

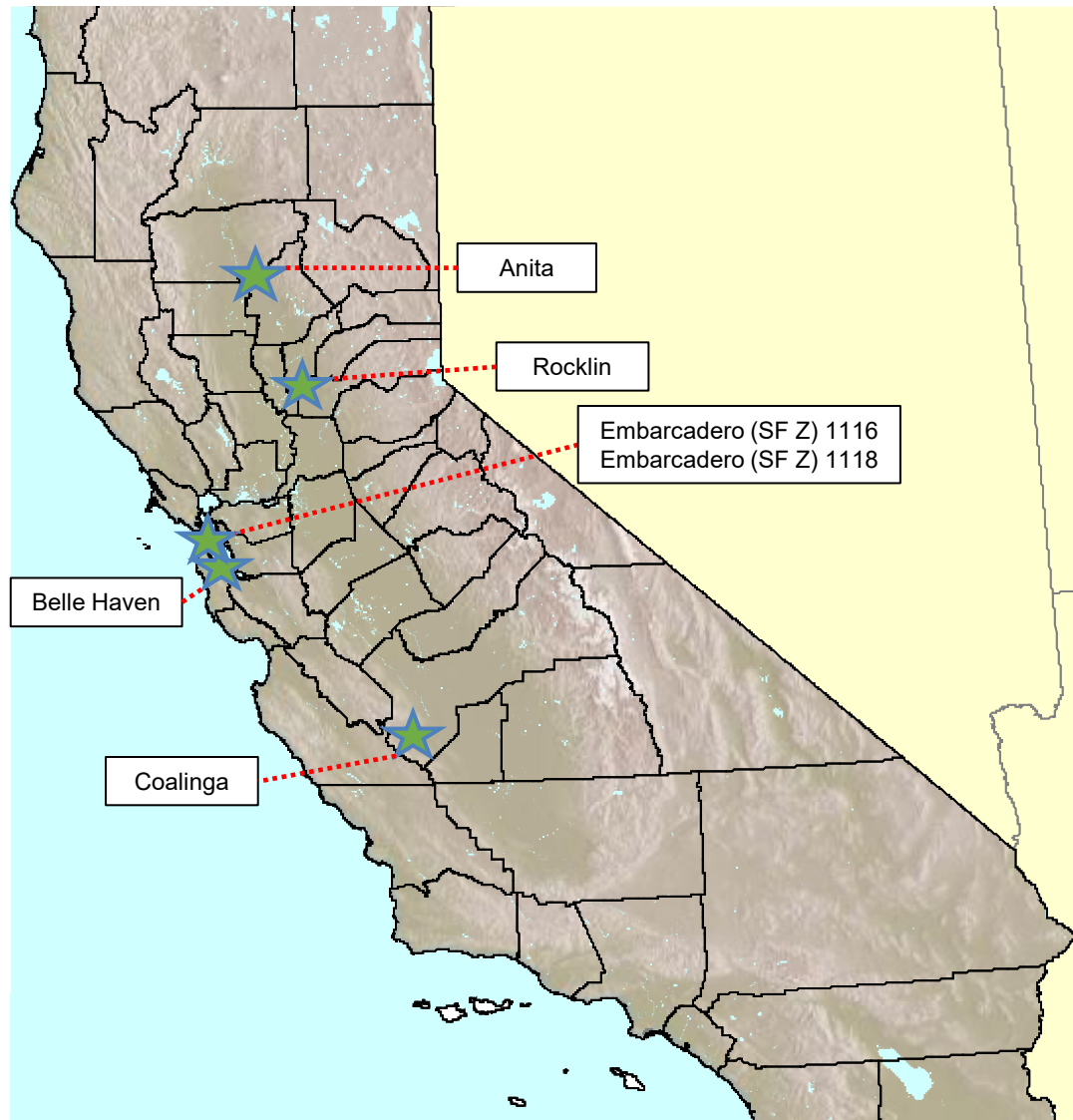


DER Growth: Load Forecast & Customer Data

Appendix F1



2021 Distribution Deferral Opportunity Partnership Pilot Locations



Candidate Deferral	GNA Facility Name	In-Service Date
Anita 1105	Nord Bank 2	6/1/2024
	Nord Bank 1	
	Anita Bank 1	
Belle Haven Bank 4	Belle Haven Bank 3	5/1/2024
Embarcadero (SF Z) 1116	Embarcadero (SF Z) 1116	4/1/2026
Embarcadero (SF Z) 1118	Embarcadero (SF Z) 1118	6/1/2025
Rocklin 1105	Del Mar Bank 2	5/1/2025
Coalinga No 1 Bank 2*	Coalinga No 1 Bank 2	5/1/2024

* CUSTOMER CONFIDENTIAL due to peak loads violating the 15-15 customer privacy rule



Nord Bank 2, Nord Bank 1, and Anita Bank 1

ANITA DEFERRAL OPPORTUNITY



Anita Location Overview



Candidate Deferral	GNA Facility Name	In-Service Date	Grid Need (MW)
Anita 1105	Nord Bank 2	6/1/2024	2.20
	Nord Bank 1	6/1/2024	1.23
	Anita Bank 1	6/1/2024	0.36



Technical and Operational Requirements

- 2.20 MW must be sourced at Nord 1105 or Nord 1106
- 1.23 MW must be sourced at Nord 1103 or Nord 1104
- 0.36 MW must be sourced at Anita 1101 or Anita 1102

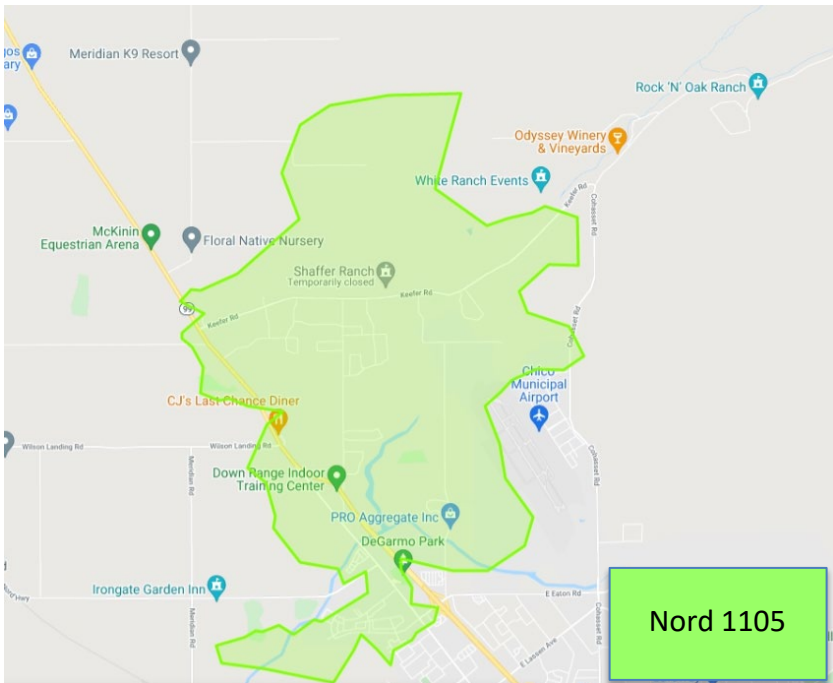
Candidate Deferral	Expected Performance and Technical Requirements									
	GNA Facility Name	In-Service Date	Requirement	Real Time (RT) or Day Ahead (DA)	Grid Need (MW)	Month	Delivery Days	Calls/ Year	Hours	Duration (Hours)
Anita 1105	<u>Nord Bank 2</u> • Nord 1105 • Nord 1106	6/1/2024	A	DA	2.20	7-9	Mon-Sun	83	5PM-12AM	7
	<u>Nord Bank 1</u> • Nord 1103 • Nord 1104	6/1/2024	B	DA	1.23	6-8	Mon-Sun	70	5PM-9PM	4
	<u>Anita Bank 1</u> • Anita 1101 • Anita 1102	6/1/2024	C	DA	0.36	7-8	Sat-Sun	8	5PM-9PM	2



Nord Bank 2 Location Overview

Location

Nord Bank 2, Butte County

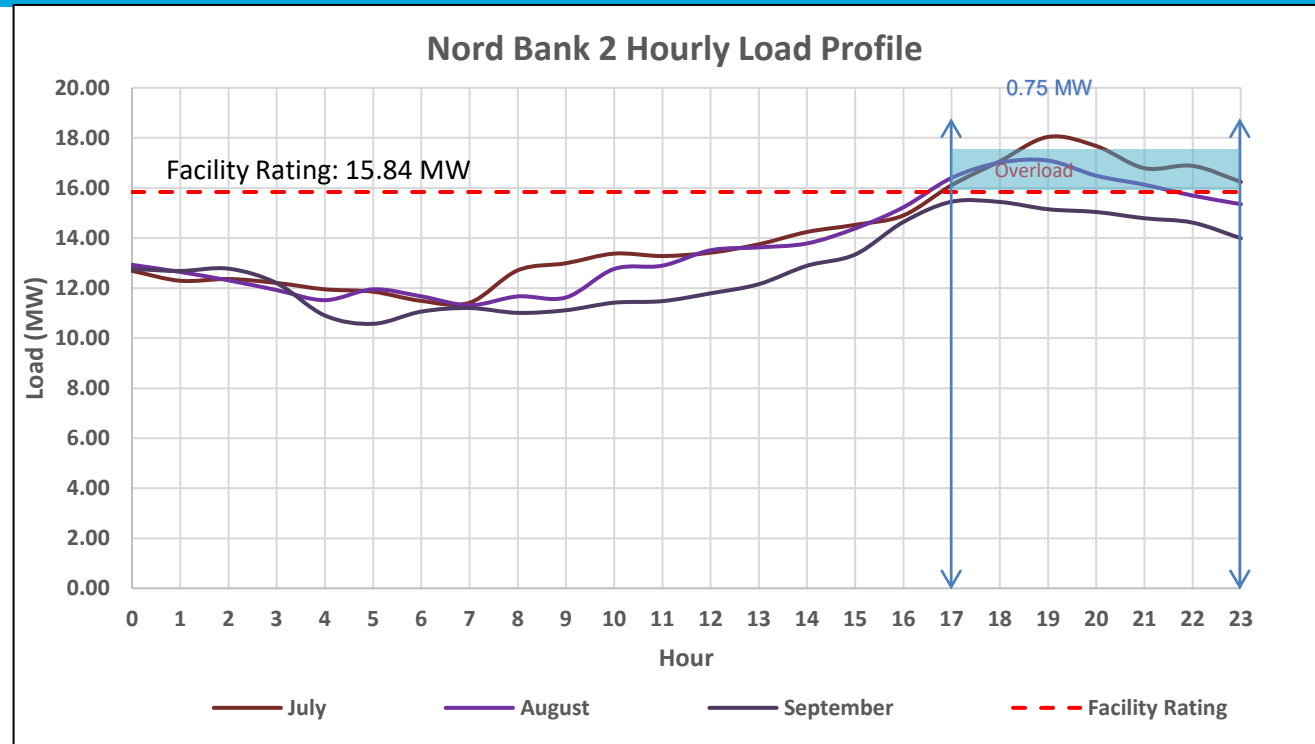


Candidate Deferral	GNA Facility Name	In-Service Date	Grid Need (MW)
Anita 1105	Nord Bank 2	6/1/2024	2.20
	Nord Bank 1	6/1/2024	1.23
	Anita Bank 1	6/1/2024	0.36

- **Equipment:** Nord Bank 2
- **Electrical Service:**
 - 16 MVA bank with two 12 kV feeders



