



Interactive Map and GNA/DDOR User Guide

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Support Data

Purpose

California Public Utilities Commission (CPUC) on Rulemaking 14-0808-13 issued on February 2015, required San Diego Gas & Electric (SDG&E) and other utilities to publish Distribution Resource Plan (DRP) by July 2015. The GNA and DDOR data was mandate in the DRP Track 3, sub-track 3 Decision issued in February 2018 by the CPUC to be map. The intended of the map is to help developers and contractors to find LNBA results, GNA and DDOR report of projects.

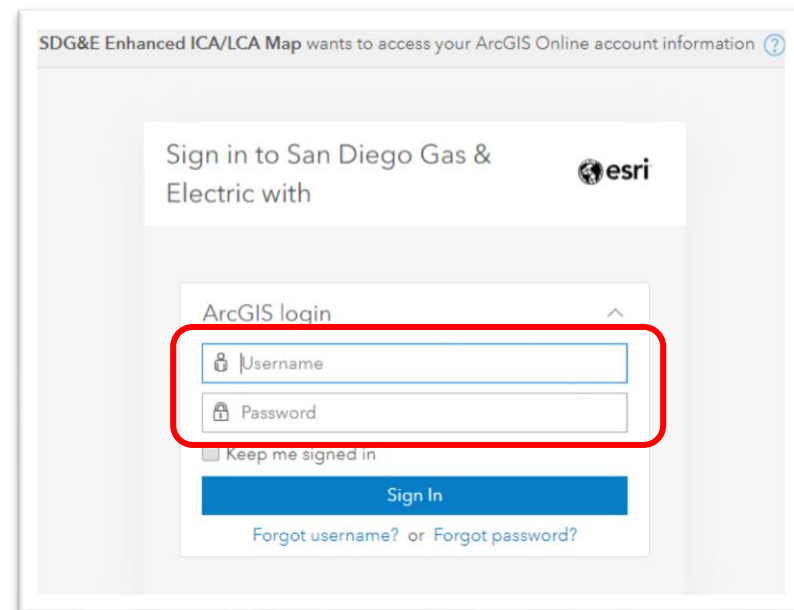
Access

For registration please visit SDGE.com

Once registration is complete, click on the link to the Map.

URL: <https://interconnectionmapsdge.extweb.sempra.com/>

Enter your **Username** and **Password** given in the email and click the **Sign-In** button.



Technical Support

If you need assistance in viewing/registering or technical issues for the interactive map, contact us via [email](#) or phone (858) 636-5581 during regular business hours (Mon-Fri, 7 a.m. to 4 p.m.)

Disclaimer

The maps are provided by SDG&E in accordance with requirements set forth by the California Public Utilities Commission. The map is not survey grade. SDG&E is not responsible for the use or reliance upon these maps by any party, and SDG&E makes no warranties, express or implied, regarding the accuracy or quality of these maps, or the frequency at which these maps are updated. Data provided is for informational purposes only. The values do not imply or guarantee that no distribution upgrade will be required.

Data redaction

SDG&E complies with the 15/15 rule, that states: If a customer takes 15% or more of the total load of the circuit OR if a circuit holds 15 customers or less, then the data will qualify for data redaction.

On the interactive map the following will be consider:

- If a circuit fails the 15/15 rule, it will be redacted from the map. Data still will be available as requested.
- If downstream from the SCADA device that was used for operational flexibility fails the 15/15 rule, only one (the minimum) value of the 576 points in the operational flexibility screen profile is provided for all the sections downstream from a sectionalizing device subject to the 15/15 Rule data redaction criteria.

Circuit Level 15/15	SCADA Device Level 15/15	Aggregate Load Profile	Redacted ICA Operation Flexibility Data
Pass	Pass	No	No
Pass	Fail	No	Yes
Fail	Not applicable	No data provided on map	No data provided on map



Definitions

Grid Needs Assessment (GNA)	Preliminary set of grid needs identified from the distribution forecast.
Distribution Deferral Opportunity Report (DDOR)	Analyzed grid needs that would result in a capital investment.
Planned Investment	The list of capital projects in the DDOR.
Candidate Deferral	A subset of the DDOR planned investments that are eligible to become procured via competitive solicitation based on Distribution Planning Advisory Group (DPAG) and Advice letter decisions.
Locational Net Benefits Analysis (LNBA)	The quantitative benefit generated by deferring a capital investment for 5 years. Represented as a \$ range of installing each KW of DER for each year of the project deferral.

