Proposed Action for Pacific Southwest Regional Office
Solar Photovoltaic and Parking Lot Project

Background

In 2013, a plan was developed for the Regional Office to install a Solar Photovoltaic (PV) System. A procurement plan was developed with other agencies in the area to reduce development and construction costs through shared contracting. This shared effort is named the "Federal Aggregated Solar Procurement Pilot" and is comprised of the Forest Service (Region 5), the U.S. Environmental Protection Agency (EPA), the U.S. General Services Administration (GSA), the U.S. Coast Guard, and the U.S. Department of Energy's Federal Energy Management Program (FEMP), as well as, Lawrence Berkeley National Laboratory. While contracting and resources are being shared among the agencies, the proposed actions are separate and not dependent on each other. To raise awareness of the effort and to assist with funding for the project, the agencies applied for the GreenGov Spotlight Community Program. The application was accepted and the Solar Procurement Pilot became one of the six projects that were selected by the White House Council on Environmental Quality (CEQ) into the GreenGov program.

Plans for repairing the Regional Office's employee parking lot have been under discussion since 2010. The parking lot has not been resurfaced since the Forest Service took over ownership of the building. Resurfacing would address current repair and runoff concerns, safety concerns, and would ensure that the Regional Office has a usable parking area into the future. In addition to resurfacing, the proposed action includes a plan to reconfigure the parking area in order to reduce current crowding and to ensure that there are sufficient parking spots for future needs.

It became apparent that the employee parking lot would need to be reconfigured to accommodate the Solar PV infrastructure and reconstructed in connection with the site-work phase of the PV project. The agency expects that combining the projects will help the agency keep costs low and will minimize the impacts of construction on employees and neighbors.

To facilitate development and discussion of the Solar PV and Parking Lot Project, the agency has created a conceptual site plan for the project (see enclosure).

Proposed Action

The agency proposes to install a solar photovoltaic (PV) system and reconfigure the employee parking area at the Regional Office (1323 Club Drive, Vallejo, California 94592). Changes to the parking lot surfacing, fencing, drainage and other site features will improve the facility while accommodating the PV system.

Solar Photovoltaic System

The agency proposes to install a solar photovoltaic (PV) system in the parking area and on the roof of the Regional Office. The PV system will provide 3-phase power at 480VAC to the Regional Office's main electrical panel. Full interoperation with the local electrical utility (Island Energy) is a part of the project design, and the final electrical design for the project will incorporate transfer switching to allow the PV system to be run in stand-alone micro-grid mode during emergencies or utility power outages.

Technical aspects of the PV systems envisioned for this project will be conventional and very much "off the shelf" in order to keep acquisition costs low, enlarge the pool of potential construction bidders, and provide long-term reliability for the Forest Service. Higher-efficiency PV collectors will be used for the project, because of limited physical area for collector locations and the desire to minimize the visual impact of the system upon nearby neighbors at Mare Island.

The PV panels in the parking area would be positioned above vehicles using a carport-mounted PV panel system. The panels would be positioned at an angle, towards the southwest to maximize exposure to the sun. The panels would be positioned to ensure that vehicles have enough vertical space to fit into the parking spots and support poles would be positioned strategically to minimize impacts to parking. Since PV panels are designed to absorb solar rays, glare would be minimal.

Provision will be made for charging hybrid and fully electric vehicles (EVs) in all modes of PV system operation. EV hookups will be built into the system to increase the number of EV charging stations as demand increases over time. The agency currently owns and operates EVs, and has plans to purchase more in the near future.

Employee Parking Lot Resurface and Upgrades

The agency proposes to reconstruct the existing employee parking lot by milling the existing asphalt for re-use under the new pavement and incorporate drainage improvement BMP's with on-site detention as well as permeable paving areas.

With the parking area reconfiguration, the agency proposes to slightly expand paving on previously graded areas. This expansion of approximately 12 feet on the western edge and 45 feet on the northern edge would create space for additional parking spaces (around 280, instead of the current 260) and increase safety by widening driving lanes throughout the parking lot. A portion of the paving around the auxiliary building will be obliterated and removed to offset some of the new paved surface area. The reconfigured parking lot will better accommodate large vehicles. New security fencing will be installed around the perimeter of the parking area.

The agency proposes to add infrastructure for charging electric vehicles and is considering a compressed natural gas (CNG) fueling station comprised of a small modular unit with compressor and hose attachments. These alternative fuel stations are needed to facilitate the addition of electric and CNG fueled vehicles to the Forest Service's fleet.

The agency will maintain an appropriate ratio of ADA parking spots, and is considering the addition of parking spots designated for compact cars, motorcycles, and carpools. The redesigned parking lot would create a clearer, safer traffic flow than currently exists. For example, there would be a clear traffic flow for entering and exiting the security gate (see enclosure). Pedestrian cross-walks and speed bumps are proposed in an effort to increase safety for pedestrians.

The proposed actions for the new employee parking lot area were developed to improve water quality, protect habitat, use land more efficiently, and embrace natural processes while providing a cost effective solution for needed repairs and new features for employees and visitors.

Upgraded Employee-Use Features

The agency proposes to repair and maintain trails and add picnic areas for employee use. The trails and picnic areas would be located just outside of the security fence surrounding the employee parking lot and would provide a location for employees to access outdoor spaces around the building.

Construction Process

The construction process will have short term impacts in the project area. The agency expects that the proposed actions will take 3 to 6 months to complete. During that time, the gated employee parking area behind the Regional Office may be inaccessible or only partially accessible. There might also be some noise and traffic associated with the construction. The agency plans to minimize these impacts through strategic planning of the construction schedule.

Environmental Documentation

The Forest Service has made a preliminary assessment that this proposed action falls within and meets the intent of actions listed in the Forest Service NEPA Handbook (FSH) that are excluded from documentation in an Environmental Assessment (EA) or Environmental Impact Statement (EIS) (*See* FSH 1909.15 section 30 and 36 CFR 220.6(d)(3)). The agency is circulating this proposed action and performing scoping, as required under 36 CFR 220.6(c), to ensure that there are no extraordinary circumstances that would preclude use of 36 CFR 220.6.

Submitting Comments

Please submit any comments you have on the actions described above, or any issues related to these actions, during the 30-day opportunity for comment. The 30-day opportunity to comment will begin on the date at the top of the enclosed cover letter. Your comments will be used to:

- Identify potential impacts and key issues to be considered;
- Identify and eliminate from detailed study the issues that are not central to the proposed action or which have been covered by prior environmental review; and to
- Identify any additional environmental review or consultation requirements.

Comments regarding this project may be emailed to comments-pacificsouthwest-regional-office@fs.fed.us, or mailed to A.J. Duggan, 4th Floor – EP, 1323 Club Drive, Vallejo, California 94592. Comments may also be hand delivered to 1323 Club Drive, Vallejo, California 94592 (c/o A.J. Duggan, 4th Floor – EP).

Additional information about the project will be posted on the project website as it becomes available, http://www.fs.usda.gov/goto/r5/PVParkingProject.