Technical and Operational Requirements

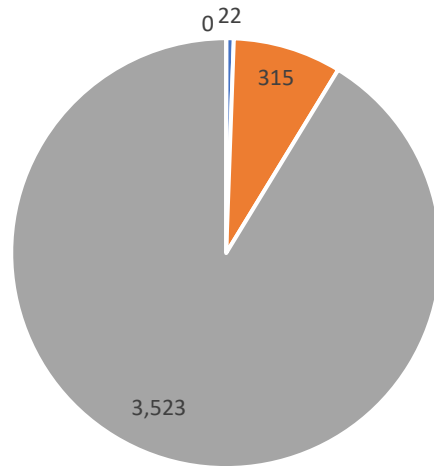


Candidate Deferral	GNA Facility Name	Requirement	Real Time (RT) or Day Ahead (DA)	Grid Need (MW)	Month	Delivery Days	Calls/ Year	Hours	Duration (Hours)
Anita 1105	Nord Bank 2 - Nord 1105 - Nord 1106	A	DA	2.20	7-9	Mon-Sun	83	5PM-12AM	7



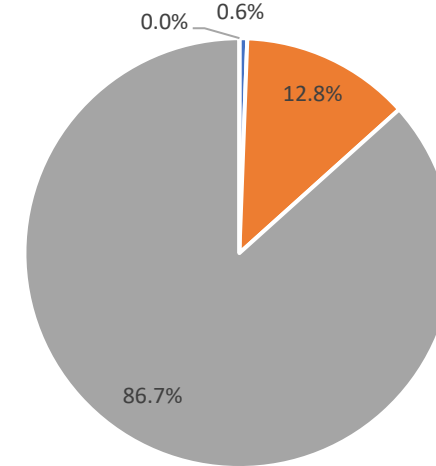
Customer Composition – Nord Bank 2 (Peak Load Day – June 26th, 2020)

Customer Count



■ Agricultural ■ Commercial/Industrial ■ Residential ■ Other

Peak Day Load by Customer Class (%)



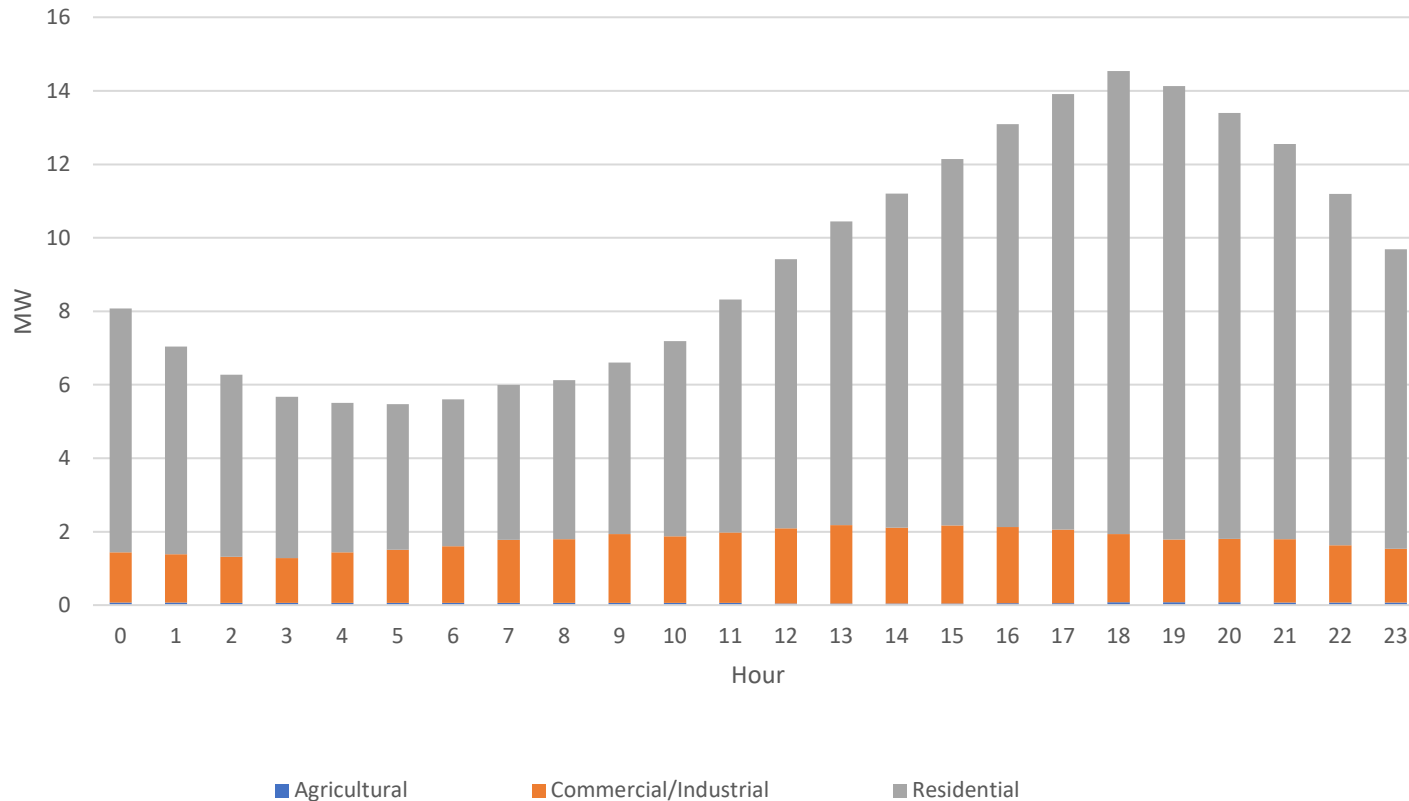
■ Agricultural ■ Commercial/Industrial ■ Residential ■ Other

Customer Class	Total Customer Count	Peak Day Load (MW)
Agricultural	22	0.09
Commercial/Industrial	315	1.85
Residential	3,523	12.60
Other	0	0.00
Total	3,860	14.54



Load by Customer Class – Nord Bank 2 (Peak Load Day – June 26th, 2020)

Peak Day Hourly Load Profile by Customer Type



Historical 2020		
Observed Peak Load (MW)	Installed DERs	
	Solar PV (MW)	Mixed (MW)
14.54	3.91	0.01



Nord Bank 1 Location Overview

Location

Nord Bank 1, Butte County

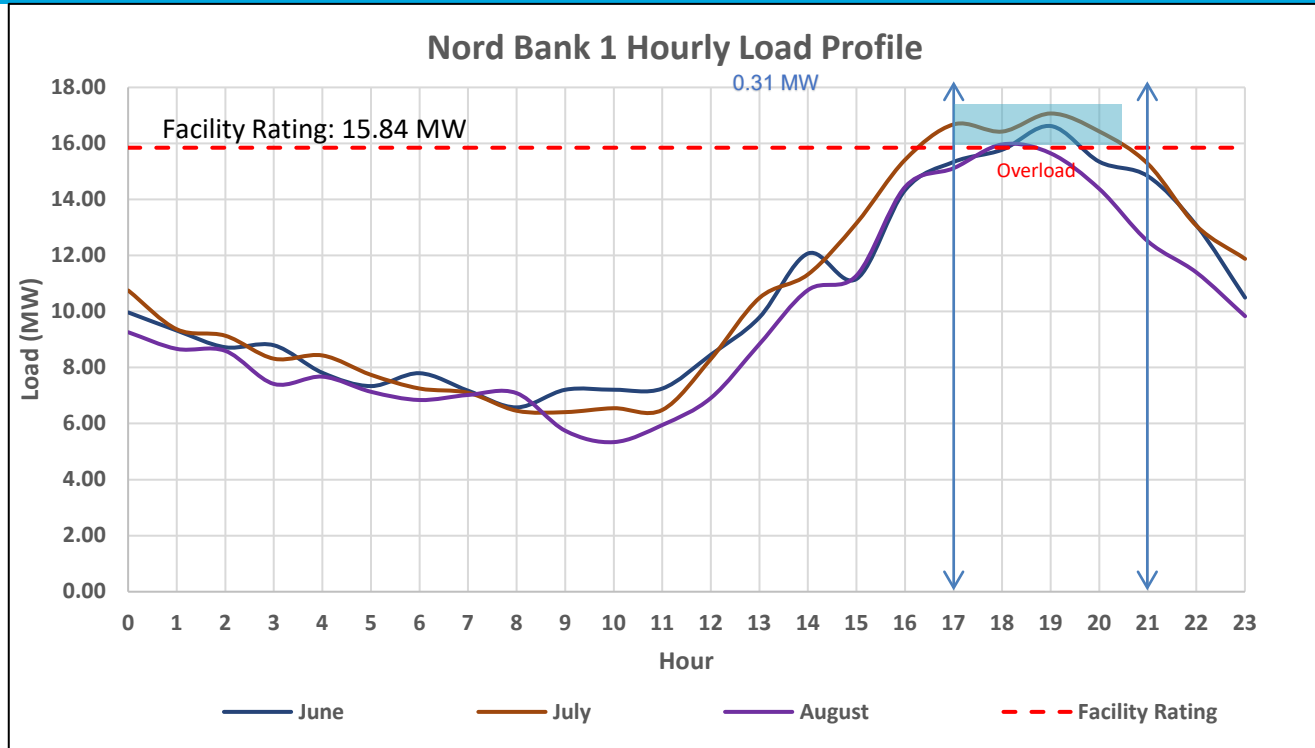


Candidate Deferral	GNA Facility Name	In-Service Date	Grid Need (MW)
Anita 1105	Nord Bank 2	6/1/2024	2.20
	Nord Bank 1	6/1/2024	1.23
	Anita Bank 1	6/1/2024	0.36

- **Equipment:** Nord Bank 1 – Feeders 1103 and 1104
- **Electrical Service:**
 - 16 MVA bank with two 12 kV feeders



Technical and Operational Requirements

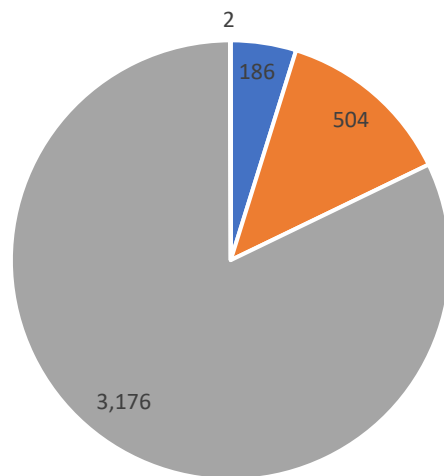


Candidate Deferral	GNA Facility Name	Requirement	Real Time (RT) or Day Ahead (DA)	Grid Need (MW)	Month	Delivery Days	Calls/Year	Hours	Duration (Hours)
Anita 1105	<u>Nord Bank 1</u> - Nord 1103 - Nord 1104	B	DA	1.23	6-8	Mon-Sun	70	5PM-9PM	4



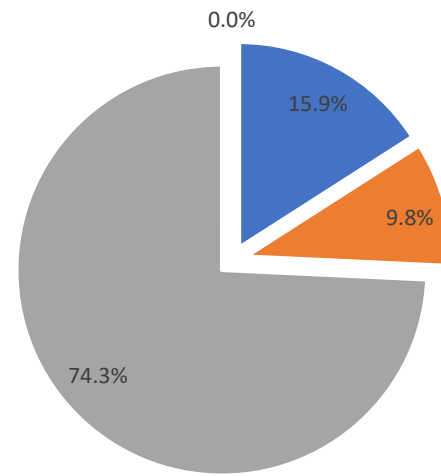
Customer Composition – Nord Bank 1 (Peak Load Day – August 15th, 2020)

Customer Count



■ Agricultural ■ Commercial/Industrial ■ Residential ■ Other

Peak Day Load by Customer Class (%)