Interactive Map

Map Navigation

1 Search Bar

Type an address, city, place, substation or circuit to zoom into that location.

2 Zoom tools

2.1 Zoom extent – zooms out to default elevation, service territory

2.2 Next zoom- takes you one forward zoom level

2.3 Previous zoom – takes you one back zoom level

2.4 Zoom out- draw a rectangle on an area on the map to zoom out

2.5 Zoom in- draw a rectangle on an area on the map to zoom in

2.6 Panning – Click and drag on the map to move the map location.

2.7 Zoom in and zoom out buttons

(or use the mouse wheel to zoom in and out)

3 Specific Zoom level layer

3.1 Substation Level – zooms to an elevation to display layer

3.2 Grid Level – zooms to an elevation to display layer

3.3 Section Level – zooms to an elevation to display layer

4 Legend – click to displays the values of the selected layer

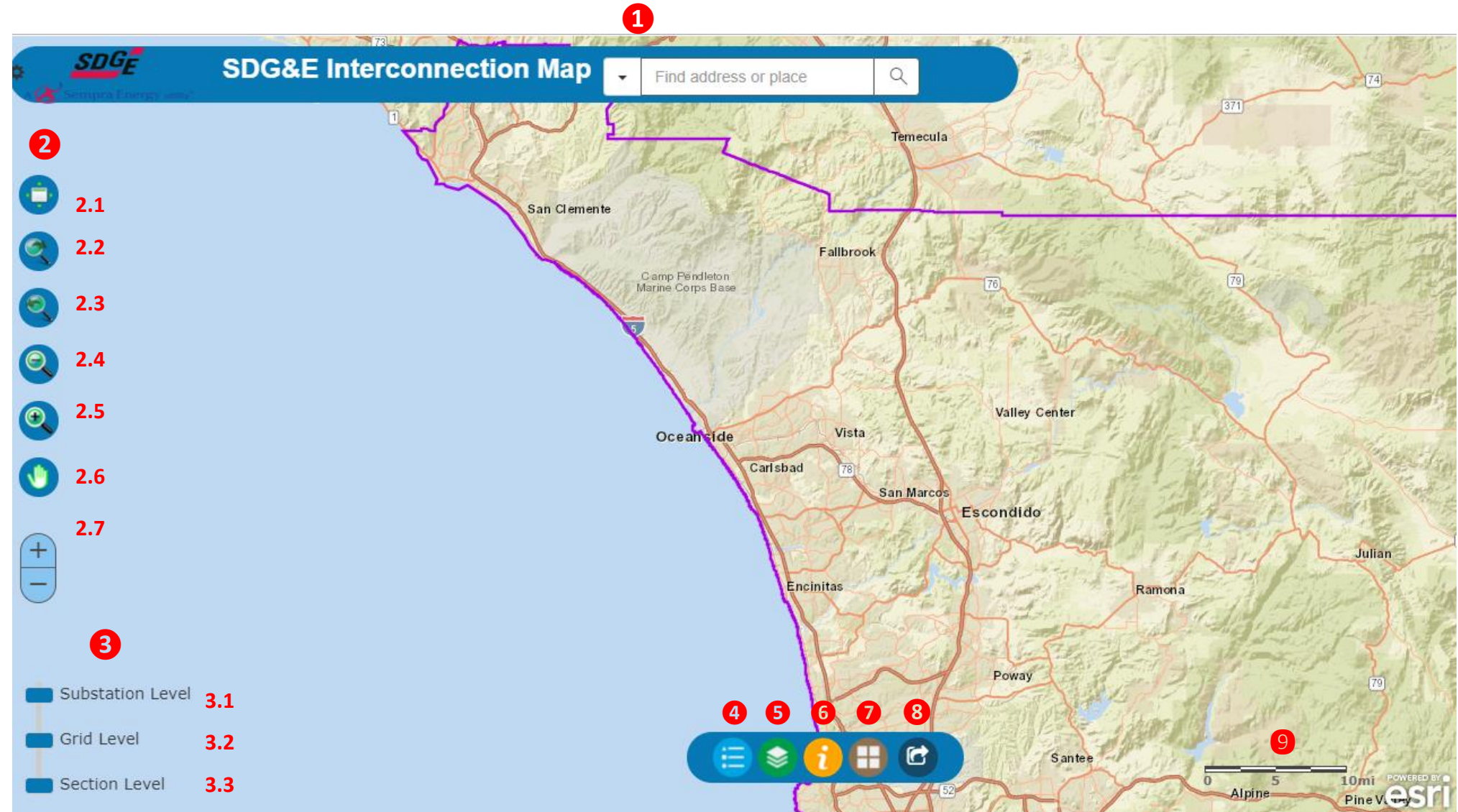
5 Layer List – click to select the desire layer to view

