

**U.S. Department of Energy  
Naval Reactors Representative's Office  
Kesselring Site**

National Environmental Policy Act (NEPA) Categorical Exclusion (CX)  
Determination Summary Form

**#4 BOILER REPLACEMENT; CONDENSATE RETURN TANK REPLACEMENT; BUILDING 8  
SIDING ABATEMENT & REPLACEMENT; AND THE BUILDING 8 CONTROL ROOM  
RELOCATION**

**REFERENCE**

10 CFR Part 1021, Department of Energy National Environmental Policy Act Implementing Procedures, Subpart D, Typical Classes of Actions

**PROJECT SCOPE DISCUSSION**

This project replaces the existing, retired #4 Boiler, located in the boiler house (Kesselring Site (KS) Building 8), with a new boiler and sub-systems to provide optimal operation and steam generation capacity at KS. KS steam heating generation system capacity does not have 100% redundancy when the new KS buildings (112, 113, 114, and 115) are tied into the steam heating distribution system. The existing two 500 boiler horsepower (BHP) boilers can provide the heating capacity required, however; if one were to fail, the boiler house would be at risk of not satisfying peak season heating needs.

Concurrent with this project, separate projects to replace both the Condensate Return Tank (CRT), the Building 8 Siding on the south and west walls will be accomplished.

The existing CRT is 35 years old and is past its useful life. Periodic visual inspections of the internal surface of the tank have observed signs of corrosion typical with carbon steel exposure to air and water. A replacement 2,000 gallon CRT, fabricated of series 300 stainless steel (SS), will be installed. SS is less susceptible to corrosion and is the industry standard for boiler plant CRTs.

The siding is manufactured of transite which is an asbestos containing material (ACM). With a portion of the west wall being removed to facilitate the removal of the retired boiler, the ideal time to cost effectively abate this environmental risk and to install with replacement siding is during this project.

Lastly, as a concurrent work effort associated with the #4 Boiler Replacement, the 25 year old Boiler House control room will be relocated in order to increase operator efficiencies, provide additional monitoring & operating equipment, eliminate walkway & industrial area congestion and increase operator safety. The new control room will be a two-story, prefabricated structure and will include a larger area for operators to monitor several critical site systems, a meeting area, an office, and a locker room. This ultimately results in an additional 85 square feet of usable space.

The project does not violate applicable regulatory requirements, require construction or major expansion of waste handling facilities, result in unpermitted releases of hazardous substances, or adversely affect environmentally sensitive resources, including wetlands. The project does

not involve genetically engineered organisms or species. There are no extraordinary circumstances related to the proposed action. The project has not been segmented to meet the definition of a categorical exclusion and is not connected to other actions with potentially significant and/or cumulative impacts.

## **CONCLUSION**

The Kesselring Site #4 Boiler Replacement; Condensate Return Tank Replacement; Building 8 Siding & Abatement; and the Building 8 Control Room Relocation Projects are categorically excluded from additional NEPA documentation under 10 CFR 1021 Subpart D, Appendix B, B1.3 B1.5, B1.15, B1.16, B1.23, B2.1, B2.2, B5.1 and B5.2. Specifically, the categorical exclusion that applies is:

### 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), preventative, 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, gabions, grading, 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, cross arms, insulators, and downed power 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.

### B1.5 Existing Steam Plants and Cooling Water Systems

Minor improvements to existing steam plants and cooling water systems (including, but not limited to, modifications of existing cooling towers and ponds), provided that the improvements would not: (1) Create new sources of water or involve new receiving waters; (2) have the potential to significantly alter water withdrawal rates; (3) exceed the permitted temperature of discharged water; or (4) increase introductions of, or involve new introductions of, hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products.