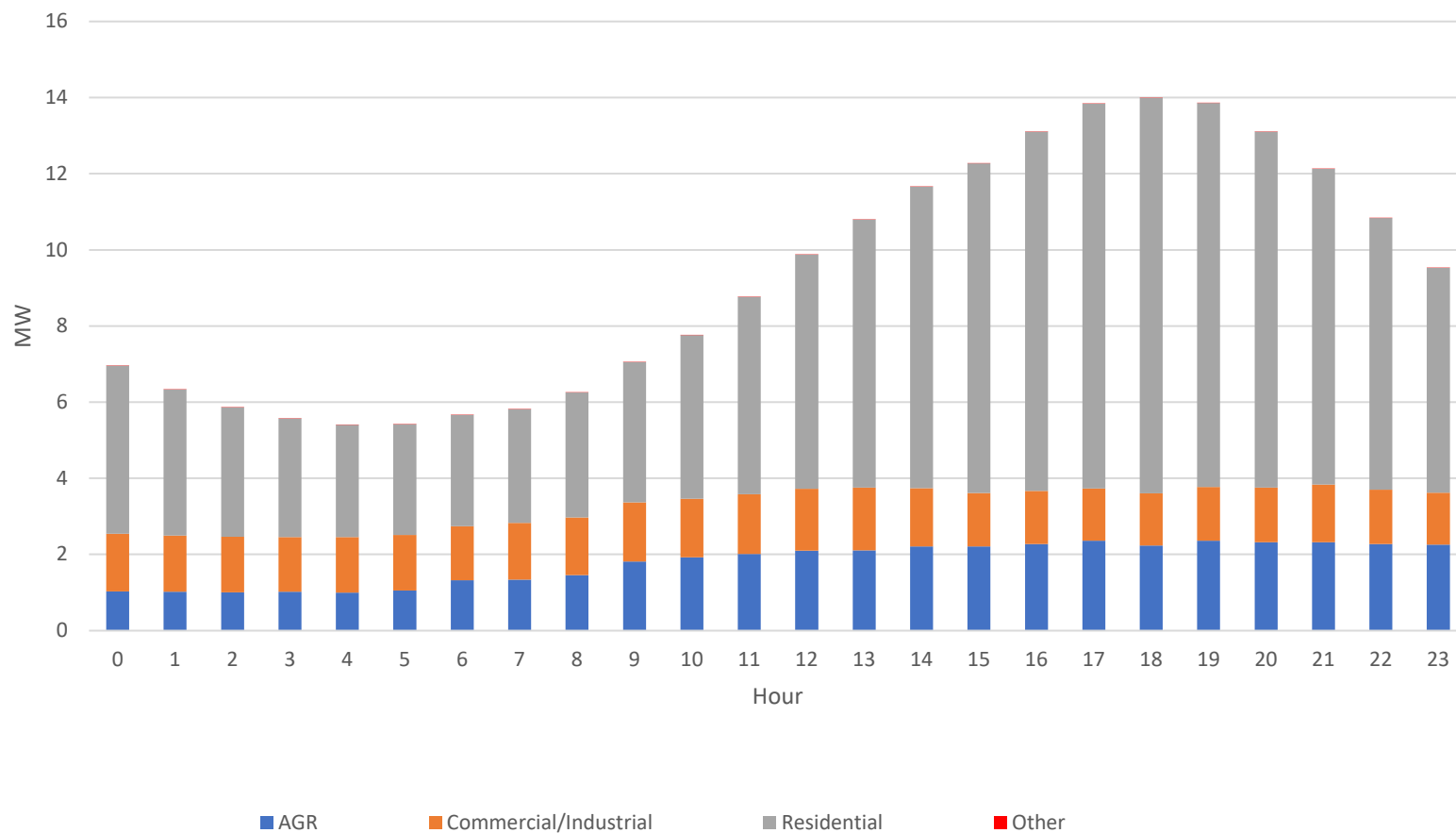
■ Agricultural ■ Commercial/Industrial ■ Residential ■ Other

Customer Class	Total Customer Count	Peak Day Load (MW)
Agricultural	186	2.23
Commercial/Industrial	504	1.37
Residential	3,176	10.39
Other	2	0.00
Total	3,868	13.99



Load by Customer Class – Nord Bank 1 (Peak Load Day – August 15th, 2020)

Peak Day Hourly Load Profile by Customer Type



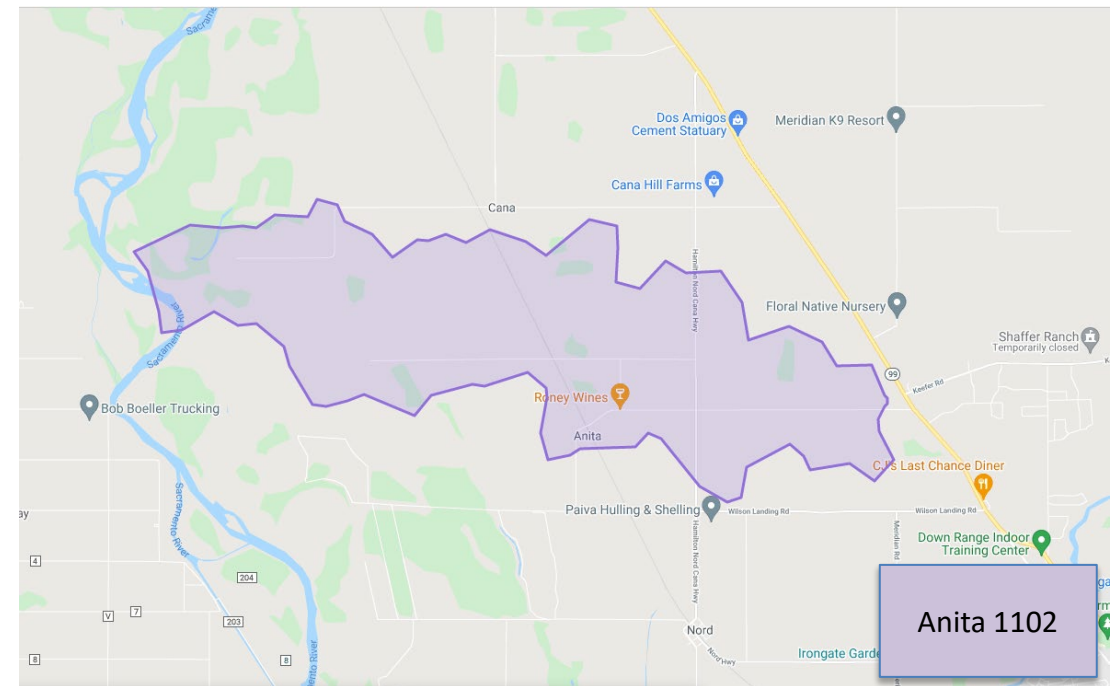
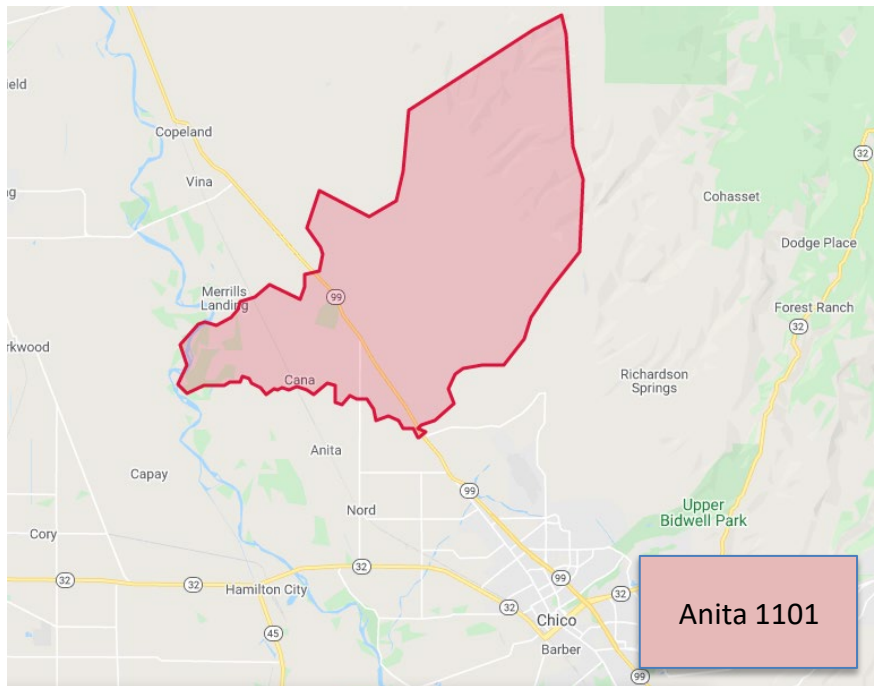
Historical 2020		
Observed Peak Load (MW)	Installed DERs	
	Solar PV (MW)	Mixed (MW)
13.99	5.75	0.05



Anita Bank 1 Location Overview

Location

Anita Bank 1, Butte County

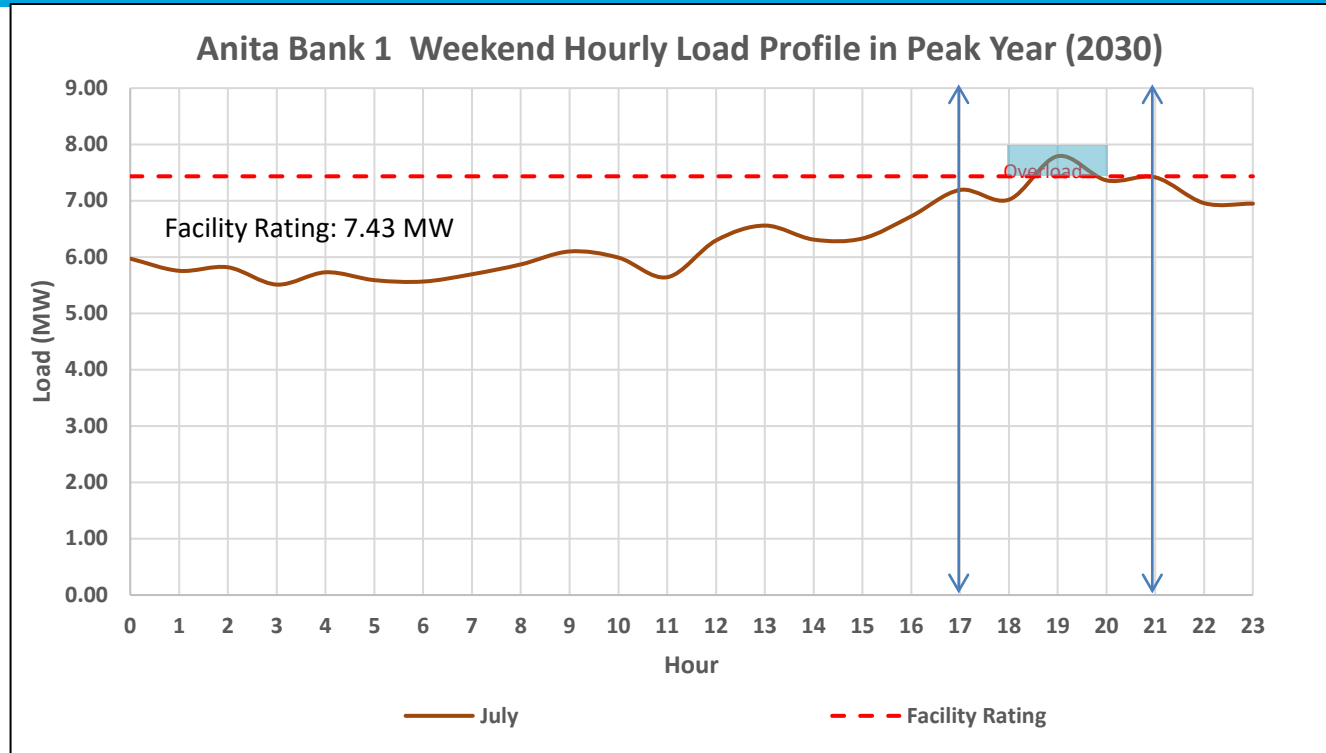


Candidate Deferral	GNA Facility Name	In-Service Date	Grid Need (MW)
Anita 1105	Nord Bank 2	6/1/2024	2.20
	Nord Bank 1	6/1/2024	1.23
	Anita Bank 1	6/1/2024	0.36

- **Equipment:** Anita Bank 1 – Feeders 1101 and 1102
- **Electrical Service:**
 - 7.5 MVA bank with two 12 kV feeders