6 Information & User Guide

7 Base Map Gallery

8 API

9 Elevation map display



Elevation Map Display

The following attributes will be display at different elevations on the map



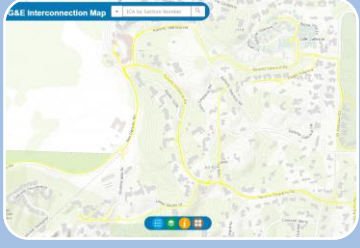
Service Territory
10 miles



Substations
2 miles



GNA/DDOR - Grid Level
0.3 miles



GNA/DDOR - Section Level
600 feet

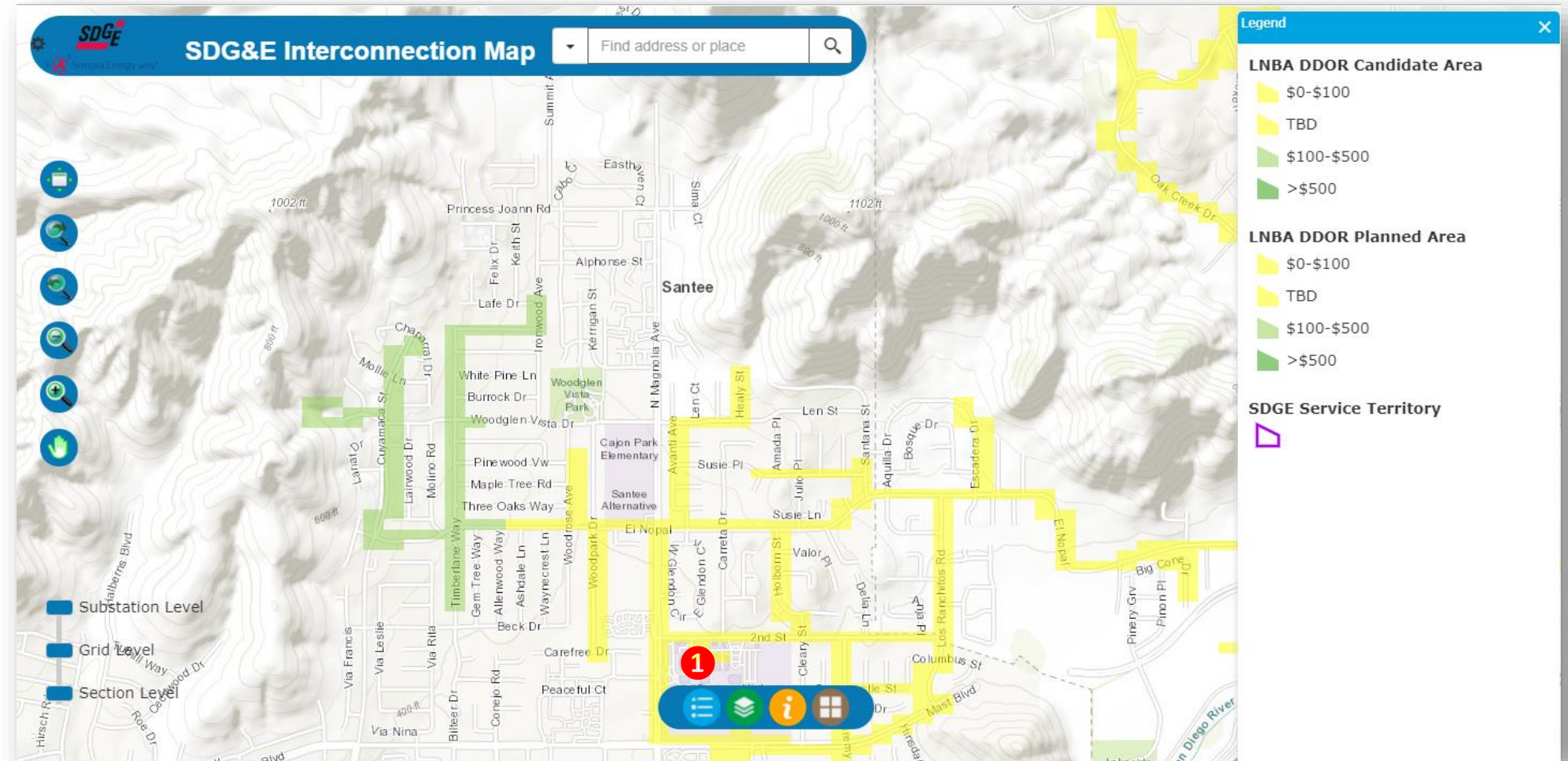


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Legend

Displays what the different color is representing \$ range of installing each KW of DER for each year of the project deferral

- 1 Click to show the legend
- 2 A window will appear on the right showing the selected layer values by the range of dollars per KW year capacity.