#### B1.15 Support Buildings

Siting, construction or modification, and operation of support buildings and support structures (including, but not limited to, trailers and prefabricated modular buildings) within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible). Covered support buildings and structures include, but are not limited to, those for office purposes; parking; cafeteria services; education and training; visitor reception; computer and data processing services; health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (such as security posts); fire protection; small-scale fabrication (such as machine shop activities), assembly, and testing of non-nuclear equipment or components; and similar support purposes, but exclude facilities for nuclear weapons activities and waste storage activities, such as activities covered in B1.10, B1.29, B1.35, B2.6, B6.2, B6.4, B6.5, B6.6, and B6.10 of this appendix.

#### B1.16 Asbestos Removal

Removal of asbestos-containing materials from buildings in accordance with applicable requirements (such as 40 CFR part 61, "National Emission Standards for Hazardous Air Pollutants"; 40 CFR part 763, "Asbestos"; 29 CFR part 1910 subpart I, "Personal Protective Equipment"; and 29 CFR part 1926, "Safety and Health Regulations for Construction"; and appropriate state and local requirements, including certification of removal contractors and technicians).

### B1.23 Demolition and Disposal of Buildings

Demolition and subsequent disposal of buildings, equipment, and support structures (including, but not limited to, smoke stacks and parking lot surfaces), provided that 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.

### B2.1 Workplace Enhancements

Modifications within or contiguous to an existing structure, in a previously disturbed or developed area, to enhance workplace habitability (including, but not limited to, installation or improvements to lighting, radiation shielding, or heating/ventilation/air conditioning and its instrumentation, and noise reduction).

### 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).

### B5.1 Actions to Conserve Energy or Water

- (a) Actions to conserve energy or water, demonstrate potential energy or water conservation, and promote energy efficiency that would not have the potential to cause significant changes in the indoor or outdoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, manufacturers, and designers), organizations (such as utilities), and governments (such as state, local, and tribal). Covered actions include, but are not limited to weatherization (such as insulation and replacing windows and doors); programmed lowering of thermostat settings; placement of timers on hot water heaters; installation or replacement of energy efficient lighting, low-flow plumbing fixtures (such as faucets, toilets, and showerheads), heating, ventilation, and air conditioning systems, and appliances; installation of drip-irrigation systems; improvements in generator efficiency and appliance efficiency ratings; efficiency improvements for vehicles and transportation (such as fleet change out); power storage (such as flywheels and batteries, generally less than 10 megawatt equivalent); transportation management systems (such as traffic signal control systems, car navigation, speed cameras, and automatic plate number recognition); development of energy-efficient manufacturing, industrial, or building practices; and small-scale energy efficiency and conservation research and development and small-scale pilot projects. Covered actions include building renovations or new structures, provided that they occur in a previously disturbed or developed area. Covered actions could not involve commercial, residential, agricultural, academic, institutional or industrial sectors. Covered actions do not include rulemakings, standard-settings, or proposed DOE legislation, except for those actions listed in B5.1 (b) of this appendix.
- (b) Covered actions include rulemakings that establish energy conservation standards for consumer products and industrial equipment, provided that the actions would not: (1) Have the potential to cause a significant change in manufacturing infrastructure (such as construction of new manufacturing plants with considerable associated ground disturbance);

(2) involve significant unresolved conflicts concerning alternative uses of available resources (such as rare or limited raw materials); (3) have the potential to result in a significant increase in the disposal of materials posing significant risk to human health and the environment (such as RCRA hazardous wastes); or (4) have the potential to cause a significant increase in energy consumption in a state or region.

B5.2 Modifications to Pumps and Piping

Modifications to existing pump and piping configurations (including, but not limited to, manifolds, metering systems, and other instrumentation on such configurations conveying materials such as air, brine, carbon dioxide, geothermal system fluids, hydrogen gas, natural gas, nitrogen gas, oil, produced water, steam, and water). Covered modifications would not have the potential to cause significant changes to design process flow rates or permitted air emissions.

NRRO Approval:



H. S. Miller

Date:

24 SEP 20

CX Determination Date

5108650

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H. H. H.