
Deputy Directive

Number: DD-104

Refer to:

Director's Policy: DP-04 Environmental Policy
DP-06 Caltrans' Partnerships
DP-23-R1 Energy Efficiency,
Conservation, and Climate
Change

Effective Date: 06-17-10

Supersedes: NEW

TITLE Creating New Opportunities for Solar Energy Systems Deployment on State of California-Owned/Department-Controlled (SODC) Facilities

POLICY

The California Department of Transportation (Department) supports the creation of new opportunities for generating solar energy at SODC facilities and within its access-controlled rights of way. The Department will promote the installation of solar energy systems, either through direct funding or by third party providers, on SODC facilities in a safe and reasonable manner. Installations shall not compromise the purpose and intent of highway rights of way, maintenance and operations facilities, and other property assets, and must provide a benefit to the Department, as well as the public it serves.

DEFINITIONS/BACKGROUND

Solar energy is defined as the conversion of the sun's energy into usable energy (electricity or usable heat) through the use of photovoltaic or solar-thermal panels. Such conversion has common applications both commercially and in residential communities.

The Governor and the Legislature have directed State of California (State) agencies to develop alternative sources of energy, reduce dependency on non-renewable energy sources, reduce Department-generated greenhouse gases, and create markets for new technology. These directives were contained in the Governor's Executive Orders: S-20-04 and its related Energy Action Plan, S-3-05 Greenhouse Gas Emission Reduction Targets, S-01-07 Low Carbon Fuel Standard, S-13-08 Climate Change, and S-14-08 Renewable Energy Requirements. Implementing these actions will assist with lessening the Department's impact on climate change, while ensuring the Department's compliance with these directives.

The California Global Warming Solutions Act of 2006 (Assembly Bill 32) led to the creation of the Department's Climate Action Program which broadens its commitment to environmental stewardship. The Department is making climate change consideration an integral part of its business operations and, as

such, is motivated to develop alternative energy sources. The Department can reduce its reliance on more traditional nonrenewable energy sources by promoting and implementing solar energy systems.

The State owns 15,000 miles of roadways and hundreds of maintenance and operations facilities. Recently, the Department embarked on a program to install solar electric systems on its SODC buildings under the Clean Renewable Energy Bond Program. The Department can broaden its use of operating rights of way, facilities, and other property assets to generate solar energy in many locations such as Park and Ride Lots, maintenance stations, and highways where solar energy systems can be safely and cost-effectively implemented. The Department obtained conceptual concurrence from the Federal Highway Administration to use highways for generating solar energy, consistent with its March 27, 2009 memorandum "Guidance on Utilization of Highway Right of Way." This allows the Department to install solar energy systems, enter into joint projects with the solar industry, or work with other State and local agencies to implement solar projects.

RESPONSIBILITIES

Deputy Director, Project Delivery:

- Establishes a single point of contact (Solar Energy Coordinator) for the Department to coordinate efforts related to incorporation of solar energy systems at SODC facilities.
- Ensures Project Delivery program works with appropriate divisions and district offices to develop, maintain, and implement Project Delivery policies, procedures, standards, guidelines, and training related to integrating solar energy systems at SODC facilities.
- Ensures incorporation of solar energy systems at SODC facilities is considered and encouraged consistent with policies, procedures, standards and guidelines.
- Ensures appropriate divisions review relevant Department planning documents to identify and facilitate solar energy project implementation at SODC facilities.

Deputy Director, Maintenance and Operations:

- Establishes a single point of contact for the Maintenance and Operations program to coordinate efforts related to incorporation of solar energy systems on SODC facilities.
- Ensures Maintenance and Operations program works with appropriate divisions and district offices to develop, maintain, and implement Maintenance and Operations policies, procedures, standards, guidelines, and training related to integrating solar energy systems at SODC facilities.
- Ensures incorporation of solar energy systems at SODC facilities is considered and encouraged consistent with policies, procedures, standards and guidelines.

- Ensures appropriate divisions review relevant Department planning documents to identify and facilitate solar energy project implementation at SODC facilities.

Deputy Director, Planning and Modal Programs:

- Establishes a single point of contact for Planning and Modal Programs to coordinate efforts related to incorporation of solar energy systems at SODC facilities.
- Ensures Planning and Modal Programs works with appropriate divisions and district offices to develop, maintain, and implement Planning and Modal Programs policies, procedures, standards, guidelines, and training related to integrating solar energy systems at SODC facilities.
- Ensures that Planning and Modal Programs works with appropriate divisions and district offices to identify opportunities for the inclusion of solar energy systems at SODC facilities.
- Ensures appropriate transportation plans and planning documents address opportunities for inclusion of solar energy.
- Ensures incorporation of solar energy systems at SODC facilities is considered and encouraged, consistent with policies, procedures, standards and guidelines.
- Ensures that the Department's Climate Action program and the Energy Conservation program address the feasibility of incorporating solar energy systems at SODC facilities. This shall include the collection and compilation of energy-generation data from those divisions and districts that are operating solar energy systems.
- Ensures appropriate divisions review relevant Department planning documents to identify opportunities for, and facilitate development of, solar energy systems at SODC facilities.
- Establishes performance measures and a monitoring program that can be used in evaluating the benefits or impacts of implementing solar energy systems at SODC facilities.

Deputy Director, Administration:

- Establishes a single point of contact for the Administration program to coordinate efforts related to incorporation of solar energy systems at SODC facilities.
- Ensures Administration works with appropriate divisions and district offices to coordinate proposals that may involve the placement of solar energy systems at SODC facilities.
- Ensures appropriate divisions review relevant Department planning documents to identify and facilitate solar energy project implementation at SODC facilities.