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Layers List

- 1 Click to select the layer of interest
- 2 A window will appear on the right showing different layers that can be selected. The default layer is Generation Capacity. Please select the DDOR/LNBA Layer to display the area of need of a planned infrastructure project. The default is that both the Planned Investment and Candidate Deferral layers are selected.

Planned Investment – The list of capital projects in the DDOR.

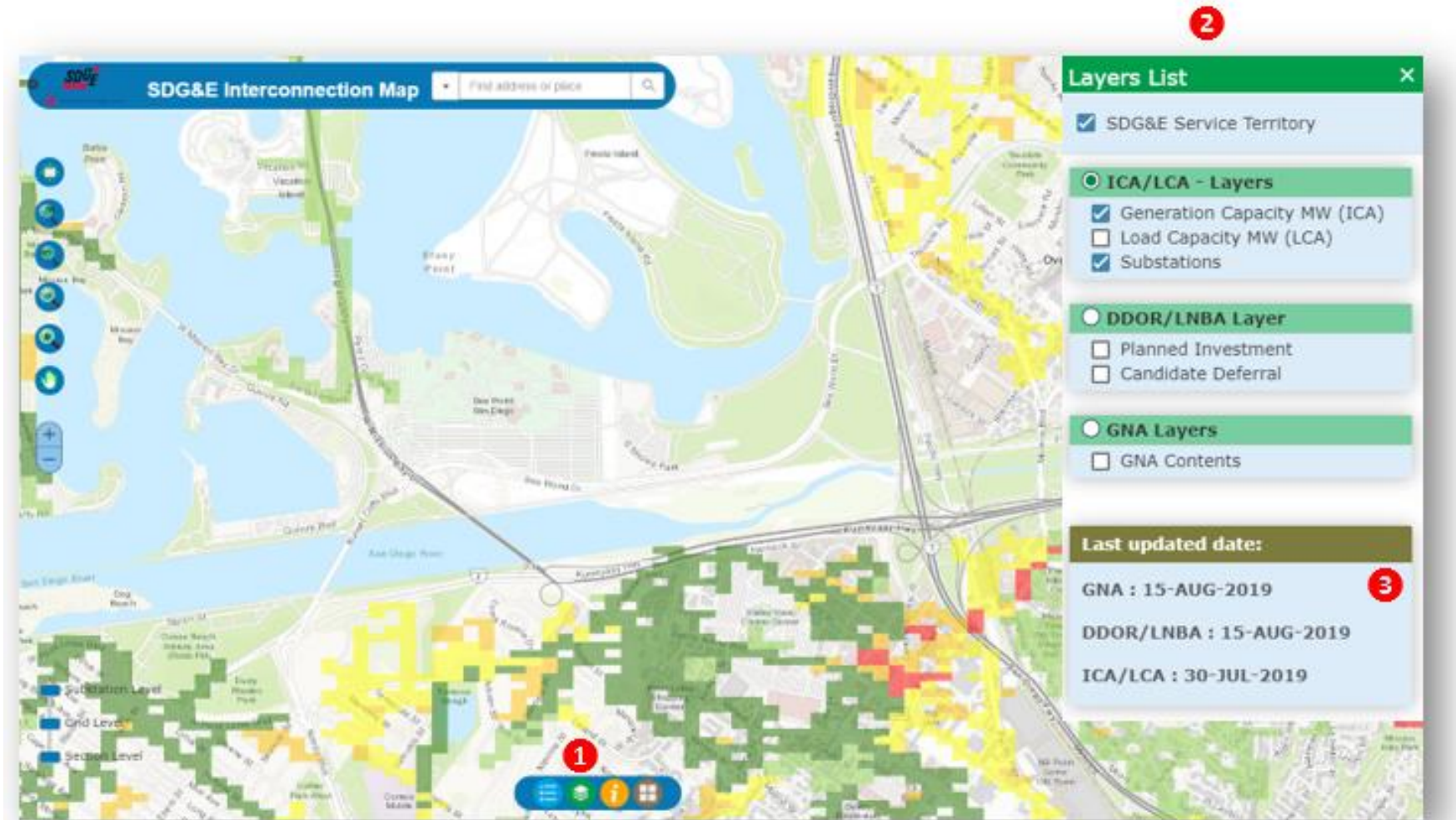
Candidate Deferral – A subset of the DDOR planned investments that are eligible to become procured via competitive solicitation based on Distribution Planning Advisory Group (DPAG) and Advice letter decisions.

