

Procurement Summary for Compliance with Integrated Resource (IRP) Order D.19-11-016

Energy Division Staff Review of IRP February 2022 Filings

Date: July 2022

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California Public
Utilities Commission

Notes

- All data shown in MW Net Qualifying Capacity (NQC) (Sept.) unless noted.
- This presentation focuses only on procurement data and compliance with D.19-11-016 – it is not representative of all procurement underway by Load Serving Entities (LSEs) for compliance with other CPUC requirements such as D.21-06-035 (aka Mid-Term Reliability Order) or procurement driven by individual LSE portfolio needs.
- Data summarized is current as of February 1, 2022, and does not reflect project delays or acceleration reported since that time.

Background

- The CPUC ordered Load Serving Entities (LSEs) to procure 3,300 MW of new resources by 2023 in November 2019 via an order in the Integrated Resource Planning (IRP) proceeding, D.19-11-016.
- The CPUC established reporting requirements on this LSE procurement and outlined procedures for the need for backstop procurement in D.20-12-044.
- The contents of these slides pertains only to the February 1, 2022, compliance filing for D.19-11-016.
- The procurement obligations for D.19-11-016 are divided into three Tranches, one each for years 2021, 2022, and 2023.
- The procurement obligations applied to all LSEs; however, LSEs were allowed to 'opt-out' of the obligation and have the IOUs procure on their behalf. After opt-outs, procurement obligations apply to 25 LSEs.
- LSEs are required to report on procurement efforts twice per year, in February and August.

Recap of Findings from **February 2021** Data

- All Load Serving Entities (LSEs) subject to D.19-11-016 procurement obligations **submitted timely compliance information** as required in D.20-12-044.
 - These two decisions established the Near-Term IRP Procurement obligation and reporting requirements.
- In February 2021, procurement obligation updates were supplied by 25 LSEs. **All 25 of these LSEs demonstrated an effort** to meet their procurement obligations, especially for Tranche 1 due by 8/1/2021.
- After completing the review of the LSE submitted required documentation, Staff determined that there was **no need to order backstop procurement** at that time.
- Link to last year's report: [Procurement in Compliance with D.19-11-016 \(Feb 2021 Data\)](#)

Executive Summary (for February 2022 data)

- All Load Serving Entities (LSEs) subject to D.19-11-016 procurement obligations submitted timely compliance information as required in D.20-12-044.
- Procurement obligation updates were supplied by 25 LSEs (excludes 18 LSEs that opted-out). All 25 of these LSEs demonstrated an effort to meet their procurement obligations, especially for Tranche 2.
- After completing the review of the LSE submitted required documentation, Staff determined that there is no need to order backstop procurement at this time.
 - While some LSEs are experiencing delays, they did not meet the criteria for backstop procurement (outlined on slide 12).
- Staff plans to review updated data from the LSEs after filings on August 1, 2022.

Additional Key Findings (pt. 1)

- **Progress on Meeting Procurement Obligations by Tranche**
 - LSEs were delayed in meeting **Tranche 1 requirements of 1,650 MW by 8/1/2021**.
 - LSEs collectively had only 1300 MW of the required 1650 MW online as of 8/1/2021.
 - LSEs have a **Tranche 2 obligation of 825 MW by 8/1/2022**, for a cumulative requirement of 2,475 MW.
 - By February 2022, **LSEs had brought 2,100 MW online** – fully completing the Tranche 1 obligation and making progress towards the Tranche 2 obligation.
 - As of February 2022, LSEs are expected to bring 2,740 MW online by 8/1/2022.
 - A portion of 2022 procurement is likely to be delayed due to existing supply chain and other challenges.
 - LSEs have a **Tranche 3 obligation of 825 by 8/1/2023**, for a cumulative requirement of 3,300 MW.
 - LSEs are collectively on track to achieve Tranche 3 with nearly 3,900 MW expected to come online by the conclusion of this order, well exceeding the 3,300 MW requirement. Excess MWs may count towards other IRP orders.
- **Types of Resources Procured**
 - Across all three Tranches, over 80% of the NQC MWs submitted by LSEs were either battery or renewable-plus-storage resources.
 - Thermal resources represented about 7% of the procurement, primarily from Sutter.
 - Solar resources represented about 7% of the procurement. LSEs also procured 5% of other resources, including biomass, geothermal, wind, and demand response.

