# Summary of Compliance with Integrated Resource Planning (IRP) Order D.19-11-016 and Progress Toward Mid Term Reliability (MTR) D.21-06-035 Procurement

Energy Division Staff Review of IRP August 2022 Data Filing

February 2023

<u>www.cpuc.ca.gov/irp</u>



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#### Notes

- All data shown in MW Net Qualifying Capacity (NQC) 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).
- An additional appendix includes procurement toward D.21-06-035 Mid Term Reliability (MTR). This is not compliance level data and only includes preliminary staff descriptions of what the data shows.
- All data summarized herein is current as of Aug 1, 2022, submittals, inclusive of any subsequent communications with staff on filings.
- On Friday January 13th, 2023, a Supplemental MTR Procurement Order for 2026-2027 and Transmission Planning Process Proposed Decision (Supplemental MTR and TPP PD)\* was served to the service list for R.20-05-003.
  - The PD orders supplemental MTR procurement of a total of 4,000 MW of net qualifying capacity (NQC) for 2026 and 2027
  - This procurement is in addition to the 11,500 MW ordered previously in D.21-06-035.
  - This decision would also automatically postpone the LLT resources from D.21-06-035 from 2026 to 2028.
  - The data in this report does not take into account the additional procurement in the PD.

\* <u>Proposed Decision Re: Decision Ordering Supplemental Mid-Term Reliability Procurement (2026-2027) And Transmitting</u> <u>Electric Resource Portfolios To California Independent System Operator For 2023-2024 Transmission Planning Process.</u>

# D.19-11-016 Background

D.19-11-016 overview and Recap of Findings from D.19-11-016 February 2022 Data

# Background on D.19-11-016

- 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 LSEs submitted compliance filings in February 2022 in compliance with these orders this is the data we are currently analyzing.
- The procurement obligations for D.19-11-016 are divided into three tranches, one each for years 2021, 2022, and 2023.
- LSEs are required to report on procurement efforts twice per year, in February and August.
- This is the third Procurement Progress Report for D.19-11-016:
  - Procurement in Compliance with D.19-11-016 per February 1, 2022 Filings, 7/22/2022
  - Procurement in Compliance with D.19-11-016 per February 1, 2021 Filings, 8/23/2021

## Recap of Findings from 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.
- Staff determined that there was **no need to order backstop procurement** at the time of the review (July 2022) based on the LSE data submitted in February 2022.
  - While some LSEs were experiencing delays, they did not meet the criteria for backstop procurement (outlined on slide 15).

# August 2022 Key Updates on Compliance Status

# Key Findings from August 2022 Data (Part 1 of 2)

#### 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 1,284 MW of the required 1,650 MW online as of 8/1/2021.
  - As of 8/1/2022 LSEs fully completed their Tranche 1 obligation.
- LSEs have a **Tranche 2 obligation of 825 MW by 8/1/2022**, for a cumulative requirement of 2,475 MW.
  - As of August 2022, LSEs had brought 2,621 MW online fully completing the Tranche 1 obligation and collectively reaching their Tranche 2 obligation.
- LSEs have **a Tranche 3 obligation of 825 MW by 8/1/2023**, for a cumulative requirement of 3,300 MW.
  - LSEs are collectively on track to achieve Tranche 3 with nearly 3,800 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.

# Key Findings from August 2022 Data (Part 2 of 2)

#### Types of Resources Procured

- Across all three tranches, 81% of the 3,300 MW NQC requirement is being met with storage only or renewable-plus-storage resources.
- Approximately 12% of the requirement is being met with solar-only, biomass, geothermal, wind, and demand response resources.
- The remaining 7% -- less than 240 MW is being met with natural gas generation.
  - Natural gas was eligible for D.19-11-016 compliance under limited circumstances, it is not eligible for MTR compliance.