GNA – Grid Needs Assessment: Preliminary set of grid needs identified from the distribution forecast

- 3 Timestamp the last time the layers were updated.

Note:

See [Navigation Tools ICA User guide](#) for ICA layer information



Layer Display Information

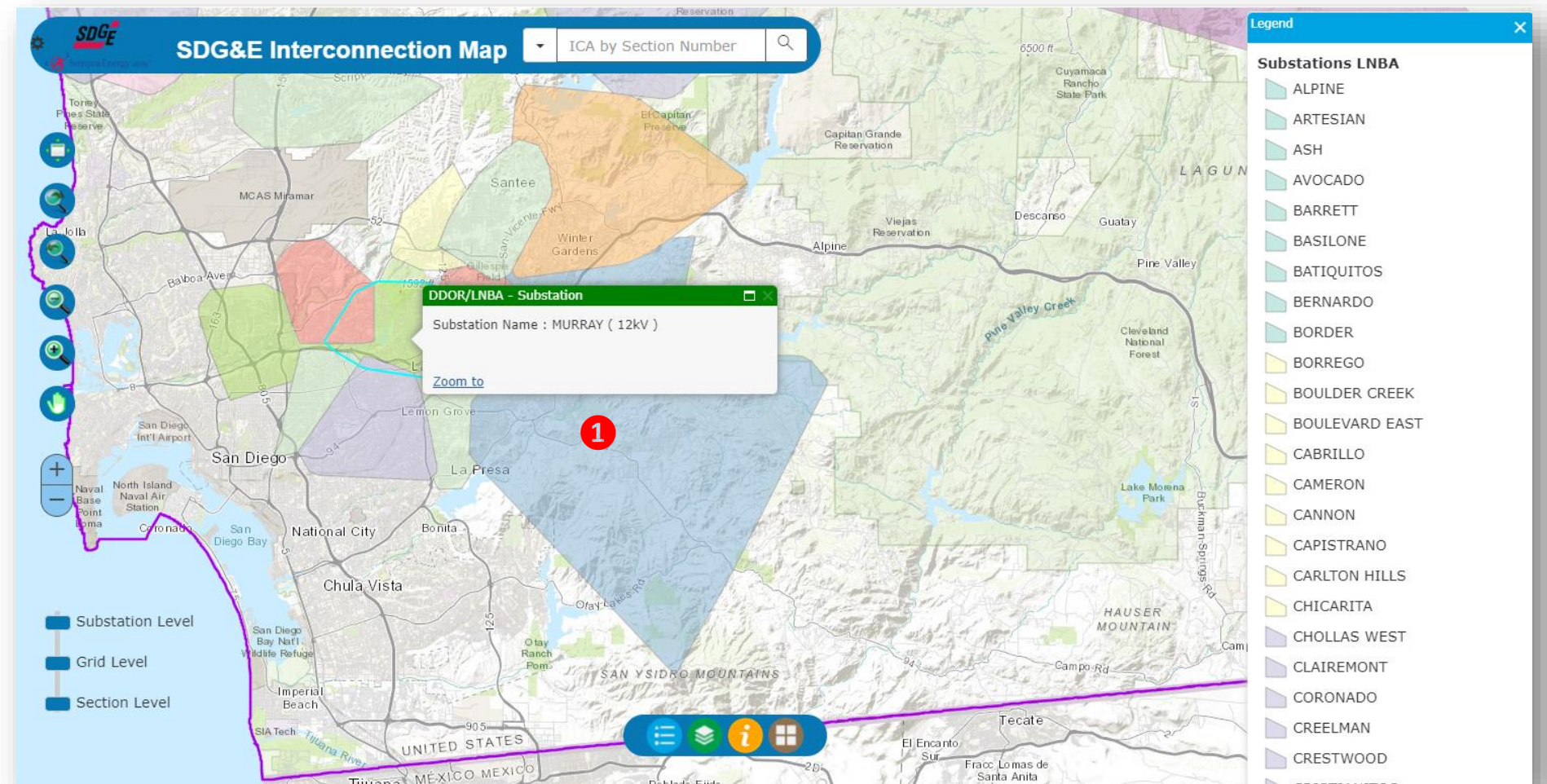
Substation layer

This layer loads at 2 miles zoom level

1 Click on any substation colored polygon area and a window will pop-up displaying the following information on the substation selected:

- Substation Name

Note: Only substation that contain a project(s) will be display.



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Planning Investment & Candidate Deferral Layer -Grid and Section zoom level

This layer loads at zoom level 0.3 mile.

1 Click on any Grid or Line Section (this depends on the zoom level) to open a window to display information

2 The pop-up will display:

For DDOR/LNBA Planned Investment

- DDOR Project
- Substation
- Bank/Circuit
- Project Description
- Equipment involved
- Additional Project Description
- In-Service Date
- Deficiency Need (Year)
- Deficiency % (Year)
- Equipment Units
- Distribution Service Identified
- DER Service Eligible
- LNBA Range (\$/KW-year)

For DDOR/LNBA Candidate Deferral

- DDOR Project
- GNA ID
- Substation
- Bank/Circuit
- In-Service Date
- Distribution Service Required
- Months of Need
- Duration of Need
- Number of Need Events per Year
- Service Provision MW
- Estimated LNBA Range (\$/KW-year)
