

Evaluation Report of Load Serving Entities' Compliance with 2020 Local and System Resource Adequacy Requirements (November 12, 2019)

The ISO has reviewed and evaluated the aggregate 2020 annual Resource Adequacy (RA) Plans of load serving entities (LSEs) received as of November 5, 2019 and 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 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 and collective capacity deficiencies in several Local Capacity Areas in the PG&E and SCE TAC Areas. The ISO's evaluation shows aggregate compliance with the LCR criteria in the 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 to cure individual or collective deficiencies before the ISO can engage in any backstop procurement.

The ISO notes that the deficient LSEs 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 (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 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.

System Resource Adequacy requirements

The ISO's evaluation shows aggregate compliance with the year ahead RA requirement (90% of the monthly resource adequacy requirement) for the five summer months.

Flex Resource Adequacy requirements

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

Local Resource Adequacy requirements

The LSEs year-ahead RA showings evaluation was performed with the same assumptions as the 2020 LCR report that was used to give LSEs their LCR allocations, namely the LCR report dated May 1, 2019 http://www.caiso.com/Documents/Final2020LocalCapacityTechnicalReport.pdf. The LSEs and suppliers are subject to the RA replacement requirement and are subject to ISO capacity procurement mechanism backstop authority as approved by FERC.

SDG&E TAC Area

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

SCE TAC Area

- 1. Remaining technical need in the SCE TAC Area totals 108.35 MW.
- 2. At this time, individual LSE deficiencies in the SCE TAC Area total 125.33 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 MW to a maximum deficiency of 108.35 MW. If the individual deficient LSE 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):

<u>Big Creek/Ventura Area:</u> an additional 108.35 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 one sub-area:

Santa Clara – with remaining need of 108.35 MW

PG&ETAC Area

- 1. Remaining technical need in the PG&E TAC Area totals 332.89 MW.
- 2. At this time, individual LSE deficiencies in the PG&E TAC Area total 118.97 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 213.92 MW to a maximum deficiency of 332.89 MW. If the individual deficient LSE 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):

<u>Sierra Area:</u> an additional 276.76 MW is needed, from the relevant resources listed in Appendix A, in order to satisfy the LCR criteria. The entire remaining technical need is driven by these sub-areas:

Drum-Rio Oso – with remaining need of 43.99 MW
South of Palermo – with remaining need of 232.77 MW

<u>Stockton Area:</u> an additional 44.37 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 one sub-area:

Tesla-Bellota – with remaining need of 44.37 MW

<u>Fresno Area:</u> an additional 4.67 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 one sub-area:

Borden – with remaining need of 4.67 MW

<u>Kern Area:</u> an additional 7.09 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 one sub-area:

Kern 70 kV – with remaining need of 7.09 MW

Process for curing a Collective Deficiency:

For purposes of curing a collective deficiency, a Scheduling Coordinator for an LSE may submit a revised annual Resource Adequacy Plan by **December 13**, **2019**, 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 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 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 | CRNEVL_6_SJQN 2 | San Joaquin 2 | 0.01 | 0.01 | Fresno | Borden |
| PG&E | WISHON_6_UNITS | Wishon/San Joaquin #1-A Agg | 18.40 | 18.40 | Fresno | Borden |
| PG&E | OLDRIV_6_BIOGAS | Bidart Old River 1 | 1.69 | 1.69 | Kern | Kern 70 kV |
| PG&E | SKERN_6_SOLAR1 | South Kern Solar PV Plant | 5.40 | 5.40 | Kern | Kern 70 kV |
| PG&E | GRNLF2_1_UNIT | Greenleaf II Cogen | 38.99 | 38.99 | Sierra | Drum-Rio Oso |
| PG&E | KELYRG_6_UNIT | Kelly Ridge Hydro | 11.00 | 2.00 | Sierra | Drum-Rio Oso |
| PG&E | SLYCRK_1_UNIT 1 | Sly Creek Hydro | 13.00 | 3.00 | Sierra | Drum-Rio Oso |
| PG&E | BELDEN_7_UNIT 1 | Belden Hydro | 119.00 | 113.13 | Sierra | South of Palermo |
| PG&E | BIOMAS_1_UNIT 1 | Woodland Biomass | 24.31 | 24.31 | Sierra | South of Palermo |
| PG&E | BNNIEN_7_ALTA PH | Alta Power House | 0.68 | 0.68 | Sierra | South of Palermo |
| PG&E | BOWMN_6_HY DRO | NID Bow man Pow erhouse | 2.54 | 2.54 | Sierra | South of Palermo |
| PG&E | BUCKCK_2_HYDRO | Lassen Station Hydro | 0.04 | 0.04 | Sierra | South of Palermo |
| PG&E | BUCKCK_7_OAKFLT | Oak Flat | 1.30 | 1.30 | Sierra | South of Palermo |
| PG&E | DAVIS_7_MNMETH | MM Yolo Power LLC | 1.76 | 1.76 | Sierra | South of Palermo |
| PG&E | DEERCR_6_UNIT 1 | Deer Creek | 2.98 | 2.98 | Sierra | South of Palermo |
| PG&E | FMEADO_6_HELLHL | FMEADO_6_HELLHL | 0.43 | 0.43 | Sierra | South of Palermo |
| PG&E | HAYPRS_6_QFUNTS | Haypress Hydro QF Units | 0.09 | 0.09 | Sierra | South of Palermo |
| PG&E | HIGGNS_1_COMBIE | Combie South | 0.22 | 0.22 | Sierra | South of Palermo |
| PG&E | HIGGNS_7_QFUNTS | HIGGNS_7_QFUNTS | 0.24 | 0.24 | Sierra | South of Palermo |
| PG&E | LODIEC_2_PL1X2 | Lodi Energy Center | 302.58 | 33.18 | Sierra | South of Palermo |
| PG&E | NWCSTL_7_UNIT 1 | New castle Hydro | 0.51 | 0.51 | Sierra | South of Palermo |
| PG&E | OXBOW_6_DRUM | Oxbow Hydro | 3.62 | 3.62 | Sierra | South of Palermo |
| PG&E | PLACVL_1_CHILIB | Chili Bar Hydro | 8.40 | 6.84 | Sierra | South of Palermo |
| PG&E | STIGCT_2_LODI | Lodi STIG Unit | 49.50 | 18.07 | Sierra | South of Palermo |
| PG&E | ULTRCK_2_UNIT | Rio Bravo Rocklin | 22.83 | 22.83 | Sierra | South of Palermo |
| PG&E | FROGTN_1_UTICAA | Angels Powerhouse | 1.40 | 1.40 | Stockton | Tesla-Bellota |
| PG&E | LOCKFD_1_BEARCK | Bear Creek Solar | 0.41 | 0.41 | Stockton | Tesla-Bellota |
| PG&E | LOCKFD_1_KSOLAR | Kettleman Solar | 0.27 | 0.27 | Stockton | Tesla-Bellota |
| PG&E | PEORIA_1_SOLAR | Sonora 1 | 0.41 | 0.41 | Stockton | Tesla-Bellota |
| PG&E | PHOENX_1_UNIT | Phoenix PH | 0.84 | 0.84 | Stockton | Tesla-Bellota |
| PG&E | SCHLTE_1_PL1X3 | Tracy Combined Cycle Plant | 309.51 | 1.00 | Stockton | Tesla-Bellota |
| PG&E | SPRGAP_1_UNIT 1 | Spring Gap Hydro | 0.01 | 0.01 | Stockton | Tesla-Bellota |
| PG&E | STANIS_7_UNIT 1 | Stanislaus Hydro | 91.00 | 22.93 | Stockton | Tesla-Bellota |
| PG&E | STNRES_1_UNIT | Covanta Stanislaus | 18.26 | 0.26 | Stockton | Tesla-Bellota |
| PG&E | ULTPCH_1_UNIT 1 | Pacific Ultrapower Chinese St | 16.19 | 16.19 | Stockton | Tesla-Bellota |
| PG&E | VLYHOM_7_SSJID | Woodw ard Pow er Plant | 0.65 | 0.65 | Stockton | Tesla-Bellota |
| SCE | SNCLRA_2_UNIT | Channel Islands Power | 27.50 | 27.50 | Big Creek/Ventura | Santa Clara |
| SCE | SNCLRA_6_OXGEN | E.F. Oxnard Incorporated | 35.38 | 35.38 | Big Creek/Ventura | Santa Clara |
| SCE | SNCLRA_6_PROCGN | Procter & Gamble Oxnard II | 45.47 | 45.47 | Big Creek/Ventura | Santa Clara |