#### LSE Self-Reported Procurement Issues

- Multiple LSEs identified stop gap remedial measures ("remediation plans") to ensure their obligations would be met.
- These remedial measures were reported in LSEs' August 1, 2022, filings and in subsequent communications with Staff.
- Some projects expected to be online by 8/1/2023 to meet LSE obligations will be delayed based on communications and LSEs have identified other resources to bring online to meet their obligation.
- Staff is actively monitoring all new projects expected online in 2023, including projects being procured pursuant to D.19-11-016 and 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 allowed non-IOU LSEs to opt-out of procuring their share of the procurement obligation and instead allow IOUs in their service territories to procure on their behalf.
  - No Opt-Out: 22 CCAs and ESPs did not opt-out of IRP Procurement Obligations.
  - Yes Opt-Out: 18 CCAs and ESPs opted-out (knowing that the 3 IOUs would be then obligated to procure on their behalf and the costs charged to the opt-outs).
  - 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

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#### Requirements by Tranche by LSE

- Each LSE has a procurement requirement for each tranche
- 25 LSEs submitted information related to all their requirements
- LSEs that opted out of procurement are not included in table -- their MW requirements are included in IOU totals

Note: Consistent with the 9/23/21 ruling in R. 20-05-003, specifically in reference to D.06-06-066, modified by D.07-05-043, ESP obligations are confidential and have been redacted.

LSE Type	Reporting LSE Full Name	LSE	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	1.9	1.0	1.0	3.8
	Monterey Bay Community Power Authority	CCCE	28.7	14.4	14.4	57.4
	Clean Power Alliance of Southern California	CPASC	98.5	49.2	49.2	196.9
	CleanPowerSF	CPSF	28.5	14.3	14.3	57.0
	East Bay Community Energy	EBCE	49.8	24.9	24.9	99.6
	Lancaster Choice Energy	LCE	4.7	2.4	2.4	9.4
	Marin Clean Energy	MCE	43.8	21.9	21.9	87.5
	Peninsula Clean Energy Authority	PCEA	27.5	13.8	13.8	55.0
CCA	Pioneer CommunityEnergy	PIONEE R	9.3	4.6	4.6	18.5
	Pico Rivera Innovative Municipal Energy	PRIME	1.3	0.7	0.7	2.6
	Redwood Coast Energy Authority	RCEA	5.4	2.7	2.7	10.7
	Rancho Mirage Energy Authority	RMEA	2.4	1.2	1.2	4.8
	San Jose Clean Energy	SJCE	38.8	19.4	19.4	77.6
	San Jacinto Power	SJP	1.4	0.7	0.7	2.8
	Sonoma Clean Power Authority	soma	21.7	10.8	10.8	43.3
	Silicon Valley Clean Energy Authority	SVCE	33.6	16.8	16.8	67.2
	Valley Clean Energy Alliance	VCEA	6.3	3.2	3.2	12.6
	Calpine Power America	СРА				
	Direct Energy Business	DEB				
SP	Calpine Energy Solutions	NES				
	Shell Energy North America	SENA				
	University of California	UC				
	Pacific Gas & Electric	PGE	382.6	191.3	191.3	765.1
JU	Southern California Edison	SCE	620.7	310.3	310.3	1241.3
	San Diego Gas & Electric	SDGE	150.7	75.3	75.3	301.3
	Grand Total		1,650	825	825	3,300

#### **IRP** Procurement Orders and Compliance Review Schedule

#### Table 1. CPUC Procurement Orders (MW NQC)

CPUC Orders	Total	2021	2022	2023	2024	2025	2026
<b>D.19-11-016</b> Applies to 25 LSEs since 18/43 LSEs opted out.	3,300 MW	1,650 MW by Aug 1	825 MW by Aug 1	825 MW by Aug 1	n/a	n/a	n/a
<b>D.21-06-035 (MTR)</b> Applies to all CPUC- jurisdictional LSEs. No opt-outs allowed.	11,500 MW	n/a	n/a	2,000 MW by Aug 1	6,000 MW by June 1	1,500 MW <sup>1</sup> by June 1	2,000 MW <sup>2</sup> by June 1
Cumulative Procurement Ordered	14,800 MW	1,650 MW	2,475 MW	5,300 MW	11,300 MW	12,800 MW	14,800 MW

#### Table 2. CPUC Review of LSE Contracting Progress

	2021	2022	2023	2024	2025	2026
CPUC Reviews LSE Compliance Filings <u>and</u> CPUC could order Backstop Procurement	February 2021	February 2022	February 2023 & December 2023	December 2024	December 2025	June 2026
CPUC Reviews LSE Compliance Filings <u>only</u>	August 2021	August 2022	August 2023	June 2024	June 2025	

Notes:

(1) D.21-06-035 required 2,500 of the 9,000 MW required between 2023-2025 be "Diablo-Canyon Replacement".