- Utility Cost of Traditional Mitigation

3 Click to download the data

The screenshot displays the SDG&E Interconnection Map interface. At the top, there is a search bar and the map title. The map shows a grid of yellow lines representing planned investments and candidate deferrals. Two pop-up windows are shown:

DDOR/LNBA Planned Investment (1 of 2)

DDOR Project	Planned Investment
Substation	Del Mar
Bank / Circuit	C68
Project Description	Transfer with new equipment
Equipment Involved	Sectionalizing, cable
Additional Project Description	
In-Service Date	6/1/2022
Deficiency Need (2018)	2
Deficiency % (2018)	0.33%
Equipment Units	Amps
Distribution Service Identified	Thermal, Backtie
DER Service Eligible	
LNBA Range (\$/KW-year)	\$0-\$100

DDOR/LNBA Candidate Deferral (1 of 2)

DDOR Project	Candidate Deferral
GNA ID	2018_0038
Substation	Del Mar
Bank / Circuit	C68
In-Service Date	6/1/2022
Distribution Service Required	Thermal
Months of Need	June to October
Duration of Need	1PM to 10PM
Number of Need Events per Year	61
Service Provision MW	0.037
Estimated LNBA Range (\$/KW-year)	\$0-\$100
Utility Unit Cost of Traditional Mitigation	\$412,000

The **Layers List** panel on the right shows the following layers:

- SDG&E Service Territory
- ICA/LCA - Layers**
 - Generation Capacity MW (ICA)
 - Load Capacity MW (LCA)
 - Substations
- DDOR/LNBA Layer**
 - Planned Investment
 - Candidate Deferral
- GNA Layers**
 - GNA Contents

The **Last updated date:** section shows:

- GNA : 15-AUG-2019
- DDOR/LNBA : 15-AUG-2019
- ICA/LCA : 30-JUL-2019

Layer Display Information

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GNA layer -Grid and Section zoom level

1 Click on any Grid or Line Section (this depends on the zoom level) to open a window to display information

2 The pop-up will display:

For GNA

- Substation
- Facility ID
- Primary Driver
- Distribution Service Identified
- Anticipated Upgrade Date
- Equipment Rating
- Equipment Units
- 5 year % Deficiency

3 Click to download the data

The screenshot displays the SDG&E Interconnection Map interface. A search bar at the top contains the text "Find address or place". A map shows a residential area with a green grid overlay. A pop-up window titled "GNA Contents (1 of 2)" is open, displaying the following data:

Facility ID	68
Facility Type	Distribution line
Primary Driver	Demand Growth
Distribution Service Identified	Thermal
Anticipated Upgrade Date	6/1/2020
Equipment Rating	500
Equipment Units	Amps
% Deficiency 2019	0.80%
% Deficiency 2020	4.70%
% Deficiency 2021	5.90%
% Deficiency 2022	
% Deficiency 2023	

Below the table are links for "Download Data" and "Zoom to". A "Layers List" panel on the right shows the following layers:

- SDG&E Service Territory
- ICA/LCA - Layers**
 - Generation Capacity MW (ICA)
 - Load Capacity MW (LCA)
 - Substations
- DDOR/LNBA Layer**
 - Planned Investment
 - Candidate Deferral
- GNA Layers**
 - GNA Contents

At the bottom right, a "Last updated date:" section shows:

- GNA : 15-AUG-2019
- DDOR/LNBA : 15-AUG-2019
- ICA/LCA : 30-JUL-2019

Downloads

Planning Investment, Candidate Deferral Layer & GNA

1 Click on the “Download Dataset” to download the following files:

- LNBA_DDOR_Full

Two tabs will be on the report:

1. DDOR Planned Investment
2. DDOR Candidate Deferral

- GNA_Contents_Full

A tap will be on the report:

1. Preliminary set of grid needs identified from the distribution forecast

DDOR/LNBA Candidate Deferral (1 of 6)

DDOR Project	Candidate Deferral
GNA ID	2018_0038
Substation	Del Mar
Bank / Circuit	C68
In-Service Date	6/1/2022
Distribution Service Required	Thermal
Months of Need	June to October
Duration of Need	1PM to 10PM
Number of Need Events per Year	61
Service Provision MW	0.037
Estimated LNBA Range (\$/KW-year)	\$0-\$100
Utility Unit Cost of Traditional Mitigation	\$412,000

[Download Data](#) 1

[Zoom to](#)

GNA Contents (1 of 2)

Facility ID	68
Facility Type	Distribution line
Primary Driver	Demand Growth
Distribution Service Identified	Thermal
Anticipated Upgrade Date	6/1/2020
Equipment Rating	500
Equipment Units	Amps
% Deficiency 2019	0.80%
% Deficiency 2020	4.70%
% Deficiency 2021	5.90%
% Deficiency 2022	
% Deficiency 2023	

[Download Data](#) 1

[Zoom to](#)

