

**Environmental Assessment Addendum
Construction and Operation of Solar Photovoltaic Systems
at Naval Weapons Station Seal Beach
19 February 2016**

This addendum of the September 2015 Environmental Assessment (EA) for the Construction and Operation of Solar Photovoltaic Systems at Naval Weapons Seal Beach documents changes to the project description and examines the potential for changes to environmental impacts as they are described in the EA.

Project Description Changes (Selected Alternative-Alternative 2)

The Selected Alternative Description in the EA and Finding of No Significant Impact includes the construction and operation of a solar photovoltaic (PV) system at Site A, an approximately 73 acre parcel at Naval Weapons Station Seal Beach. This project has been changed to a battery energy storage system (in addition to the solar PV system), all within the project footprint that was analyzed in the EA. An energy inverter may also be constructed. The battery storage system may be comprised of technologies such as lithium-ion cell chemistries and/or flow battery chemistries utilizing proprietary solutions based on vanadium sulfate-chloride, zinc-bromine, zinc-chloride, or other electrolytes. Acid based batteries will not be utilized. The batteries will be housed in large containers to protect them from the elements. Each container will be painted "earth-tone" colors to blend in with the surrounding environment, thereby reducing potential visual quality impacts. The above revisions to the Selected Alternative in the EA would require minor changes in the construction methodology and equipment used from the project analyzed in the EA; however, the duration of the construction process would be shorter. There would be changes in the operation of the project as it would involve operation of an energy storage system versus operation of a solar PV energy generation system.

Supplemental Analysis

For the following resource areas that were analyzed in the EA, the environmental effects of the project changes would be very similar to those described in the EA and would not result in significant impacts to the human or natural environment such as: land use and coastal resources; cultural resources; biological resources (federally listed wildlife and special status wildlife species); topography, geology and soils; traffic and circulation, and water resources.

For the following resource areas that were analyzed in the EA, minor changes to resource impacts would occur, as listed below:

Utilities

The project will change from solar PV panels being installed, operated and maintained, to an energy storage system being installed, operated and maintained. Energy will be stored instead of being generated. Under the project changes, there will be an increased beneficial impact to utilities as the batteries will provide up to 150 megawatt-hours of storage capacity. This will allow for better grid integration of intermittent renewable energy and also provide load shifting services to grid operators. Therefore the project changes will result in a decrease in the potential impacts to utilities than those described in the EA.

Noise

The temporary noise level increases during construction activities would be very similar for the project changes as were stated in the EA. Noise level increases from project operation and maintenance; however, would be slightly higher for the changed project. The EA states that there would be no increase in noise levels during operations; however, some low level noise may be generated from the changed project from the inverter and potential air conditioning units to cool the batteries. Operational noise increases; however, will be minimal and would not be heard at the closest residential areas (approximately 400 feet from the construction area) or by pedestrians walking near the station boundary. Therefore, the project changes would not result in a significant impact from noise.

Visual Quality

Under the project changes, impacts to visual resources will be similar to those discussed in the EA. Visual quality impacts to sensitive viewers will still be low, as contrast would be weak in this location, particularly given the earth-tone paint color to be used for the exterior surfaces of the battery containers. Therefore, the project changes would not result in significant visual quality impacts.

Conclusion

As described above, the project description change would result in minimal impact changes to those described in the EA and would not result in significant impacts to resources at Naval Weapons Station Seal Beach.

A handwritten signature in cursive script, reading "Connie Moen", positioned above a horizontal dashed line.

CONNIE MOEN
N45 NEPA Coordinator