Additional Key Findings (pt. 2)

- **LSEs self-reported issues with executed procurement contracts**
 - LSEs identified “remediation plans” (i.e., ‘stop gap’ measures) to ensure their obligations would be met.
 - These issues were reported with the filings on February 1, 2022, as well as in subsequent communications with Staff since February 2022.
 - Many projects expected to be online by 8/1/2022 to meet LSE obligations will be delayed based on communications, but most delays are less than 6 months since projects with expected online dates in 2022 were largely underway but may be experiencing late-stage supply chain, construction, and interconnection issues.
 - Staff is actively monitoring all new projects expected online in 2022-2023, including projects procured pursuant to D.19-11-016 as well as other CPUC orders.

Procurement Obligations

Identification of D.19-11-016 Procurement Obligations by LSE Type and Tranche

Procurement Obligations and Opt-Outs by LSE

Opt-Out Status	Tranche 1 Requirement (8/1/2021)	Tranche 2 Requirement (8/1/2022)	Tranche 3 Requirement (8/1/2023)	Adjusted Obligation
No (22 CCAs & ESPs)	496	248	248	992
Yes (18 CCAs & ESPs)				
3 IOUs	1,154	577	577	2,308
Grand Total - 43 LSEs	1,650	825	825	3,300

- **D.19-11-016 established a procurement obligation on all LSEs; however, it allowed LSEs to opt-out of the obligation.**
 - **No Opt-Out:** 22 CCAs and ESPs did not opt-out of IRP Procurement Obligations.
 - **Yes Opt-Out:** 18 CCAs and ESPs opted-out (with the 3 IOUs then obligated to procure on their behalf and the costs charged to the opt-out LSEs)
 - **IOUs:** IOUs received procurement obligations for their own load and the 18 opt-out LSEs
 - Opt-out & new CCA Total MW (included above): SCE: 110.3 MW, SDG&E: 133.4 MW, PG&E: 47.6 MW

Requirements by Tranche by LSE (MW)

- Each LSE has a unique MW procurement obligation for each Tranche
- 25 LSEs submitted information related to all their procurement obligations

Reporting LSE Full Name	LSE	Reporting LSE Ty	Tranche 1 Requirement (8/1/2021)	Tranche 2 Requirement (8/1/2022)	Tranche 3 Requirement (8/1/2023)	Adjusted Obligation
Apple Valley Choice Energy	AVCE	CCA	1.9	1.0	1.0	3.8
Clean Power Alliance of Southern California	CPASC	CCA	98.5	49.2	49.2	196.9
Clean Power San Francisco	CPSF	CCA	28.5	14.3	14.3	57.0
Direct Energy, L.L.C.	DEB	ESP				
East Bay Community Energy	EBCE	CCA	49.8	24.9	24.9	99.6
Lancaster Clean Energy	LCE	CCA	4.7	2.4	2.4	9.4
Marin Clean Energy	MCE	CCA	43.8	21.9	21.9	87.5
Monterey Bay Community Power Authority	MBCPA	CCA	28.7	14.4	14.4	57.4
Peninsula Clean Energy	PCEA	CCA	27.5	13.8	13.8	55.0
PG&E	PGE	IOU	382.6	191.3	191.3	765.1
Pico Rivera Innovative Municipal Energy	PRIME	CCA	1.3	0.7	0.7	2.6
Pioneer Community Energy	PIONEER	CCA	9.3	4.6	4.6	18.5
Rancho Mirage Energy Authority	RMEA	CCA	2.4	1.2	1.2	4.8
Redwood Cost Energy Authority	RCEA	CCA	5.4	2.7	2.7	10.7
San Jacinto Power	SJP	CCA	1.4	0.7	0.7	2.8
San Jose Clean Energy	SJCE	CCA	38.8	19.4	19.4	77.6
SCE	SCE	IOU	620.7	310.3	310.3	1,241.3
SDG&E	SDGE	IOU	150.7	75.3	75.3	301.3
Shell Energy North America	SENA	ESP				
Silicon Valley Clean Energy	SVCEA	CCA	33.6	16.8	16.8	67.2
Sonoma Clean Power	SOMA	CCA	21.7	10.8	10.8	43.3
UC Office of the President	UCOP	ESP				
Valley Clean Energy Alliance	VCEA	CCA	6.3	3.2	3.2	12.6
Calpine Energy Solutions	NES	ESP				
Calpine PowerAmerica-CA, L.L.C. (1362)	CPA	ESP				
Grand Total			1,650	825	825	3,300

Note: ESP obligations are confidential and have been redacted.

