California ISO

Evaluation Report of Load Serving Entities' and Central Procurement Entities' Compliance with 2025 Resource Adequacy Requirements

November 7, 2024

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1. Summary of review

The ISO has reviewed and evaluated the aggregate 2025 annual Resource Adequacy (RA) Plans of load serving entities (LSEs) and central procurement entities (CPEs) received as of November 4, 2024 to assess compliance with annual Local, System and Flex Resource Adequacy requirements. In addition, the ISO has evaluated the effectiveness of the Resource Adequacy Resources and RMR resources that have been procured by LSEs and CPEs to assess compliance in Local Capacity Areas with the Local Capacity Technical Study criteria as required by Tariff Sections 43.2.1.1 and 43.2.2. The ISO's evaluation has identified individual LSE/CPE and collective capacity deficiencies in several Local Capacity Areas in the PG&E TAC Area. The ISO's evaluation shows aggregate compliance with the LCR criteria in the SCE, SDG&E, VEA and MWD TAC Areas. A deficiency occurs when the aggregate portfolio of Resource Adequacy Resources that has been procured, including RMR resources, fails to satisfy the adopted reliability criteria in a Local Capacity Area. The tariff provides an opportunity for LSEs and CPEs to cure individual or collective deficiencies before the ISO can engage in any backstop procurement.

The ISO notes that the deficient LSEs and CPEs are not required to purchase capacity from specific units, which are identified as being able to satisfy the LCR criteria for purposes of meeting individual deficiencies. LSEs and CPEs (including those deficient at this time) can purchase capacity from any resources with a local attribute in the TAC Area. However, to the extent that the aggregate LSE and CPE showings do not comprise the right mix of resources that meet the LCR criteria and ISO effectiveness needs, a deficiency may exist that would cause the ISO to procure individual and/or collective backstop capacity.

2. Resource Adequacy requirements

The following provides the assessment of the aggregate 2025 annual Resource Adequacy (RA) plans of load serving entities (LSEs) and central procurement entities (CPEs) including the identified shortfalls for system, flex and local capacity Resource Adequacy requirements.

2.1 System Resource Adequacy requirements

The ISO's evaluation shows aggregate compliance with the year ahead RA requirement for all five summer months.

2.2 Flex Resource Adequacy requirements

The ISO's evaluation shows aggregate compliance with the year ahead flex RA requirement for all months.

2.3 Local Resource Adequacy requirements

The LSEs year-ahead RA showings evaluation was performed with the same assumptions as the 2025 LCR report that was used to give LSEs and CPEs their LCR allocations, namely the LCR report dated April 30, 2024 https://stakeholdercenter.caiso.com/InitiativeDocuments/Final2025LocalCapacityTechnicalReport.pdf . The LSEs/CPEs and suppliers are subject to the RA replacement requirement and are subject to ISO capacity procurement mechanism backstop authority as approved by FERC.

2.3.2 Southern California Edison (SCE) TAC Area

The ISO's evaluation shows aggregate compliance with the LCR criteria.

2.3.3 San Diego Gas and Electric (SDG&E) TAC Area

The ISO's evaluation shows aggregate compliance with the LCR criteria.

2.3.4 Pacific Gas and Electric (PG&E) TAC Area

The following is a summary of the deficiencies in the PG&E TAC area.

1. The remaining local Resource Adequacy technical need in the PG&E TAC Area totals 847.54 MW.
2. At this time, individual LSE/CPE local deficiencies in the PG&E TAC Area total 8137.00 MW.
3. At this time, the collective deficiency can only be given as a range (see page 1 paragraph 2 above) from a minimum deficiency of 0.00 MW to a maximum deficiency of 847.54 MW. If the individual deficient LSE/CPE purchase capacity from local resources to fill their shortfall and at the same time those resources meet the remaining technical need than collective deficiency will be minimized, but if not, then the collective deficiency could reach the maximum.

Need explanation by non-compliant area(s) and sub-area(s):

Bay Area:
An additional 418.90 MW is needed, from the relevant resources listed in Appendix A, in order to satisfy the LCR criteria. The remaining technical need is driven by:

- San Jose sub-area: with remaining need of 47.86 MW
- Bay Area overall: with remaining need of 418.90 MW

Sierra Area:
An additional 37.02 MW is needed, from the relevant resources listed in Appendix A, in order to satisfy the LCR criteria. The remaining technical need is driven by these sub-areas:

- Drum-Rio Oso sub-area: with remaining need of 35.24 MW
- Gold Hill-Drum sub-area: with remaining need of 1.78 MW