Technical and Operational Requirements

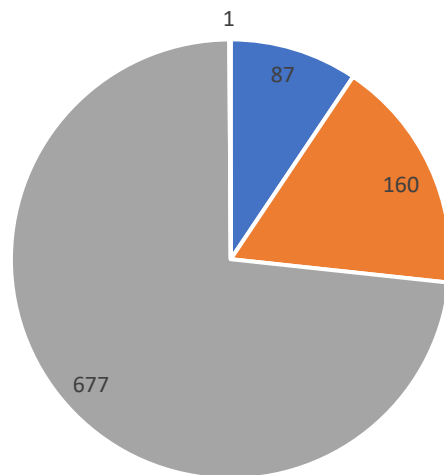


Candidate Deferral	GNA Facility Name	Requirement	Real Time (RT) or Day Ahead (DA)	Grid Need (MW)	Month	Delivery Days	Calls/ Year	Hours	Duration (Hours)
Anita 1105	Anita Bank 1 - Anita 1101 - Anita 1102	C	DA	0.36	7-8	Sat-Sun	8	5PM-9PM	2



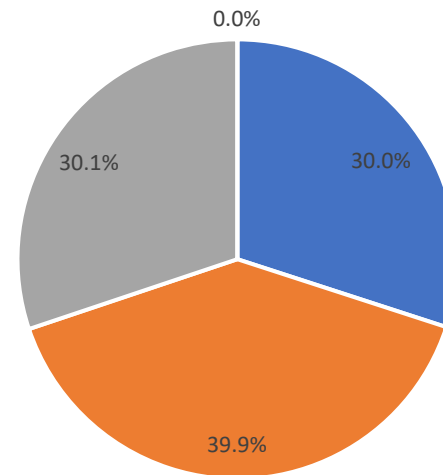
Customer Composition – Anita Bank 1 (Peak Load Day – August 15th, 2020)

Customer Count



■ Agricultural ■ Commercial/Industrial ■ Residential ■ Other

Peak Day Load by Customer Class (%)



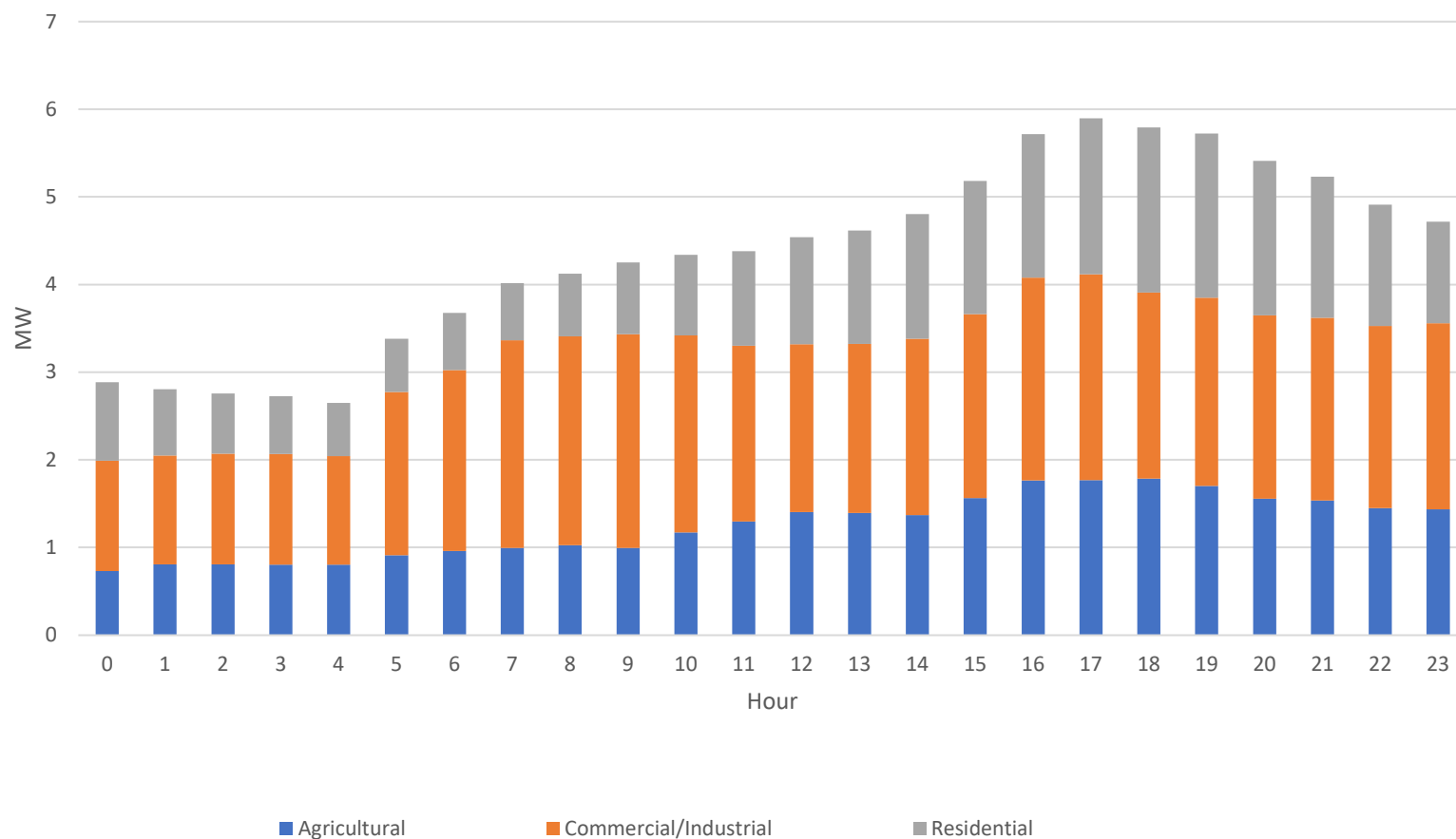
■ Agricultural ■ Commercial/Industrial ■ Residential ■ Other

Customer Class	Total Customer Count	Peak Day Load (MW)
Agricultural	87	1.77
Commercial/Industrial	160	2.35
Residential	677	1.78
Other	1	0.00
Total	925	5.90



Load by Customer Class – Anita Bank 1 (Peak Load Day – August 15th, 2020)

Peak Day Hourly Load Profile by Customer Type



Historical 2020		
Observed Peak Load (MW)	Installed DERs	
	Solar PV (MW)	Mixed (MW)
5.90	2.63	0.00



Belle Haven Bank 3

BELLE HAVEN DEFERRAL OPPORTUNITY



Belle Haven Location Overview



Candidate Deferral	GNA Facility Name	In-Service Date	Grid Need (MW)
Belle Haven Bank 4	Belle Haven Bank 3	5/1/2024	3.94



Technical and Operational Requirements

- 3.94 MW must be sourced at Belle Haven 1103 or Belle Haven 1104

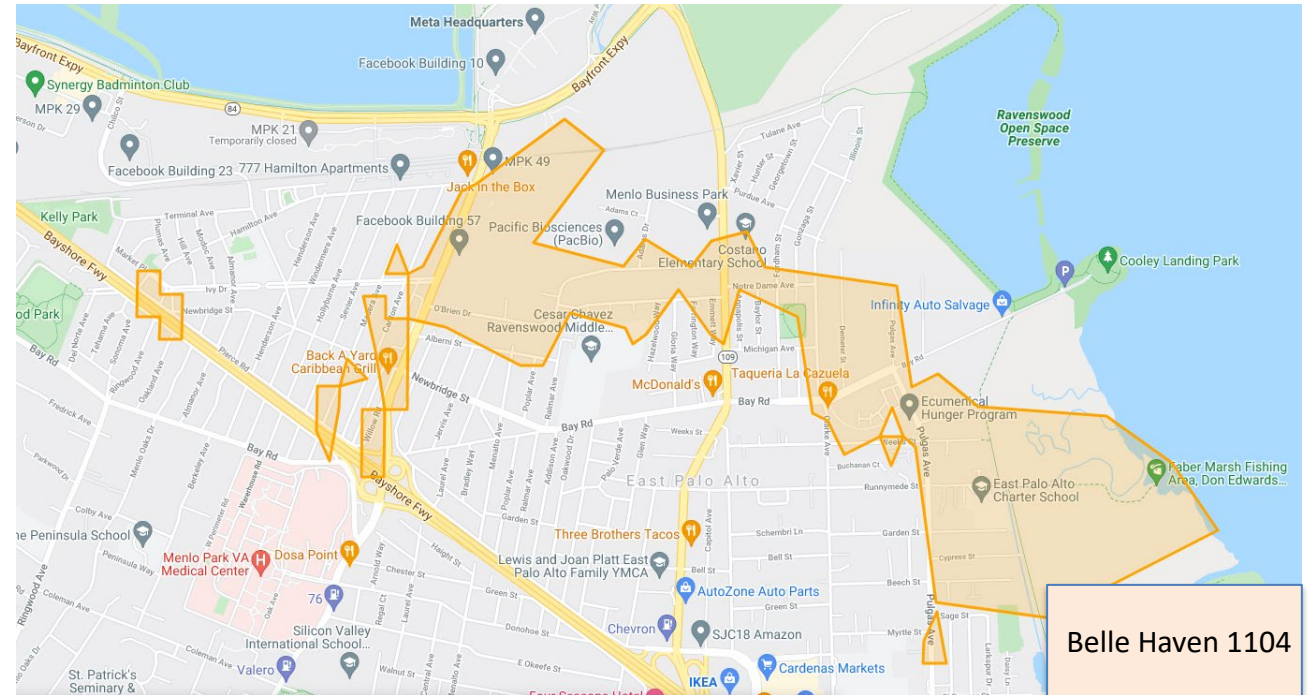
Candidate Deferral	Expected Performance and Technical Requirement									
	GNA Facility Name	In-Service Date	Requirement	Real Time (RT) or Day Ahead (DA)	Grid Need (MW)	Month	Delivery Days	Calls/ Year	Hours	Duration (Hours)
Belle Haven Bank 4	<u>Belle Haven Bank 3</u> • Belle Haven 1103 • Belle Haven 1104	5/1/2024	A	DA	3.94	4-10	Mon – Sun	163	8AM-9PM	12



Belle Haven Bank 3 Location Overview

Location

Belle Haven Bank 3, San Mateo County

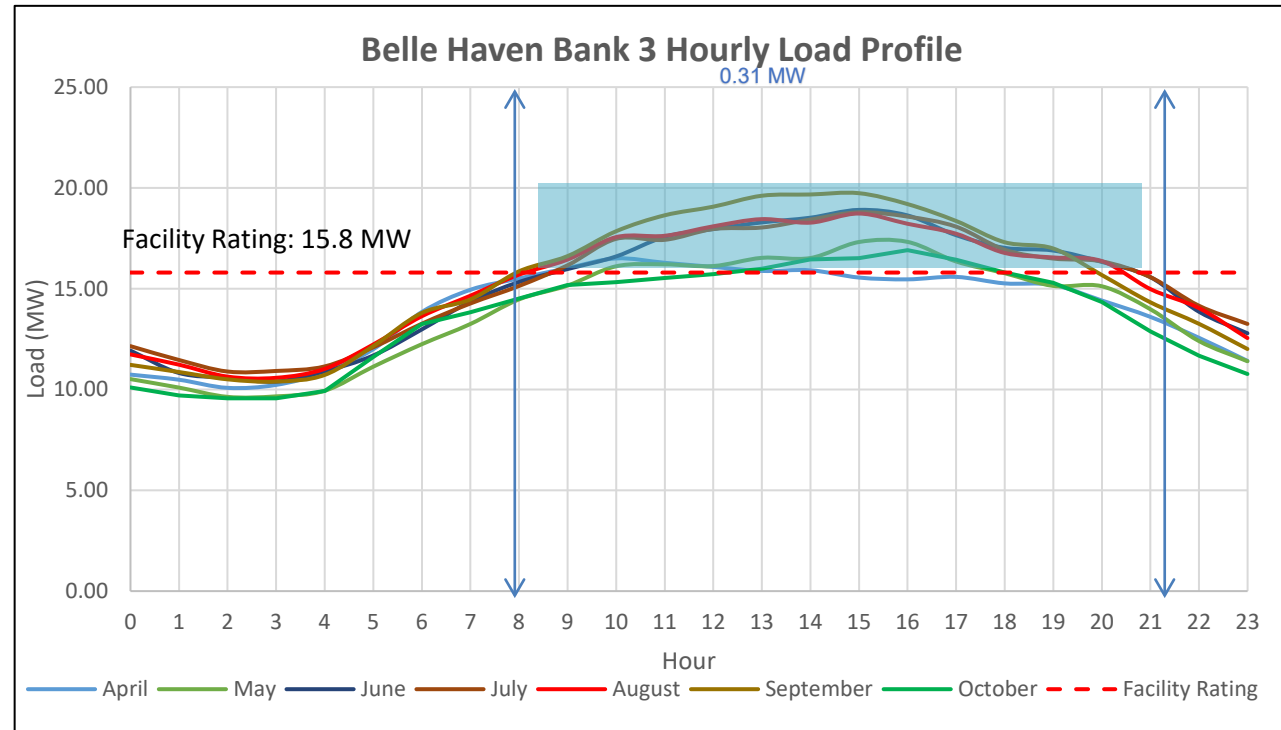


Candidate Deferral	GNA Facility Name	In-Service Date	Grid Need (MW)
Belle Haven Bank 4	Belle Haven Bank 3	5/1/2024	3.94