LNBA_DDOR_Full.xlsx

GNA_Contents_Full.xlsx

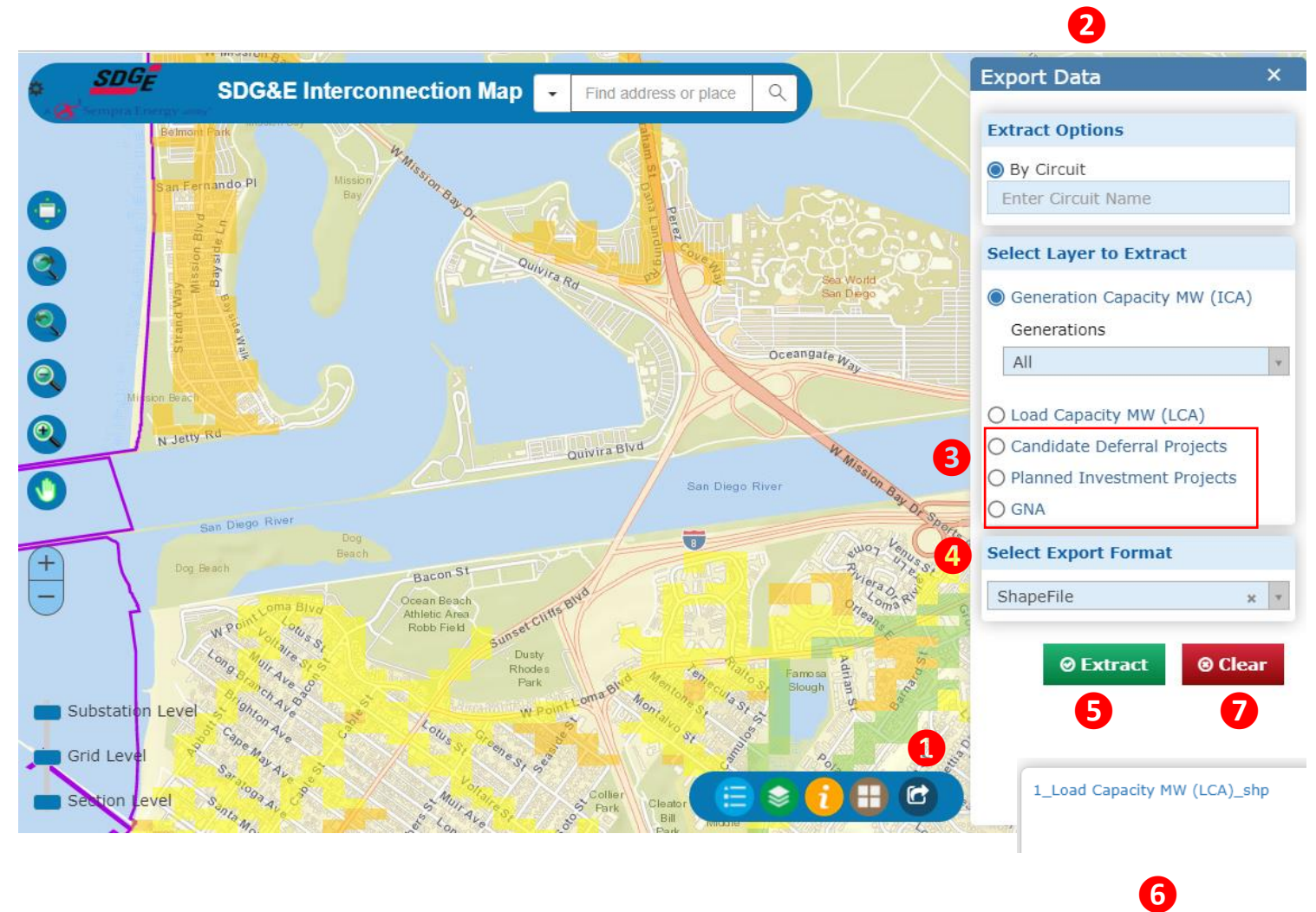
Area Identification:	Substation	Bank / Circuit	Description	Equipment Involve	Additional Information	In-Date
1	2018_0001	Batiquitos	C751	Transfer	N/A	6/1
2	2018_0002	Batiquitos	C757	Transfer with new equipment	Cable	6/1
3	2018_0003	Batiquitos	B4243	Transfer	N/A	6/1
4	2018_0004	Cannon	C783	Transfer	Trenching/conduit, cable, sectionalizing	6/1

Substation ID	Facility ID	Facility Type	Primary Driver	Distribution Service Identified	
1	Old Town	105	Distribution line	Demand Growth	Thermal, Backtie
2	Coronado	376	Distribution line	Demand Growth	Thermal, Backtie

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API (Application Programming Interface)

- 1 Click to export data
- 2 A window will appear on the right
- 3 Select one of the layers to extract
 - **Candidate Deferral Projects** – To download all the projects on this layer
 - **Planned Investment** – To download all the projects on this layer.
 - **GNA** – To download all the projects on this layer.
- 4 Select the export format
 - Shapefile
 - CSV
 - JSON
- 5 Click to export the data.
- 6 A list with a file or files will be displayed to save, just click each file to save on local machine.
- 7 Please click on “Clear” to run a new query



Note:

For information on Generation Capacity and Load Capacity layers reference the [Navigation Tools ICA User guide](#)