(2) D.21-06-035 required 2,000 MW of Long-Lead Time Procurement by 2026, with an option to extend to 2028: 1,000 MW of long-duration storage and 1,000 MW of firm zero-emitting.

## **Milestone Requirements**

- **Milestone 1:** a <u>signed contract</u> with a resource developer for provision of commercial technology, an <u>interconnection agreement</u> with a demonstrated path toward deliverability by the required online date, signed land leases or title deeds demonstrating <u>project site control</u>, and a <u>project timeline</u>. This milestone may also show intended procurement from demand response resources, as well as allowable imports.
- **Milestone 2:** a showing of a "<u>notice to proceed</u>" or similar contractual evidence of construction commencement for new construction projects, as well as <u>executed contracts for demand response, imports,</u> or sales of excess resources between LSEs.
- **Milestone 3**: <u>evidence of a project being online</u> and capable of delivering energy, or in the case of demand response, load reduction.

# **Criteria for Ordering Backstop Procurement**

D. 20-12-044 directed that CPUC staff are to evaluate the need for backstop procurement to be required by the CPUC 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

#### Progress Towards D.19-11-016 Procurement Requirement Procurement Reported by LSEs in Their August 1, 2022, Compliance Filings

Aggregation of Procurement Reported to CPUC by LSE Type and Tranche

### Notes about Tables

- These tables only include procurement pursuant to D.19-11-016
- Appendix tables show MTR procurement separately, but the combination of these tables still does not constitute all procurement activity, since LSEs also procure for other purposes (i.e., to meet RPS requirements, storage mandates, Resource Adequacy, individual portfolio needs, etc.)
- These tables are current as of the 8/1/2022 filing date, including subsequent communications with Staff, but they have not been updated based on Summer Reliability procurement reports or the11/1/22 LSE Integrated Resource Plan filings.

#### Procurement Reported by Tranche by LSE Type

Row Labels	Requirement Tranche 1	Tranche 1 Claimed	Excess or Shortfall Tranche 1	Requirement Tranche 2	Tranche 2 Claimed	Excess or Shortfall Tranche 2	Requirement Tranche 3	Tranche 3 Claimed	Excess or Shortfall Tranche 3
IOU	1,154	1,241	88	1,731	1,788	58	2,308	2,321	14
CCA	403	728	325	605	1,179	574	807	1,307	500
ESP	93	118	25	139	187	47	186	225	40
Grand Total	1,650	2,088	438	2,475	3,154	679	3,300	3,790	554

- LSE reporting indicates that collectively they expect to be 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 1 and Tranche 2 requirements

# Procurement Reported by LSE Type and Expected Online Date

Plus/Minus Tranche Requirements	Below the 1,650 MW ordered for Tranche 1		Above the Tranche 3 orde and so some excess may carryover to MTI	/	
Grand Total	1,284	1,337	1,104	106	3,853
IOU	743	607	914	106	2,321
ESP	118	68	39		225
ССА	423	712	165		1,307
LSE Type	Online as of 8/1/21	Online as of 8/1/22	Online by 8/1/23	Online after 8/1/23	Grand Total

- This chart sorts the MWs reported by expected online dates (instead of by tranche) to demonstrate that online dates and tranches do not directly correspond (e.g., some Tranche 1 procurement occurred late)
- The grand total is higher than the sum of the three buckets ,as some procurement had inaccurate Commercial Operation Dates (CODs)
- The expected total (3,803 MW) well exceeds the 3,300 MW required to be online by 8/1/2023 California Public Utilities Commission

