>
<td>11 acres (NOx)</td>
</tr>
<tr>
<td>General Light Industry*</td>
<td>1249 employees (NOx)</td>
<td>-</td>
<td>540 employees (NOx)</td>
</tr>
</tbody>
</table>

*The complete Table 3-1 presents many categories of land use. The general light industry category most closely represents substation operations.

2. All Basic Construction Mitigation Measures would be included in the project design and implemented during construction; and

3. Construction-related activities would not include any of the following:
   a. Demolition;
   b. Simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously);
   c. Simultaneous construction of more than one land use type (e.g., project would develop residential and commercial uses on the same site) (not applicable to high density infill development);
   d. Extensive site preparation (i.e., greater than default assumptions used by the Urban Land Use Emissions Model [URBEMIS] for grading, cut/fill, or earth movement); or
   e. Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

Since the Livermore substation sanitary improvements project meets the criteria outlined in the screening criteria, it is assumed that this project would result in a less-than-significant impact from
criteria air pollutant and precursor emissions, and therefore the general conformity requirements do not apply to this project.

Basic Construction Mitigation Measures will be included in the project design and implemented during construction as follows:

1. Western will adhere to all applicable requirements of those agencies having jurisdiction over air quality matters, and any necessary permits for O&M will be obtained.
2. Machinery and vehicles will be kept in good operating condition and older equipment will be replaced with equipment meeting applicable emission standards; appropriate emissions-control equipment will be maintained for vehicles and equipment, per EPA and/or Western air emission requirements.
3. Idle equipment will be shut down when not in active use; visible emissions from stationary generators will be controlled.
4. Dust control measures will be implemented in road construction and maintenance, as needed. Trucks transporting loose materials will be covered or maintain at least two feet of freeboard and will not create any visible dust emissions.
5. There will be no open burning of construction trash.
6. Grading activities will cease during periods of high winds (as determined by local air quality management districts).
7. Major operations will be avoided on days when the local Air Quality Index is expected to exceed 150.

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

<table>
<thead>
<tr>
<th>Western Area Power Administration</th>
<th>WAPA Sierra Nevada Region: WAPA Sierra Nevada Region Livermore Substation Sanitary Facility Upgrades Project</th>
<th>Project Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sierra Nevada Region</td>
<td></td>
<td>100373160</td>
</tr>
</tbody>
</table>

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 Livermore Substation). 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. Prior to any construction activity, avoidance areas, if needed,
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 biologist may be required to accompany personnel and equipment. Ground markings shall be maintained through the duration of the contract.

### 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.

### 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.

  - California red-legged frog (CRLF) and California tiger salamander (CTS)
    - A preactivity survey will be conducted by a qualified biologist no more than 24 hours before ground-disturbing activities begin. A USFWS-approved biologist will remain on site during all activities to ensure protection of CRLFs and CTSs OR an exclusion barrier will be constructed around the work site, following USFWS-approved methods and materials, which will be removed at the end of the work activity.
    - Crews will inspect trenches left open for more than 24 hours for trapped animals. Only a USFWS-approved biologist will remove trapped animals.

### 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 according to WAPA’s guidelines for hazardous material handling.

- 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.

**Paleontological Resources**

The area along the Tracy-Lawrence Livermore National Laboratory transmission line ROW and substation is known to contain paleontological resources and have the potential to occur elsewhere within the project area. Surveys conducted in 2009 found exposed fossils of plants and animals. Therefore, WAPA SNR will be implementing Paleontological Resources Project Conservation Measures as described in the San Joaquin Valley ROW Maintenance EA, 2011:

- Vehicles or equipment should not be driven over known paleontological sites. If infeasible, only vehicles with rubberized tires/treads will be allowed within sites; no skidding or steel tracked equipment.

- Only the following activities will be allowed in known paleontological sites: manual clearing of vegetation and chip/broadcast disposal of cut vegetation.

- Known paleontological resource sites located within an area where ground-disturbing activity will take place will be flagged for avoidance, and ground-disturbing activities will avoid all known paleontological resource sites, to the extent feasible.

- A Western-approved paleontologist or archaeologist could be required to monitor known paleontological sites during ground disturbing activities.

- Crews will be instructed to pay particular attention for the presence or discovery of paleontological materials in areas where paleontological surveys have not been conducted.

- Upon discovery of potential buried vertebrate fossils, work within 50 feet of the find will be halted and the discovery reported immediately to the Western Natural Resources Department or other designated point of contact. Western will determine measures to avoid the resource or mitigate during maintenance activities.

- A Western-approved paleontologist or archaeologist may be required to monitor areas with suspected vertebrate paleontological resources during any ground-disturbing maintenance activities.

- If paleontological resources were discovered during project activities, provisions the provisions above will be followed.