North Coast/North Bay Area:
An additional 250.65 MW is needed, from the relevant resources listed in Appendix A, in order to satisfy the LCR criteria. The remaining technical need is driven by:

- North Coast/North Bay overall: with remaining need of 250.65 MW

Stockton Area:
An additional 22.26 MW is needed, from the relevant resources listed in Appendix A, in order to satisfy the LCR criteria. The remaining technical need is driven by:

- Tesla-Bellota sub-area with remaining need of 22.26 MW

Fresno Area:
An additional 108.11 MW is needed, from the relevant resources listed in Appendix A, in order to satisfy the LCR criteria. The remaining technical need is driven by these sub-areas:

- Coalinga sub-area: with remaining need of 22.08 MW
- Panoche sub-area: with remaining need of 55.95 MW
- Wilson 115 kV sub-area: with remaining need of 86.03 MW

Kern Area:
An additional 10.60 MW is needed, from the relevant resources listed in Appendix A, in order to satisfy the LCR criteria. The remaining technical need is driven by:

- South Kern PP sub-area: with remaining need of 10.60 MW

3. Process for curing a Collective Deficiency:

For purposes of curing a collective deficiency, a Scheduling Coordinator for an LSE/CPE may submit a revised annual Resource Adequacy Plan by **December 9, 2024**, to demonstrate the procurement of additional Local Capacity Area Resources consistent with this notice in order to resolve the collective deficiency as provided by Tariff Section 43.2.2.1. Any Scheduling Coordinator for an LSE/CPE that provides such additional Local Capacity Area Resources consistent with this market notice shall have its share of any backstop procurement costs reduced on a proportionate basis in accordance with the Tariff. If the full quantity of capacity in the deficient Local Capacity Areas is not reported to the ISO under revised annual Resource Adequacy Plans, the ISO may engage in backstop procurement sufficient to alleviate the collective deficiency.

Scheduling Coordinators for LSEs and CPEs are further reminded of the ISO BPM Appeals Committee's Decision on Appeal of PRR 854:

> *"While this stakeholder process is underway, the ISO will continue to conduct its Local Capacity Technical Study as required by Section 40.3.1.1 of its tariff, but the ISO will use its discretion not to exercise its Capacity Procurement Mechanism authority to address annual resource deficiencies that are directly attributable to a discrepancy between a local regulatory authority's resource adequacy counting rules for demand response resources and ISO's Local Capacity Technical Study."*

Appendix A – List of physical resources by TAC area, local area, sub-area and market ID