Ruling issued on September 23, 2021 into R. 20-05-003, specifically with reference to D.06-06-066, modified by D.07-05-043.

Milestone Requirements

- D.19-11-016 and D.20-12-044 established that LSEs would report their progress against a series of milestones to the CPUC in compliance filings. These milestones represent steps toward procuring a resource and achievement of online status.
 - **Milestone 1:** a signed contract with a resource developer for provision of commercial technology, an interconnection agreement with a demonstrated path toward deliverability by the required online date, signed land leases or title deeds demonstrating project site control, and a project timeline. This milestone may also show intended procurement from demand response resources, as well as allowable imports.
 - **Milestone 2:** a showing of a “notice to proceed” or similar contractual evidence of construction commencement for new construction projects, as well as executed contracts for demand response, imports, or sales of excess resources between LSEs.
 - **Milestone 3:** evidence of a project being online and capable of delivering energy, or in the case of demand response, load reduction.

Criteria for Ordering Backstop Procurement

Established in D. 20-12-044:

Commission staff will evaluate the need for backstop procurement to be required by the Commission based on progress towards Milestones 1 and 2 for the year in which the capacity is required to come online by August 1.

Resource-specific considerations:

- Whether there is complete contract failure or delay
- Length of delay estimated
- Whether a project has failed to meet multiple milestones
- Whether the delay is related to interconnection or transmission
- Project stage of development
- Quality of LSE or developer remediation plan (including diagnosis for the delay/failure and achievable mitigation steps, backed up by evidence)

LSE-specific considerations:

- Pattern of success in meeting previous milestones
- Quality of mitigation or remediation plan
- Thoroughness of documentation

Procurement Reported by LSEs on February 1, 2022

Aggregation of Procurement Reported to CPUC
by LSE Type and Tranche

Procurement Reported by Tranche by LSE Type

LSE Type <input type="checkbox"/>	Tranche 1 Requirement	Tranche 1 Claimed	Excess or Shortfall Tranche 1	Tranche 2 Requirement	Tranche 2 Claimed	Excess or Shortfall Tranche 2	Tranche 3 Requirement	Tranche 3 Claimed	Excess or Shortfall Tranche 3
IOU	1,154	1,197	43	1,731	1,642	(89)	2,308	2,477	169
CCA	403	730	327	605	1,101	496	807	1,245	438
ESP	93	109	16	139	179	40	186	218	32
Grand Total	1,650	2,036	386	2,475	2,922	446	3,300	3,939	639

- LSEs provided documentation that reports they expect to be collectively **over-procured** for all Tranches.
- Most LSEs, including all CCAs and ESPs, submitted sufficient documentation to indicate they are on track to meet their Tranche 2 requirement

Procurement by Expected Online Date (not Tranche)

Procurement Reported by LSE Type and Expected Online Date

LSE Type	Online by 8/1/21	Online by 8/1/22	Online by 8/1/23	Grand total (include procurement delayed past order)
CCA	409	585	145	1,198
ESP	109	68	39	216
IOU	801	766	828	2,475
Grand total (include procurement delayed past order)	1,319	1,420	1,011	3,889

Exceeds 3300 MW order

Below Tranche 1 (1650 MW NQC) of order

- This chart sorts the MWs reported by expected online dates instead of Tranche to demonstrate that online date and Tranches do not directly correspond (as some Tranche 1 procurement occurred late)
- The grand total is higher than the sum of the three buckets as some procurement either has an invalid COD or is delayed past 8/1/2023
- The expected total (3,889 MW) still well exceeds the 3,300 MW required online by 8/1/2023

Procurement Reported by Resource Type and Expected Online Date

Sum of New NQC				
resource_type	Online by 8/1/21	Online by 8/1/22	Online by 8/1/23	Grand total (include procurement delayed past order)
battery	394	919	778	2,171
biomass	4			4
dr	7	6		13
loadmod	23	1	5	28
solar	56	93	70	219
thermal	277			284
wind	91	73		164
solar+battery	468	328	158	1,006
Grand total (include procurement delayed past order)	1,319	1,420	1,011	3,889

- Vast majority of procurement is either paired resources (solar+battery) or standalone batteries.