Chief, Division of Right of Way and Land Surveys:

- Establishes a single point of contact within the Division of Right of Way and Land Surveys to coordinate efforts related to incorporation of solar power systems at SODC facilities.
- Facilitates the resolution of solar energy issues involving SODC facilities that cannot be resolved at the district level.

Chiefs, Division of Design, Division of Engineering Services, and Division of Construction:

- Establish a single point of contact within each division to work with the Division of Right of Way and Land Surveys, as well as other appropriate HQ and district units, to facilitate the resolution of solar energy installation issues.
- Provide design and engineering support and guidance to any requesting HQ or district unit.

Chief, Division of Environmental Analysis:

- Establishes a single point of contact within the Division of Environmental Analysis to coordinate efforts related to incorporation of solar power systems at SODC facilities.

Chiefs, Division of Maintenance, Division of Traffic Operations and Division of Equipment:

- Establish a single point of contact within each division to work with the Division of Right of Way and Land Surveys, as well as other appropriate HQ and district units, to facilitate the resolution of solar energy installation issues and the issuance of required permits.

Chief, Division of Transportation Planning:

- Establishes a single point of contact within the Division of Transportation Planning to coordinate efforts related to incorporation of solar power systems at SODC facilities.
- Works in cooperation with district offices and with local and regional transportation planning agencies to advocate, propose, and implement solar energy projects.
- Ensures staff partners with districts, local agencies, and utility companies to conduct environmental evaluations and to consider potential environmental benefits and/or impacts.
- Ensures the consideration of solar energy grant proposals.
- Ensures that appropriate transportation plans and planning documents address opportunities for inclusion of solar energy systems at SODC facilities.
- Ensures solar energy installations are considered and encouraged at SODC facilities, consistent with policies, procedures, standards and guidelines.
- Ensures that the Department's Climate Action Program addresses the feasibility of incorporating solar energy at SODC facilities.

Chief, Division of Transportation Systems Information:

- Assists the Divisions of Maintenance and Traffic Operations in the development and maintenance of an inventory of solar energy installations and generation at SODC facilities.

Chief, Division of Business, Facilities, and Security (DBFS):

- Establishes a single point of contact for DBFS to coordinate efforts related to incorporation of solar energy installations at SODC facilities.
- Works in cooperation with divisions in HQ and the districts to facilitate the resolution of solar energy system installation issues at SODC facilities.

District Directors:

- Ensure incorporation of solar energy systems at SODC facilities are considered and encouraged and are consistent with policies, procedures, standards and guidelines.
- Partner with local and regional stakeholders to implement solar energy strategies, consistent with policies, procedures, standards and guidelines.
- Ensure appropriate staff evaluates the effectiveness of solar energy systems in partnership with local jurisdictions, utilities, etc.
- Assign a district representative to be the district Solar Energy Coordinator.
- Ensure appropriate support of activities outlined in this directive.

Deputy District Directors, Right of Way:

- Establish a single point of contact within Right of Way to coordinate efforts related to incorporation of solar energy systems at SODC facilities.
- Maintain an inventory of, and report to, the Division of Transportation Systems Information existing, under construction, and planned solar energy projects on SODC property.
- Ensure staff works with appropriate functions to follow Department policies, procedures, standards and guidelines related to implementing and integrating solar energy systems at SODC facilities.

Deputy District Directors, Design:

- Establish a single point of contact within Design to coordinate efforts related to incorporation of solar power systems at SODC facilities.
- Ensure staff works with appropriate functions to follow Department policies, procedures, standards and guidelines related to integrating solar energy systems at SODC facilities.
- Review solar installation proposals to analyze potential impacts to SODC property.

Deputy District Directors, Planning:

- Establish a single point of contact within Planning to coordinate efforts related to incorporation of solar energy systems at SODC facilities.

- Ensure staff works with appropriate functions to follow Department policies, procedures, standards and guidelines related to integrating solar energy systems at SODC facilities.
- Ensure all appropriate planning documents, such as general plans, regional transportation plans, air district plans, and utility service provider plans, are reviewed to identify the local intent or potential of using SODC property to generate solar energy.

Deputy District Directors, Project Management:

- Establish a single point of contact within Project Management to coordinate efforts related to incorporation of solar energy systems at SODC facilities.
- Ensure project delivery programs work with appropriate functions to follow Department policies, procedures, standards and guidelines related to integrating solar energy systems at SODC facilities.

Deputy District Directors, Environmental:

- Establish a single point of contact within Environmental to coordinate efforts related to incorporation of solar energy systems at SODC facilities.
- Ensure staff works with appropriate functions to follow Department policies, procedures, standards and guidelines related to integrating solar energy systems at SODC facilities.
- Review solar installation proposals for impacts to resources within the district/region.

Deputy District Directors, Maintenance and Operations:

- Establish a single point of contact within Maintenance and Operations to coordinate efforts related to incorporation of solar energy systems at facilities onto SODC facilities.
- Ensure staff works with appropriate functions to follow Department policies, procedures, standards and guidelines related to integrating solar energy systems at SODC facilities.
- Ensure that State Highway System (SHS) infrastructure and routes are operated and maintained consistent with policies, procedures, standards and guidelines to allow for solar energy production in cooperation with local utilities, cities, counties, regions, and communities where feasible, without compromising safety and mobility, or the intended purpose of the facility.

Managers and Supervisors:

- Ensure that employees are informed of this directive.

Employees:

- Be aware of and follow Department policies regarding solar energy systems installation at SODC facilities.

APPLICABILITY

This directive applies to all departmental employees involved in the planning, design, construction, maintenance, and operation of the transportation system.

Original Signed by Malcolm Dougherty

June 17, 2010

MALCOLM DOUGHERTY
Interim Chief Deputy Director

Date Signed