TAC Area	Mkt./Physical Res. ID	Physical Resource Name	NQC (MW)	Available (MW)	Local Area	LCR Need
PG&E	CALPIN_1_AGNEW	Agnews Power Plant	28.56	0.56	Bay Area	San Jose
PG&E	DUANE_1_PL1X3	Donald Von Raesfeld PP	143.5	47.30	Bay Area	San Jose
PG&E	BANKPP_2_NSPIN	Delta Pumps	127.00	87.00	Bay Area	Bay Area
PG&E	BRDSLD_2_MTZUMA	FPL Energy Montezuma Wind	11.18	11.18	Bay Area	Bay Area
PG&E	BRDSLD_2_SHILO2	Shiloh Wind Project 2	45.57	45.57	Bay Area	Bay Area
PG&E	BRDSLD_2_SHLO3B	Shiloh IV Wind Project	30.38	30.38	Bay Area	Bay Area
PG&E	CALPIN_1_AGNEW	Agnews Power Plant	28.56	0.56	Bay Area	Bay Area
PG&E	CUMBIA_1_SOLAR	Columbia Solar Energy II	5.08	5.08	Bay Area	Bay Area
PG&E	DUANE_1_PL1X3	Donald Von Raesfeld PP	143.5	47.30	Bay Area	Bay Area
PG&E	ELKHRN_1_EESX3	Elkhorn Energy Storage	182.50	2.50	Bay Area	Bay Area
PG&E	KELSO_2_UNITS	Mariposa Energy	198.03	0.43	Bay Area	Bay Area
PG&E	KIRKER_7_KELCYN	Keller Canyon Landfill Gen.	3.51	3.51	Bay Area	Bay Area
PG&E	LAWRNC_7_SUNYVL	City of Sunnyvale Unit 1 and 2	0.02	0.02	Bay Area	Bay Area
PG&E	LMBEPK_2_UNITA2	Creed Energy Center, Unit #1	47.6	2.00	Bay Area	Bay Area
PG&E	LMBEPK_2_UNITA3	Goose Haven EC, Unit #1	47.75	0.35	Bay Area	Bay Area
PG&E	OAK C_1_EBMUD	MWWTP PGS 1 - Engines	1.57	1.57	Bay Area	Bay Area
PG&E	RICHMN_7_BAYENV	Bay Environmental (Nove P.)	0.18	0.18	Bay Area	Bay Area
PG&E	RUSSELL_2_SOLANO1	Solano Renewables 1	69.88	69.88	Bay Area	Bay Area
PG&E	SHELRF_1_UNITS	Shell Oil Refinery Aggregate	74.86	74.86	Bay Area	Bay Area
PG&E	TIDWTR_2_UNITS	Martinez Cogen Limited Part.	38.00	8.00	Bay Area	Bay Area
PG&E	USWPJR_2_UNITS	Vasco Wind	23.76	23.76	Bay Area	Bay Area
PG&E	ZOND_6_UNIT	Zond Windsystems Inc.	5.20	5.20	Bay Area	Bay Area
PG&E	ADLIN_1_UNITS	Geysers Aidlin Aggregate	22.00	14.00	NCNB	NCNB
PG&E	CLOVDL_1_SOLAR	Cloverdale Solar I	0.30	0.30	NCNB	NCNB
PG&E	GEYS11_7_UNIT11	GEYSERS UNIT 11	68.00	22.00	NCNB	NCNB
PG&E	GEYS12_7_UNIT12	GEYSERS UNIT 13	50.00	2.00	NCNB	NCNB
PG&E	GEYS13_7_UNIT13	GEYSERS UNIT 13	56.00	10.00	NCNB	NCNB
PG&E	GEYS14_7_UNIT14	GEYSERS UNIT 14	70.00	42.00	NCNB	NCNB
PG&E	GEYS16_7_UNIT16	GEYSERS UNIT 16	63.00	14.00	NCNB	NCNB
PG&E	GEYS17_7_UNIT17	GEYSERS UNIT 17	75.50	21.50	NCNB	NCNB
PG&E	GEYS18_7_UNIT18	GEYSERS UNIT 18	72.00	27.00	NCNB	NCNB
PG&E	GEYS20_7_UNIT20	GEYSERS UNIT 20	50.00	20.00	NCNB	NCNB
PG&E	GYS7X8_7_UNITS	Geysers Units 7 & 8 Agg.	95.80	19.80	NCNB	NCNB
PG&E	IGNACO_1_QF	Small QF Aggregation - V/D	0.01	0.01	NCNB	NCNB
PG&E	INDVLY_1_UNITS	Indian Valley Hydro	0.86	0.86	NCNB	NCNB
PG&E	NCPA_7_GP1UN1	NCPA Geo Plant 1 Unit 1	38.85	12.26	NCNB	NCNB
PG&E	NCPA_7_GP1UN2	NCPA Geo Plant 1 Unit 2	39.94	15.92	NCNB	NCNB
PG&E	NCPA_7_GP2UN4	NCPA Geo Plant 1 Unit 4	52.73	15.84	NCNB	NCNB
PG&E	SANTFG_7_UNITS	GEYSERS CALISTOGA	72.00	55.00	NCNB	NCNB