- **Equipment:** Belle Haven Bank 3 – Feeders 1103 and 1104
- **Electrical Service:**
 - 16 MVA bank with two 12 kV feeders



Technical and Operational Requirements

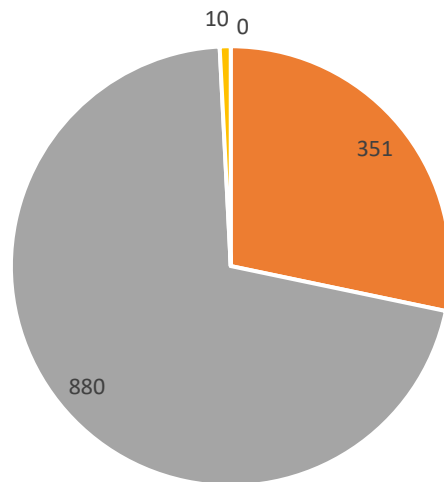


Candidate Deferral	GNA Facility Name	Requirement	Real Time (RT) or Day Ahead (DA)	Grid Need (MW)	Month	Delivery Days	Calls/ Year	Hours	Duration (Hours)
Belle Haven Bank 4	<u>Belle Haven Bank 3</u> - Belle Haven 1103 - Belle Haven 1104	A	DA	3.94	4-10	Mon – Sun	163	8AM-9PM	12



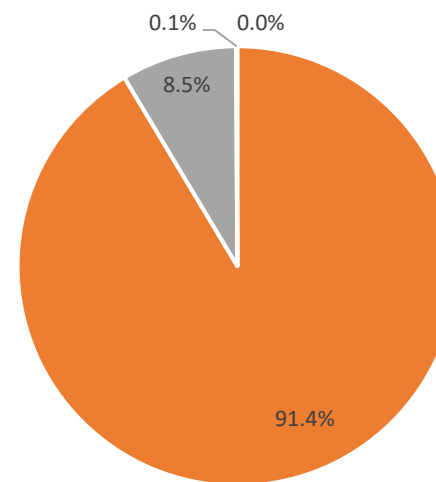
Customer Composition – Belle Haven Bank 3 (Peak Load Day – August 14th, 2020)

Customer Count



■ Agricultural ■ Commercial/Industrial ■ Residential ■ Other

Peak Day Load by Customer Class (%)



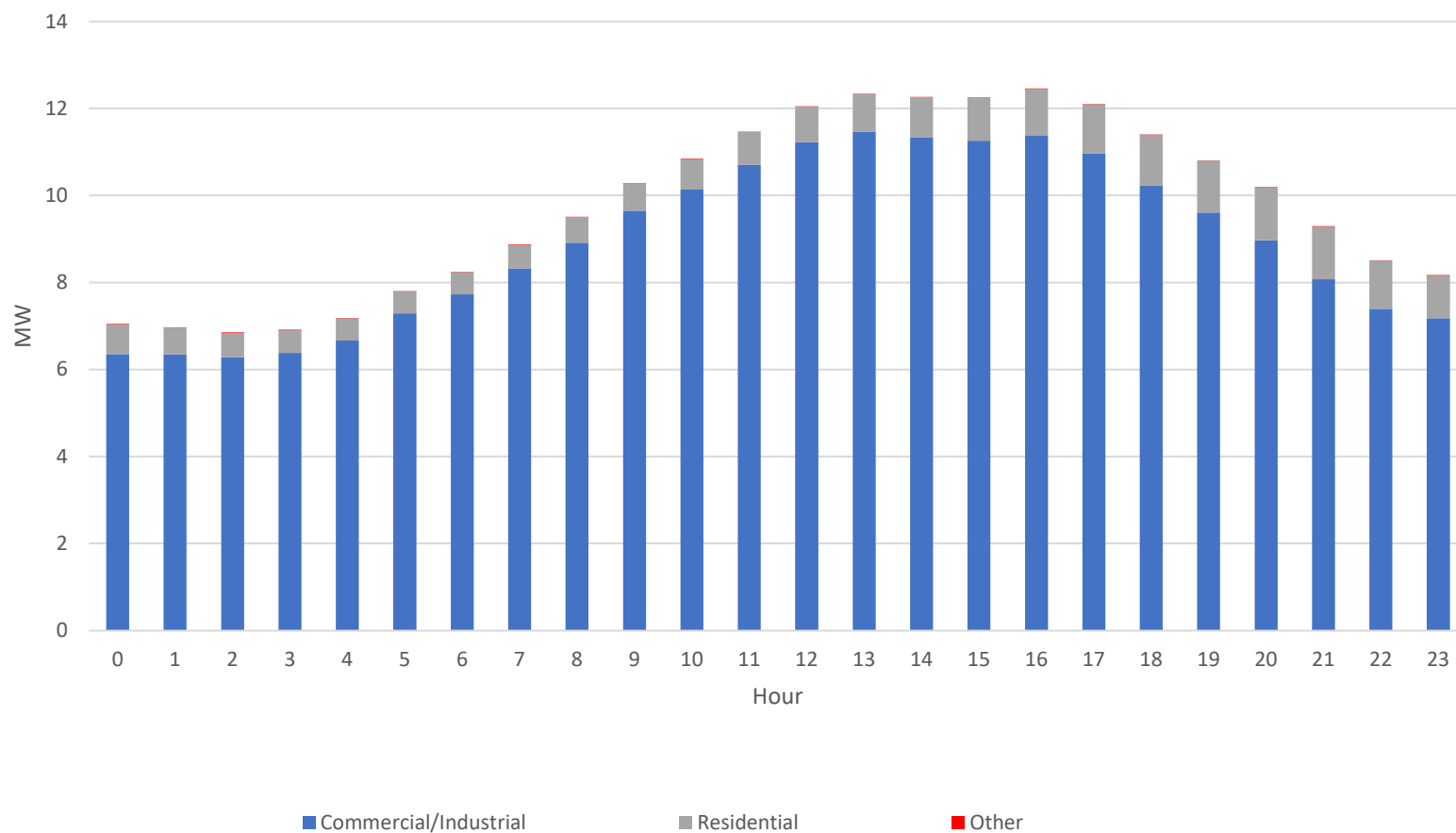
■ Agricultural ■ Commercial/Industrial ■ Residential ■ Other

Customer Class	Total Customer Count	Peak Day Load (MW)
Agricultural	0	0.00
Commercial/Industrial	351	11.39
Residential	880	1.06
Other	10	0.01
Total	1,241	12.46



Load by Customer Class – Belle Haven Bank 3 (Peak Load Day – August 14th, 2020)

Peak Day Hourly Load Profile by Customer Type



Historical 2020		
Observed Peak Load (MW)	Installed DERs	
	Solar PV (MW)	Mixed (MW)
12.46	0.72	0.04



Embarcadero (SF Z) 1116

EMBARCADERO (SF Z) 1116



Embarcadero (SF Z) 1116 Location Overview



Candidate Deferral	GNA Facility Name	In-Service Date	Grid Need (MW)
Embarcadero (SF Z) 1116	Embarcadero (SF Z) 1116	4/1/2026	0.29



Technical and Operational Requirements

- 0.29 MW must be sourced at Embarcadero (SF Z) 1116

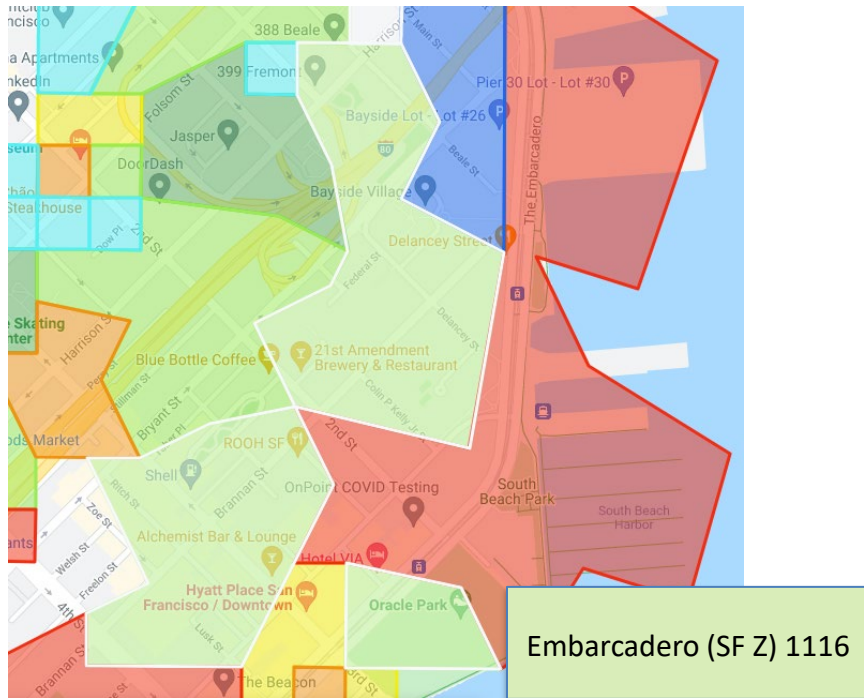
Candidate Deferral	Expected Performance and Technical Requirement									
	GNA Facility Name	In-Service Date	Requirement	Real Time (RT) or Day Ahead (DA)	Grid Need (MW)	Month	Delivery Days	Calls/ Year	Hours	Duration (Hours)
Embarcadero (SF Z) 1116	Embarcadero (SF Z) 1116	4/1/2026	A	DA	0.29	7-9	Mon – Fri	21	10AM-4PM	5