#### Procurement by LSE by Online Date

LSE Type	LSE	Online as of 8/1/21	Online as of 8/1/22	GrandTotal
	AVCE	3	0	3
	CCCE	60	0	60
	CPASC	56	400	456
	CPSF	30	69	99
	EBCE	41	26	67
	LCE	6	3	9
	MCE	74		74
	PCEA	42	4	46
CCA	PIONEER	9	11	20
	PRIME	2	1	3
	RCEA	6		8
	RMEA	3	0	4
	SJCE	49	54	103
	SJP	2	0	3
	Soma	0	75	75
	SVCE	33	57	90
	VCEA	7	10	17
	СРА			
	DEB			
ESP	NES			
	SENA			
	UC			
	PGE	213	250	463
IOU	SCE	490	188	678
	SDGE	40	169	209
Gra	nd Total	1,284	1,337	2,671

#### Procurement Reported by Resource Type and Expected Online Date

Resource Type	Online by 8/1/21	Online by 8/1/22	Online by 8/1/23	Online after 8/1/23	Grand Total
Battery	796	932	946	106	2,731
Biomass	4				4
DR	30	9	8		47
Solar	75	390	150		615
Thermal	278	8			294
Wind	101	49	14		163
Grand Total	1,284	1,387	1,118	106	3,854

• The vast majority of procurement is either paired solar and battery resources or standalone batteries.

# Total Online vs. In Development (Resource Type)

- This chart shows the resources that were online and the resources that were in development as of August 2022
- About two-thirds of total expected resources are online
- Most of the resources that are still in development are batteries

LSE Type	Resource Type	Pending	Online
	Battery	147	320
	Biomass		4
ССА	DR	3	38
	Solar	102	333
	Thermal		230
	Wind	14	116
	Battery		28
	Solar	39	81
ESP	Thermal		44
	Wind		34
	Battery	983	1,253
	DR	5	
IOU	Solar	10	50
	Thermal		20
	Grand Total	1,302	2,551

# Tranche Obligations and Online Date Comparisons

# Are LSEs types meeting their tranche requirements on time?

- As of the 8/1/21 Tranche 1 online deadline, only ~1,300 MW of the ordered 1,650 MWs of Tranche 1 resources had come online
- Even though the IOUs did not meet Tranche 2 on time, LSEs were collectively able to meet Tranche 2 on time (and "catch up" on the Tranche 1 requirements) due to excess procurement by the CCAs and ESPs

LSE Type	Requirement Tranche 1	Online as of 8/1/21	Excess or Shortfall 2021	Requirement Tranche 2	Online as of 8/1/22	Excess or Shortfall 2022	Requirement Tranche 3	Online by 8/1/23	Excess or Shorffall 2023	Adjusted Obligation	Online after 8/1/23	Excess or Shortfall total
CCA	403	423	20	605	1,135	530	807	1,300	493	807	1,307	500
ESP	93	118	25	139	187	48	186	225	39	186	225	39
IOU	1,154	743	(411)	1,731	1,350	(381)	2,308	2,264	(44)	2,308	2,321	13
Grand Total	1,650	1,284	(366)	2,475	2,621	146	3,301	3,739	438	3,301	3,803	552

#### Are LSEs meeting their Tranche requirements on time?

- Several LSEs were late in meeting their Tranche 1 obligations, but caught up by 2/1/2022 (except PG&E and SDG&E)
- Several LSEs are late for Tranche 2: EBCE, PG&E, SCE, SDG&E
- Note: ESP individual obligations are confidential, but ESPs are collectively on track

LSEs	Requirement Tranche 1	Online as of 8/1/21	Excess or Shortfall Tranche 1	Requirement Tranche 2	Online as of 8/1/22	Excess or Shortfall Tranche 2
AVCE	2	3	1	3	3	0
CCCE	29	60	31	43	60	17
CPASC	98	56	(43)	148	456	308
CPSF	29	30	1	43	99	56
EBCE	50	41	(9)	75	67	(8)
LCE	5	6	1	7	9	2
MCE	44	74	31	66	74	9
PG&E	383	213	(170)	574	463	(111)
PCEA	28	42	14	41	46	5
PIONEER	9	9	0	14	20	6
PRIME	1	2	1	2	3	1
RCEA	5	6	0	8	8	0
SCE	621	490	(131)	931	678	(253)
SDG&E	151	40	(111)	226	209	(17)
RMEA	2	3	1	4	4	0
SJCE	39	49	10	58	103	45
SJP	1	2	1	2	3	1
soma	22	0	(22)	33	75	43
SVCE	34	33	(1)	50	90	39
VCEA	6	7	]	9	17	7
ALL ESPs	93	118	25	139	187	48
Grand Total	1,650	1,284	(366)	2,475	2,671	196

