SCE Interconnection Map

Southern California Edison’s Interconnection Map provides SCE system data pertinent to Distributed Generation (DG) developers searching for possible interconnection locations on the SCE distribution system. This set of maps includes the general locations of SCE distribution circuits, substations, subtransmission systems, and areas of transmission constraints along with the associated circuit/substation/system voltage, available capacity, and current and queued DG interconnections amounts.

Typically, projects less than 10MW are connected to SCE’s distribution system. The SCE Distribution layer, in conjunction with the SCE Substation, SCE Subtransmission, and SCE Transmission layers (explained below) provide information so developers can make better educated choices in siting their generation projects.

The SCE Distribution layer contains general locations of SCE distribution circuits. This layer includes “Green” and “Red” areas containing the following data:

- **ID Number**: An internal ID for SCE use only.
- **Preferred/Not Preferred status**: Based on initial screening studies, each distribution circuit is classified as “Preferred” and “Not Preferred” for DG interconnection.
  - “Preferred” distribution circuits, rendered in green, are high load density areas on the SCE distribution system that currently have low DG penetration levels (less than 2.0MW). Locating a project inside one of the identified areas could potentially minimize the developer’s costs of interconnection to the SCE system.
  - “Not Preferred” distribution circuits, rendered in red, are low load density areas and/or are areas with high DG penetration levels. SCE does not prohibit interconnection to the SCE system in these areas, but locating a project in one of these red regions has the potential to increase the developer’s costs of interconnection to the SCE system.
- **Voltage**: The voltage of the distribution circuit.
- **Allocated Generation**: The amount of generation currently interconnected to that specific distribution circuit.
- **Queued Generation**: The amount of generation requested to interconnect to that specific distribution circuit in the future.
- **Max Available Capacity**: The “Maximum Available Capacity” shown for distribution circuits indicates the maximum amount of generation that can interconnect to that specific distribution circuit. This assumes that sufficient system upgrades are in place, insufficient system conditions may result in high interconnection costs for the developer. The “Max Available Capacity” value accounts for all allocated and queued generation on that distribution circuit.
- **Available Capacity**: The “Available Capacity” shown for distribution circuits is the amount of generation that can interconnect to that specific distribution circuit that will likely have minimal impact to the system if no subtransmission or transmission constraints exist. The “Available Capacity” value accounts for all allocated and queued generation on that distribution circuit. Locating a project in a “Preferred” region with enough “Available Capacity” increases the project’s potential for Fast Track eligibility (but does not guarantee Fast Track eligibility) and has the potential to minimize the developer’s interconnection costs to the SCE system.

The SCE Substation layer contains general locations of SCE distribution substations. This layer includes “Blue” squares containing the following data:

- **ID Number**: An internal ID for SCE use only.
- **Voltage**: The voltage(s) of the distribution substation.
- **Allocated Generation**: The amount of generation currently interconnected to that specific distribution circuit.
- **Queued Generation**: The amount of generation requested to interconnect in the future.
• **Max Available Capacity**: The “Maximum Available Capacity” shown at the substation level indicates the maximum amount of generation that can interconnect to that specific distribution substation. This value also assumes that sufficient system upgrades are in place, insufficient system conditions may result in high interconnection costs for the developer. The “Max Available Capacity” value accounts for all allocated and queued generation on the specific circuits served from that substation.

The SCE Subtransmission layer contains general locations of the SCE Subtransmission systems. Similarly to the SCE Distribution layer, this layer contains “Red” and “Green” regions containing the following data:

- **ID**: An internal ID for SCE use only
- **Preferred/Not Preferred status**: Based on initial screening studies, each subtransmission system is classified as “Preferred” and “Not Preferred” for DG interconnection.
  - “Preferred” subtransmission systems, rendered in green, are high load density areas on the SCE distribution system that currently have low DG penetration levels. Locating a project inside one of the identified areas could potentially minimize the developer’s costs of interconnection to the SCE system.
  - “Not Preferred” distribution circuits, rendered in red, are low load density areas and/or areas with high DG penetration levels. SCE does not prohibit interconnection in these areas, but locating a project in one of these red regions has the potential to increase the developer’s costs of interconnection to the SCE system.
- **Voltage**: The voltage of the subtransmission system.
- **Allocated Generation**: The amount of generation currently interconnected to that specific subtransmission system.
- **Queued Generation**: The amount of generation requested to interconnect in the future.
- **Max Available Capacity**: The “Max Available Capacity” shown for the subtransmission systems indicates the maximum amount of generation that can interconnect in a specific subtransmission system. This assumes that sufficient system upgrades are in place, insufficient system conditions may result in high interconnection costs for the developer. The “Max Available Capacity” value accounts for all allocated and queued generation on the specific circuits served from that subtransmission system.

The SCE Transmission layer contains “Red” areas where Transmission constraints exist. Interconnection within these areas may necessitate transmission level upgrades, which will increase the developer’s interconnection costs to the SCE system. The transmission system facilities are under CAISO Control and would likely need technical studies subject to FERC Generation Interconnection Procedures.

**Note**: Actual interconnection costs and Fast Track eligibility will be determined from further studies which consider specific project location, size, and application date relative to other projects in the same vicinity.

To view the subtransmission, substation, and distribution circuit interconnection map in Google Earth, download the KMZ file. Note that you will need Google Earth to view the map.