Embarcadero (SF Z) 1116 Location Overview

Location

Embarcadero (SF Z) 1116, San Francisco County

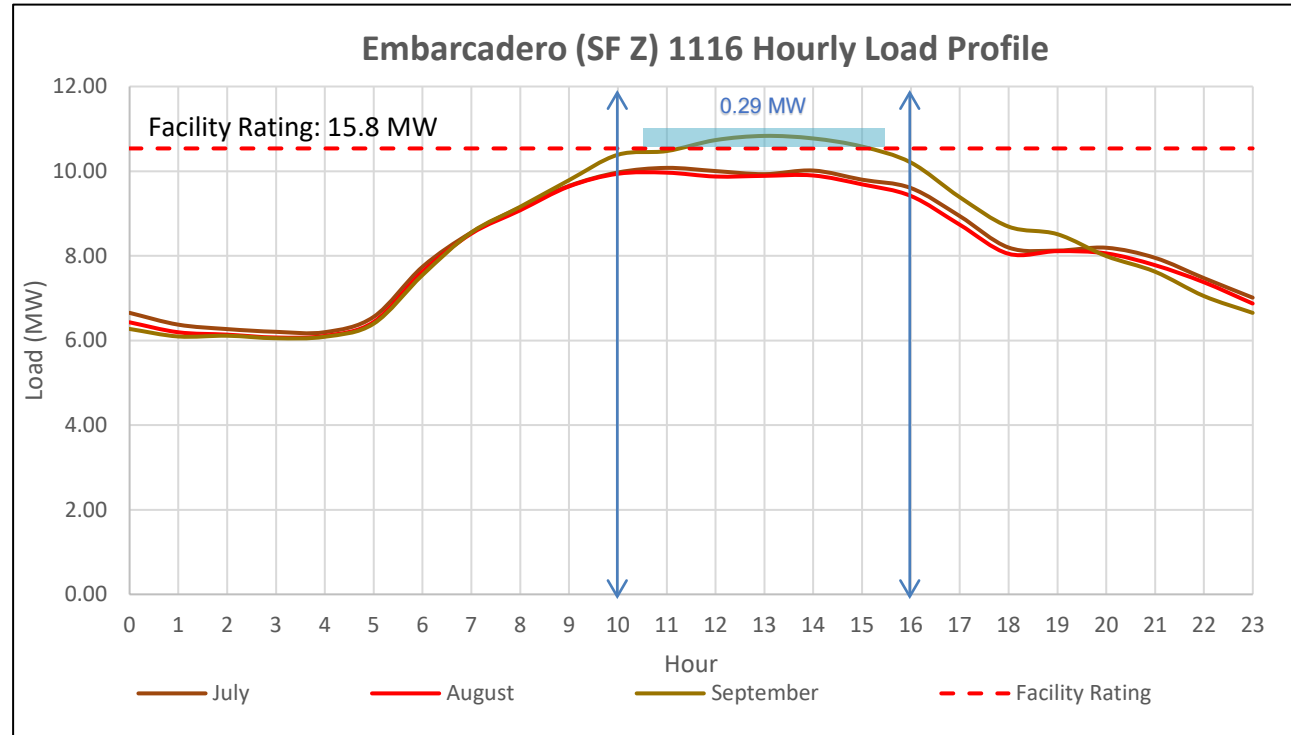


Candidate Deferral	GNA Facility Name	In-Service Date	Grid Need (MW)
Embarcadero (SF Z) 1116	Embarcadero (SF Z) 1116	4/1/2026	0.29

- **Equipment:** Embarcadero (SF Z) 1116
- **Electrical Service:**
 - 12 kV feeder



Technical and Operational Requirements

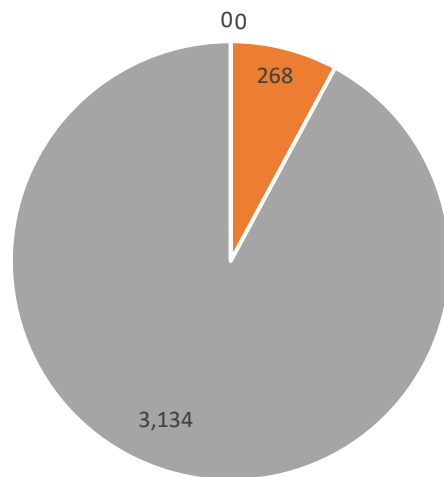


Candidate Deferral	GNA Facility Name	Requirement	Real Time (RT) or Day Ahead (DA)	Grid Need (MW)	Month	Delivery Days	Calls/ Year	Hours	Duration (Hours)
Embarcadero (SF Z) 1116	Embarcadero (SF Z) 1116	A	DA	0.29	7-9	Mon – Fri	21	10AM-4PM	5



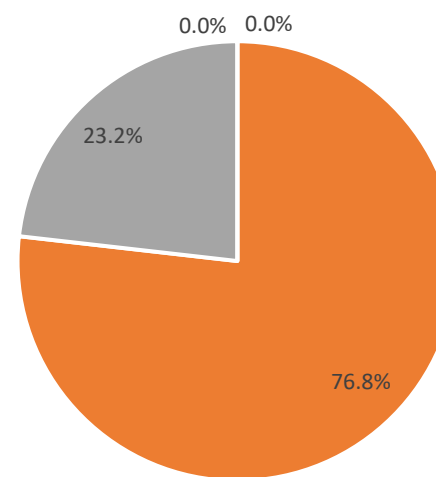
Customer Composition – Embarcadero (SF Z) 1116 (Peak Load Day – September 28th, 2020)

Customer Count



■ Agricultural ■ Commercial/Industrial ■ Residential ■ Other

Peak Day Load by Customer Class (%)



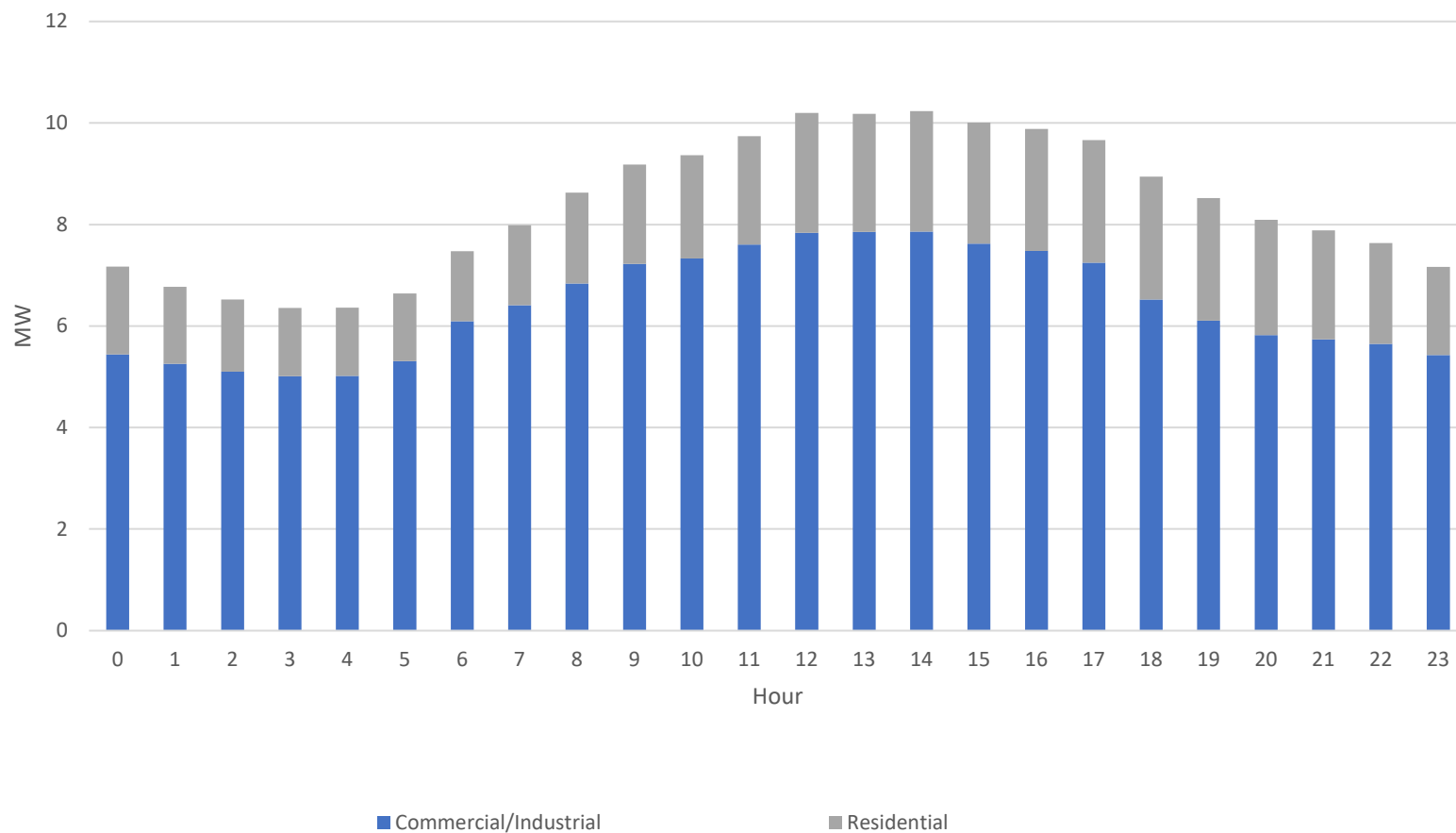
■ Agricultural ■ Commercial/Industrial ■ Residential ■ Other

Customer Class	Total Customer Count	Peak Day Load (MW)
Agricultural	0	0.00
Commercial/Industrial	268	7.86
Residential	3,134	2.37
Other	0	0.00
Total	3,402	10.24



Load by Customer Class – Embarcadero (SF Z) 1116 (Peak Load Day – September 28th, 2020)

Peak Day Hourly Load Profile by Customer Type



Historical 2020		
Observed Peak Load (MW)	Installed DERs	
	Solar PV (MW)	Mixed (MW)
10.24	0.21	0.00



Embarcadero (SF Z) 1118

EMBARCADERO (SF Z) 1118



Embarcadero (SF Z) 1118 Location Overview



Candidate Deferral	GNA Facility Name	In-Service Date	Grid Need (MW)
Embarcadero (SF Z) 1118	Embarcadero (SF Z) 1118	4/1/2026	0.29



Technical and Operational Requirements

- 1.30 MW must be sourced at Embarcadero (SF Z) 1118

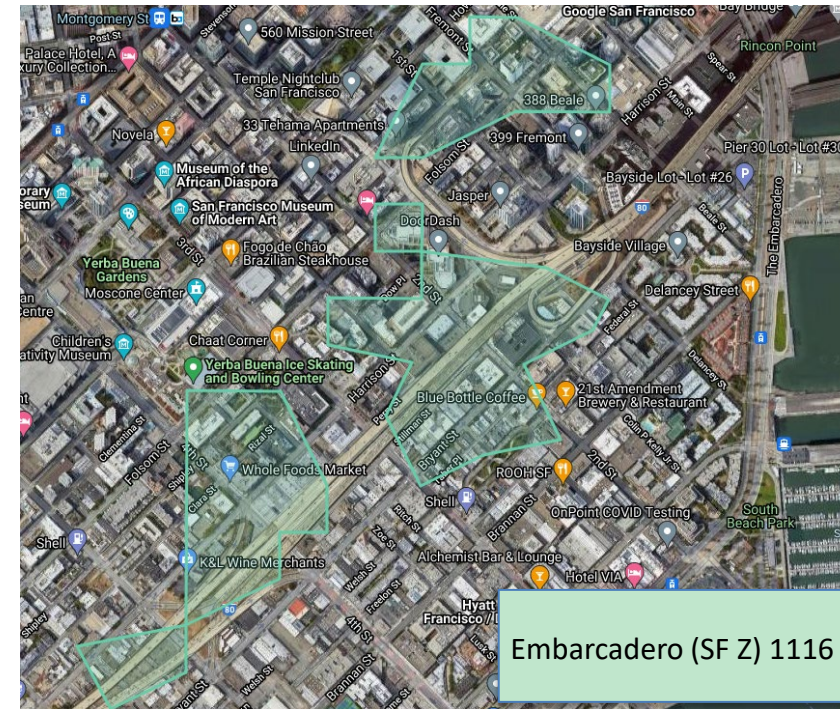
Candidate Deferral	Expected Performance and Technical Requirement									
	GNA Facility Name	In-Service Date	Requirement	Real Time (RT) or Day Ahead (DA)	Grid Need (MW)	Month	Delivery Days	Calls/ Year	Hours	Duration (Hours)
Embarcadero (SF Z) 1118	Embarcadero (SF Z) 1118	6/1/2025	A	DA	1.30	1-12	Mon – Fri	261	9AM-6PM	9