PG&E	DAVIS_7_MNMETH	MM Yolo Power LLC	2.21	2.21	Sierra	Drum-Rio Oso
PG&E	DEADCK_1_UNIT	DEADCK_1_UNIT	0.02	0.02	Sierra	Drum-Rio Oso
PG&E	FORBST_7_UNIT 1	FORBESTOWN HYDRO	37.50	6.18	Sierra	Drum-Rio Oso
PG&E	HAYPRS_6_HAYHD1	Haypress Lower	5.80	5.80	Sierra	Drum-Rio Oso
PG&E	HIGGNS_1_COMBIE	Combie South	0.31	0.31	Sierra	Drum-Rio Oso
PG&E	HIGGNS_7_QFUNTS	HIGGNS_7_QFUNTS	0.16	0.16	Sierra	Drum-Rio Oso
PG&E	KELYRG_6_UNIT	KELLY RIDGE HYDRO	11.00	1.81	Sierra	Drum-Rio Oso
PG&E	OROVIL_6_UNIT	Oroville Cogeneration, LP	7.50	0.50	Sierra	Drum-Rio Oso
PG&E	OXBOW_6_DRUM	OXBOW HYDRO	3.28	3.28	Sierra	Drum-Rio Oso
PG&E	SLYCRK_1_UNIT 1	SLY CREEK HYDRO	13.00	2.13	Sierra	Drum-Rio Oso
PG&E	WDLEAF_7_UNIT 1	WOODLEAF HYDRO	60.00	9.87	Sierra	Drum-Rio Oso
PG&E	YUBACT_1_SUNSWT	Yuba City Cogen	49.97	2.97	Sierra	Drum-Rio Oso
PG&E	PLACVL_1_CHILIB	Chili Bar Powerhouse	1.78	1.78	Sierra	Gold Hill-Drum
PG&E	CAMCHE_1_PL1X3	Camanche Units 1, 2 & 3 Agg.	2.51	2.51	Stockton	Tesla-Bellota
PG&E	LOCKFD_1_BEARCK	Bear Creek Solar	0.30	0.30	Stockton	Tesla-Bellota
PG&E	LOCKFD_1_KSOLAR	Kettleman Solar	0.20	0.20	Stockton	Tesla-Bellota
PG&E	PEORIA_1_SOLAR	Sonora 1	0.30	0.30	Stockton	Tesla-Bellota
PG&E	STNRES_1_UNIT	Covanta Stanislaus	18.95	18.95	Stockton	Tesla-Bellota
PG&E	AVENAL_6_AVPARK	Avenal Park Solar Project	1.21	1.21	Fresno	Coalinga
PG&E	AVENAL_6_SANDDG	Sand Drag Solar Project	3.19	3.19	Fresno	Coalinga
PG&E	AVENAL_6_SUNCTY	Sun City Solar Project	4.02	4.02	Fresno	Coalinga
PG&E	HURON_6_SOLAR	Huron Solar Station	4.02	4.02	Fresno	Coalinga
PG&E	JAYNE_6_WLSLR	Westlands Solar Farm PV 1	3.62	3.62	Fresno	Coalinga
PG&E	SCHNDR_1_FIVPTS	Five Points Solar Station	3.01	3.01	Fresno	Coalinga
PG&E	SCHNDR_1_WSTSDE	Westside Solar Station	3.01	3.01	Fresno	Coalinga
PG&E	CANTUA_1_SOLAR	Exchequer Hydro	4.02	4.02	Fresno	Panoche 115 kV
PG&E	EXCHEC_7_UNIT 1	Exchequer Hydro	94.50	56.50	Fresno	Panoche 115 kV
PG&E	HURON_6_SOLAR	Huron Solar Station	4.02	4.02	Fresno	Panoche 115 kV
PG&E	MCSWAN_6_UNITS	MC SWAIN HYDRO	9.00	9.00	Fresno	Panoche 115 kV
PG&E	MENBIO_6_RENEW1	CalRENEW - 1(A)	1.00	1.00	Fresno	Panoche 115 kV
PG&E	MERCFL_6_UNIT	Merced Falls Powerhouse	3.50	3.50	Fresno	Panoche 115 kV
PG&E	MNDOTA_1_SOLAR1	North Star Solar 1	16.03	16.03	Fresno	Panoche 115 kV
PG&E	SCHNDR_1_FIVPTS	Five Points Solar Station	3.01	3.01	Fresno	Panoche 115 kV
PG&E	SCHNDR_1_WSTSDE	Westside Solar Station	3.01	3.01	Fresno	Panoche 115 kV
PG&E	EXCHEC_7_UNIT 1	Exchequer Hydro	94.50	56.50	Fresno	Wilson 115 kV
PG&E	MCSWAN_6_UNITS	MC SWAIN HYDRO	9.00	9.00	Fresno	Wilson 115 kV
PG&E	MENBIO_6_RENEW1	CalRENEW - 1(A)	1.00	1.00	Fresno	Wilson 115 kV
PG&E	MERCFL_6_UNIT	Merced Falls Powerhouse	3.50	3.50	Fresno	Wilson 115 kV
PG&E	MNDOTA_1_SOLAR1	North Star Solar 1	16.03	16.03	Fresno	Wilson 115 kV
PG&E	7STDRD_1_SOLAR1	Shafter Solar	5.34	5.34	Kern	South Kern PP
PG&E	BKRFLD_2_SOLAR1	Bakersfield 111	0.37	0.37	Kern	South Kern PP
PG&E	LAMONT_1_SOLAR2	Redwood Solar Farm 4	5.34	5.34	Kern	South Kern PP
PG&E	LAMONT_1_SOLAR3	Woodmere Solar Farm	4.01	4.01	Kern	South Kern PP

PG&E	MAGUND_1_BKISR1	Bakersfield Industrial 1	0.27	0.27	Kern	South Kern PP
PG&E	MAGUND_1_BKSSR2	Bakersfield Solar 1	1.40	1.40	Kern	South Kern PP
PG&E	OLDRV1_6_SOLAR	Old River One	4.02	4.02	Kern	South Kern PP
PG&E	SKERN_6_SOLAR1	South Kern Solar PV Plant	5.34	5.34	Kern	South Kern PP