Total Online vs. In Development (Resource Type)

- This chart shows which resources were online versus in development as of February 2022
- More than half of total expected resources are online
- Most resources still in development are batteries

New NQC by Resource			
		pending	online
CCA	battery	152	199
	biomass		4
	dr		13
	loadmod	1	23
	solar	74	36
	thermal		222
	wind	15	123
	solar+battery	158	181
ESP	battery		13
	solar	64	46
	thermal		43
	wind		27
	solar+battery	25	
IOU	battery	1,232	575
	loadmod	5	
	thermal		20
	solar+battery	20	598
Grand total		1,745	2,120

Tranche 1: Online On Time vs. Currently Online

- This table compares how types of LSEs completed Tranche 1
- As of the required online date for Tranche 1, only ~1300 of 1650 required MWs had come online
- LSEs were able to catch up by the February 2022 filings and have now collectively met Tranche 1 with 2,100 MW online

	Tranche 1 Requirement	Online as of 8/1/21	Online as of 2/1/22	Shortfall/ Excess as of 8/1/2021	Shortfall/ Excess as of 2/1/2022
IOU	1,154	801	1,193	(353)	39
CCA	403	409	764	6	361
ESP	93	109	143	16	50
Grand Total	1,650	1,319	2,100	(331)	450

Tranche 1: Online On Time vs. Currently Online by LSE

- While most LSEs achieved Tranche 1 by the time of 2/1/2022 filings, two IOUs (PG&E and SDG&E) are still short and not eligible for backstop procurement
- Several LSEs were late in meeting their Tranche 1 obligations, but caught up by 2/1/2022

	Tranche 1 Requirement	Online as of 8/1/21	Online as of 2/1/22	Shortfall/ Excess as of 8/1/2021	Shortfall/ Excess as of 2/1/2022
AVCE	1.9	2.7	3.0	0.8	1.1
CCCE	28.7	60.0	60.0	31.3	31.3
CPA					
CPASC	98.4	50.8	221.8	(47.6)	123.4
CPSF	28.5	21.1	47.7	(7.4)	19.2
DEB					
EBCE	49.8	41.1	51.1	(8.7)	1.3
LCE	4.7	6.1	6.4	1.4	1.7
MCE	43.8	74.5	74.5	30.7	30.7
NES					
PCEA	27.5	41.2	45.8	13.7	18.3
PGE	382.6	213.0	313.0	(169.6)	(69.6)
PIONEER	9.2	9.2	15.2	-	6.0
PRIME	1.3	1.9	2.5	0.6	1.2
RCEA	5.4	5.5	5.5	0.1	0.1
RMEA	2.4	3.3	3.6	0.9	1.2
SCE	620.6	558.0	745.6	(62.6)	125.0
SDGE	150.6	30.0	134.0	(120.6)	(16.6)
SENA					
SJCE	38.8	48.8	91.3	10.0	52.5
SJP	1.4	2.2	2.6	0.8	1.2
SOMA	21.6	-	29.0	(21.6)	7.4
SVCE	33.6	33.6	90.3	-	56.7
UC					
VCEA	6.3	7.0	14.0	0.7	7.7
Grand Total	1,650	1,319	2,100	(331)	450

Note: ESP obligations are confidential and have been redacted.

Questions?

More Information: <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/long-term-procurement-planning/more-information-on-authorizing-procurement/irp-procurement-track>

- **D.19-11-016 (Order Requiring Procurement):** <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M319/K825/319825388.PDF>
- **D.20-12-044 (Order Setting Backstop and Reporting Requirements):** <https://docs.cpuc.ca.gov/SearchRes.aspx?docformat=ALL&docid=356271811>

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