Embarcadero (SF Z) 1118 Location Overview

Location

Embarcadero (SF Z) 1118, San Francisco County

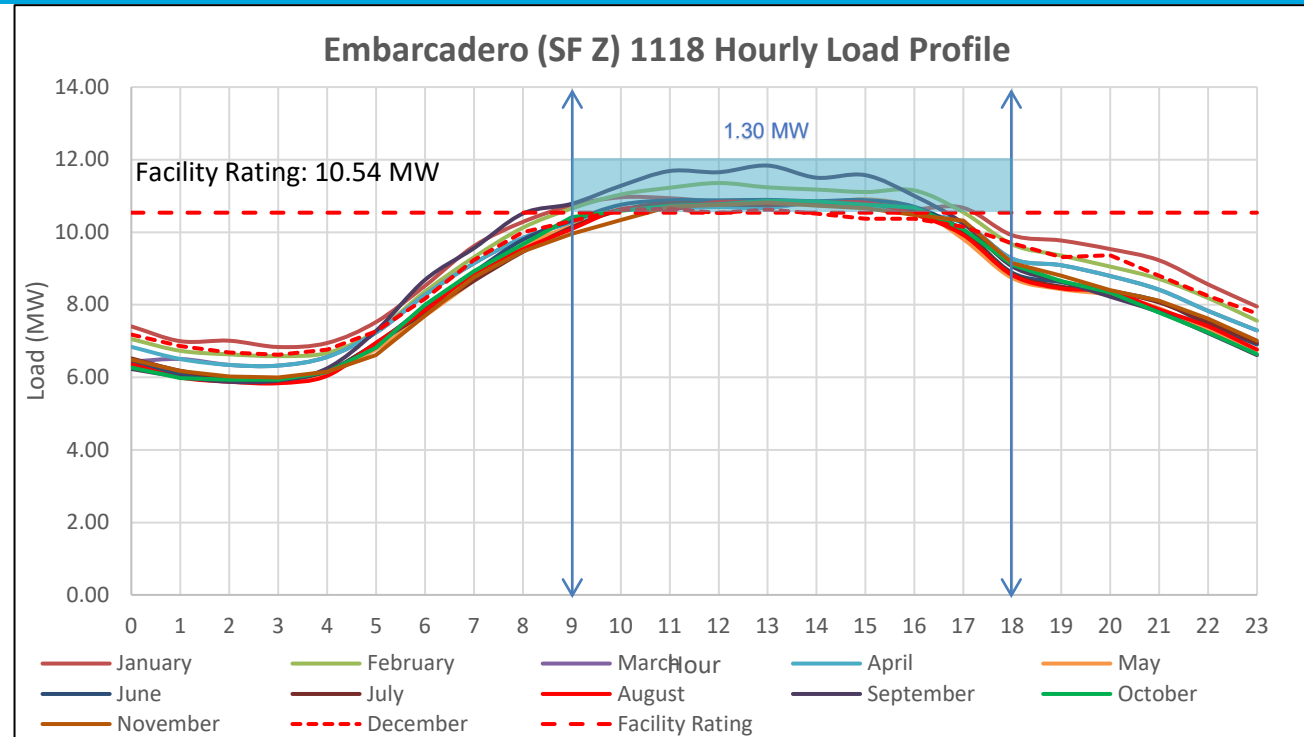


Candidate Deferral	GNA Facility Name	In-Service Date	Grid Need (MW)
Embarcadero (SF Z) 1118	Embarcadero (SF Z) 1118	6/1/2025	1.30

- **Equipment:** Embarcadero (SF Z) 1118
- **Electrical Service:**
 - 12 kV feeder



Technical and Operational Requirements

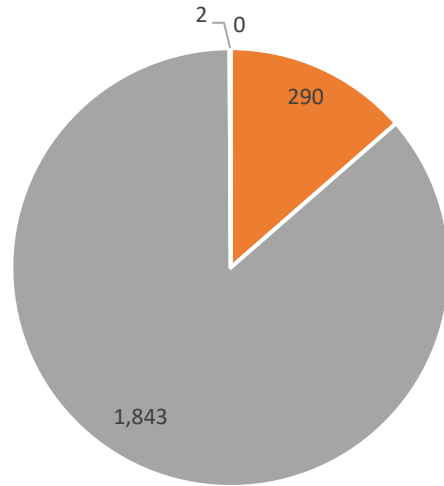


Candidate Deferral	GNA Facility Name	Requirement	Real Time (RT) or Day Ahead (DA)	Grid Need (MW)	Month	Delivery Days	Calls/ Year	Hours	Duration (Hours)
Embarcadero (SF Z) 1118	Embarcadero (SF Z) 1118	A	DA	1.30	1-12	Mon – Fri	261	9AM-6PM	9



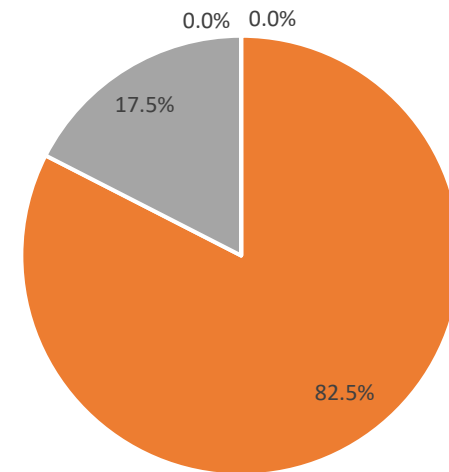
Customer Composition – Embarcadero (SF Z) 1118 (Peak Load Day – August 18th, 2020)

Customer Count



■ Agricultural ■ Commercial/Industrial ■ Residential ■ Other

Peak Day Load by Customer Class (%)



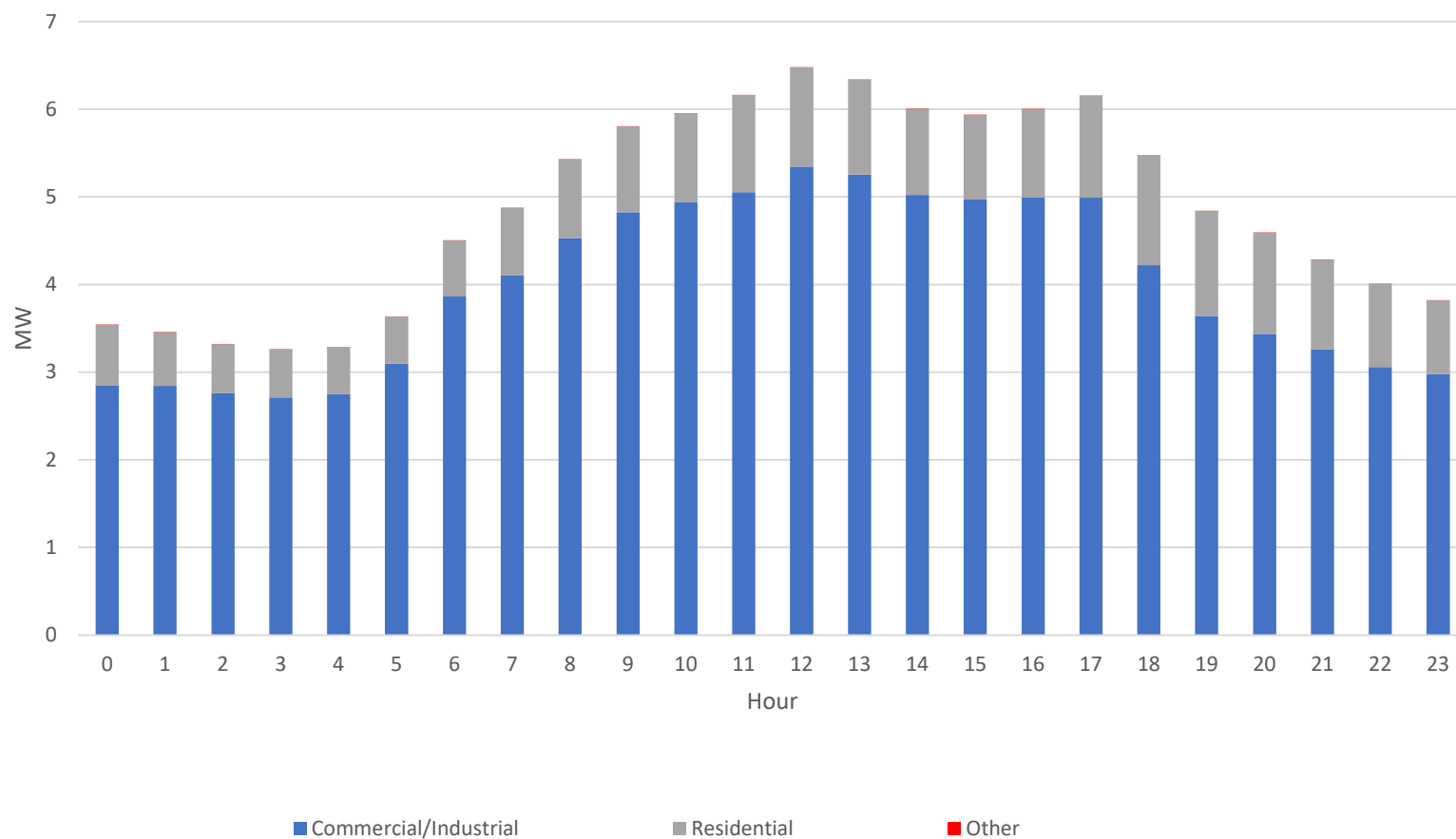
■ Agricultural ■ Commercial/Industrial ■ Residential ■ Other

Customer Class	Total Customer Count	Peak Day Load (MW)
Agricultural	0	0.00
Commercial/Industrial	290	5.34
Residential	1,843	1.13
Other	2	0.00
Total	2,135	6.48



Load by Customer Class – Embarcadero (SF Z) 1118 (Peak Load Day – August 18th, 2020)

Peak Day Hourly Load Profile by Customer Type



Historical 2020		
Observed Peak Load (MW)	Installed DERs	
	Solar PV (MW)	Mixed (MW)
6.48	0.00	0.00



Del Mar Bank 2

ROCKLIN DEFERRAL OPPORTUNITY



Rocklin Location Overview



Candidate Deferral	GNA Facility Name	In-Service Date	Grid Need (MW)
Rocklin 1105	Del Mar Bank 2	5/1/2025	0.72



Technical and Operational Requirements

- 0.72 MW must be sourced at Del Mar 2105 or Del Mar 2106

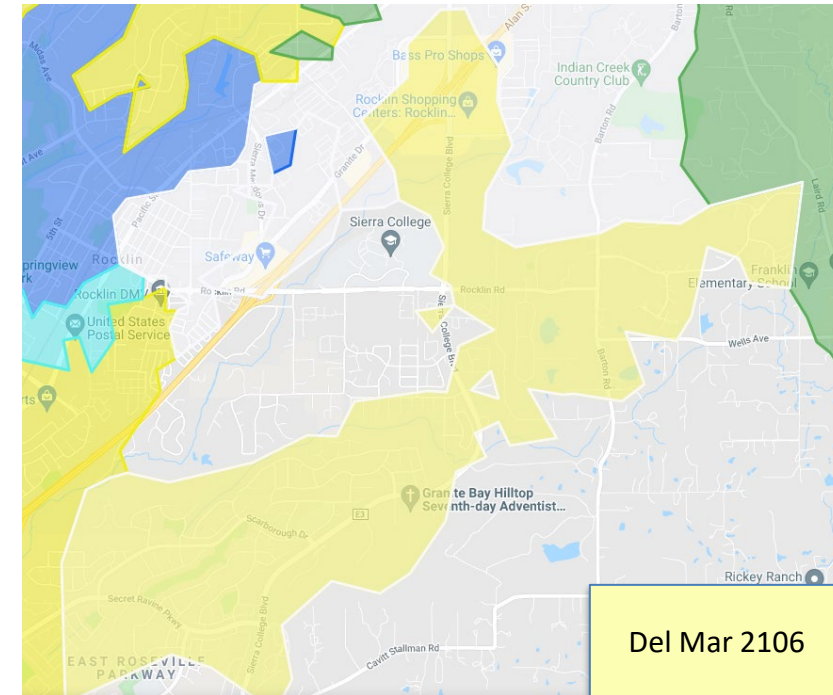
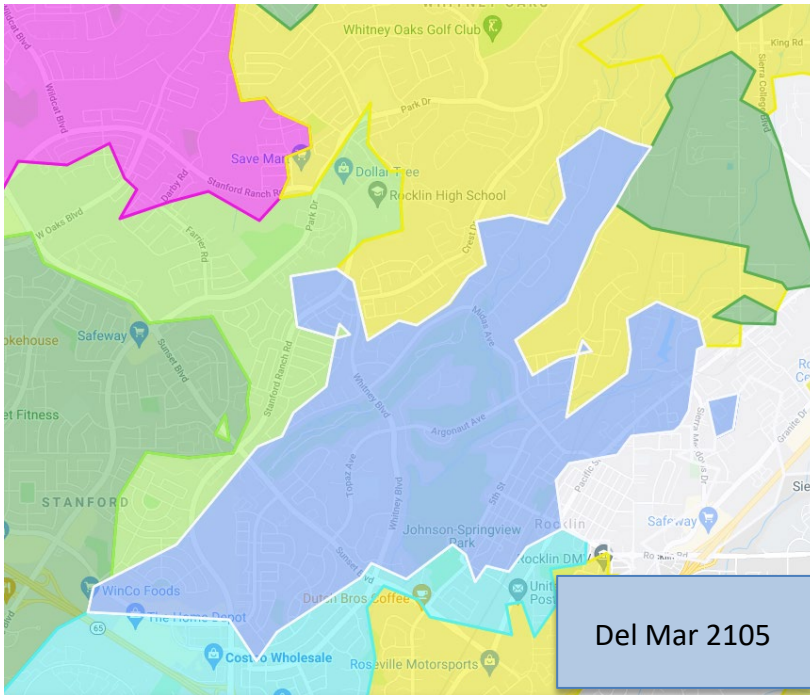
Candidate Deferral	Expected Performance and Technical Requirement									
	GNA Facility Name	In-Service Date	Requirement	Real Time (RT) or Day Ahead (DA)	Grid Need (MW)	Month	Delivery Days	Calls/ Year	Hours	Duration (Hours)
Rocklin 1105	<u>Del Mar Bank 2</u> - Del Mar 2105 - Del Mar 2106	5/1/2025	A	DA	0.72	7-8	Mon – Sun	39	5PM-7PM	2



Del Mar Bank 2 Location Overview

Location

Del Mar Bank 2, Placer County

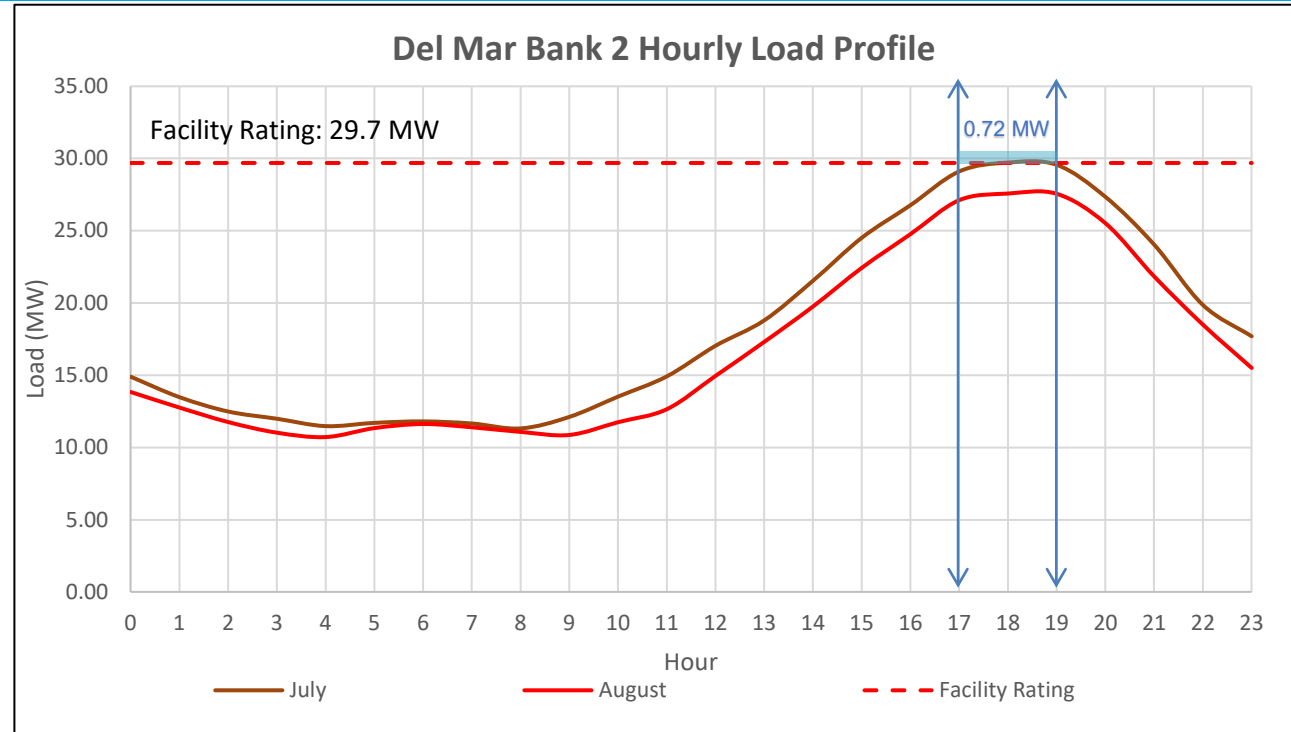


Candidate Deferral	GNA Facility Name	In-Service Date	Grid Need (MW)
Rocklin 1105	Del Mar Bank 2	5/1/2025	0.72

- **Equipment:** Del Mar Bank 2 – Feeders 2105 and 2106
- **Electrical Service:**
 - 30 MVA bank with two 21 kV feeders



Technical and Operational Requirements

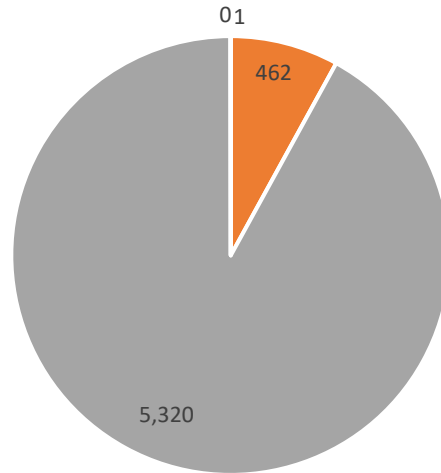


Candidate Deferral	GNA Facility Name	Requirement	Real Time (RT) or Day Ahead (DA)	Grid Need (MW)	Month	Delivery Days	Calls/ Year	Hours	Duration (Hours)
Rocklin 1105	Del Mar Bank 2 - Del Mar 2105 - Del Mar 2106	A	DA	0.72	7-8	Mon – Sun	39	5PM-7PM	2



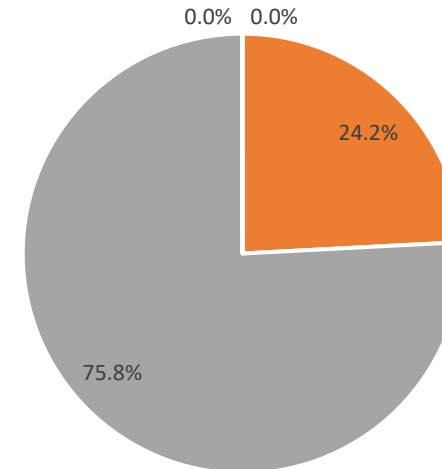
Customer Composition – Del Mar Bank 2 (Peak Load Day – August 16th, 2020)

Customer Count



■ Agricultural ■ Commercial/Industrial ■ Residential ■ Other

Peak Day Load by Customer Class (%)



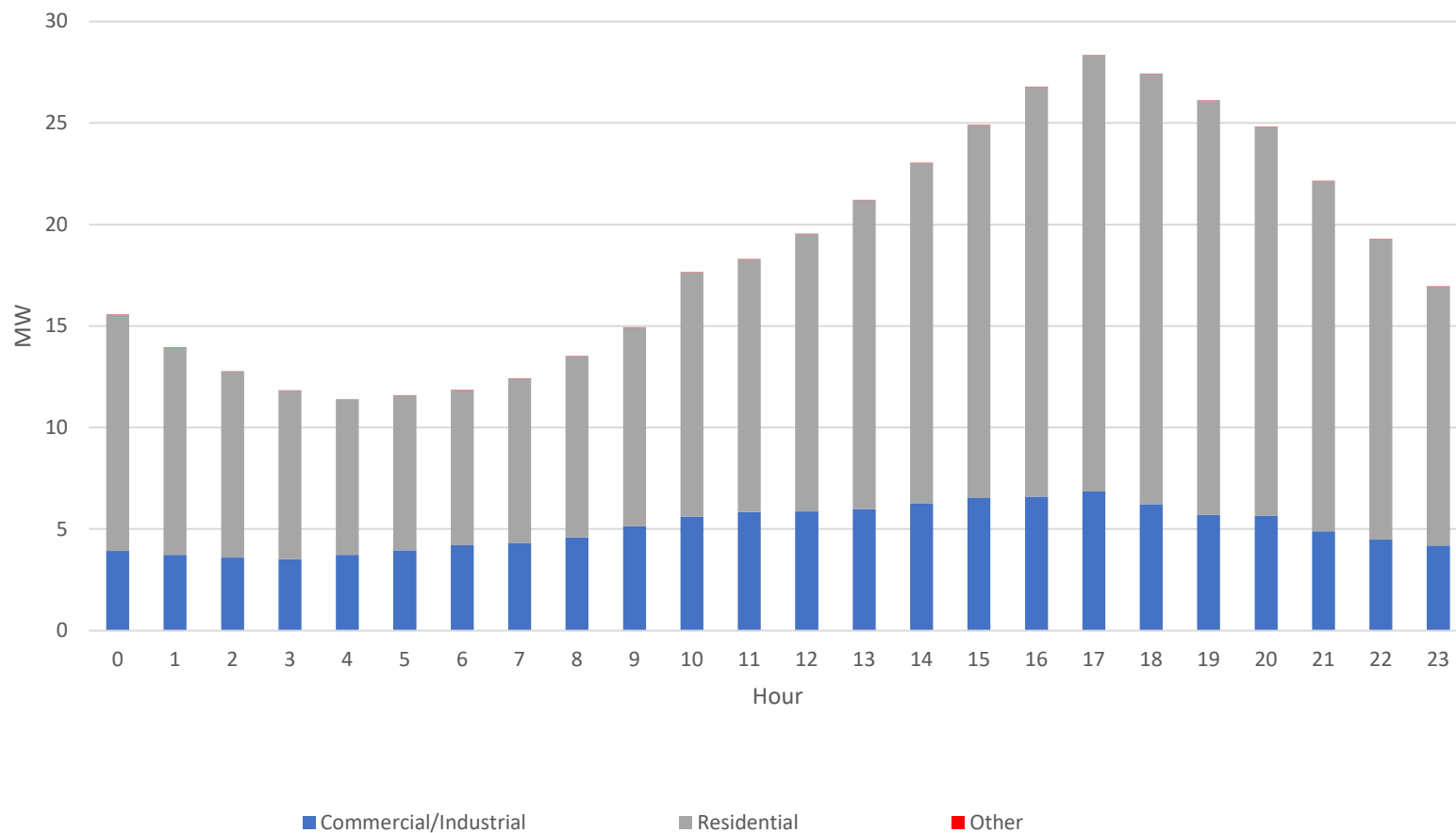
■ Agricultural ■ Commercial/Industrial ■ Residential ■ Other

Customer Class	Total Customer Count	Peak Day Load (MW)
Agricultural	0	0.00
Commercial/Industrial	462	6.85
Residential	5,320	21.49
Other	1	0.00
Total	5,783	28.34



Load by Customer Class – Del Mar Bank 2 (Peak Load Day – August 16th, 2020)

Peak Day Hourly Load Profile by Customer Type



Historical 2020		
Observed Peak Load (MW)	Installed DERs	
	Solar PV (MW)	Mixed (MW)
28.34	13.52	0.31