## Takeaways

• LSEs have procured 3,803 MW that could count towards D.19-11-016 compliance obligations

- Of the total amount procured, there were 2,671 MW of resources that came online by August 1, 2022, which means that LSEs collectively met their combined Tranche 1 and 2 obligations of 2,450 MW.
- Since the total amount procured exceeds the D.19-11-016 procurement obligation, staff expects the LSEs to apply some of these MWs to their MTR procurement obligations in future filings.
- The 3,803 MW of procurement reported in the August 2022 filings represents a small (~85 MW) reduction from the amount included in the February 2022 filings.
  - It is unclear whether this adjustment resulted from some of the reported procurement being shifted to count towards one or more LSEs' MTR obligations or a project failure.

## Takeaways (Cont'd)

- While LSEs have collectively exceeded their Tranche 1 and 2 obligations, 4 LSEs (EBCE, PG&E, SCE, and SDG&E) did not meet Tranche 2 on time
  - EBCE, SCE, PG&E, and SDG&E experienced project delays that prevented them from meeting their Tranche 2 requirements on time.
  - In its the February 2022 filing review, Staff determined that no backstop procurement was necessary because (a) EBCE and SCE were sufficiently contracted towards Tranche 2 at that time but have subsequently experienced project delays and (b) PG&E and SDG&E had reported deficits but were not eligible for backstop procurement.
  - In their August 2022 filings, all LSEs (including the 4 deficient LSEs) have reported contracting efforts to recover the deficit reported for Tranche 2 by August 1, 2023.
  - Staff will perform additional review of the February 1, 2023, compliance filings to assess the status of the Tranche 2 and 3 obligations, and the CPUC will assess whether backstop procurement or other mitigation actions need to be triggered at that time.

# Appendix I: Tables Showing Preliminary Progress toward Mid-Term Reliability (MTR) via D.21-06-035

# Background on Midterm Reliability (MTR) Order

- The CPUC ordered Load Serving Entities (LSEs) to procure 11,500 MW of new resources between August 2023 and June 2026 via a Midterm Reliability (MTR) order in the Integrated Resource Planning (IRP) proceeding, D.21-06-035.
- LSEs will first submit compliance filings in February 2023 in compliance with D.21-06-035. LSEs will continue to file twice per year.
  - Staff requested and received significant voluntary data submissions in August 2022 (in advance of the February 2023 MTR compliance filings) and that data is summarized herein, but it is not meant to be used for MTR compliance determinations, it is simply offered here as a progress showing.
- The procurement obligations for D.21-06-035 are annual and delineated by procurement category (specified below).
- All procurement must be clean, and specifically, at least:
  - 2,500 MW must be from zero-emitting generation, generation paired with storage, or demand response resources to replace Diablo Canyon.
  - 1,000 MW must be from firm clean resources
  - An additional 1,000 MW must be from long-duration energy storage

## **MTR Requirements Summary**

	Mid-Term Reliability (MTR) Procurement Requirements by Tranche and Category (NQC MW)								
	Procurement Category	2023	2024	2025	2026	Total			
α	Total MTR Required Procurement by Year	2,000	6,000	1,500	2,000	11,500			
b	Diablo Canyon Replacement 2023-2025 Online Dates		2,500			2,500			
с	Other/General Procurement 2023-2025 Online Dates		7,000			7,000			
d	Long Lead-Time - Long-Duration Storage				1,000	1,000			
е	Long Lead-Time - Firm Zero-Emitting			1,000	1,000				
= b + c + d + e	Total MTR Procurement	9,500		2,000	11,500				

For the purpose of this presentation the following procurement obligation years are labeled as:

2023: Tranche 1 2024: Tranche 2 2025: Tranche 3 2026 Lond Duration Storage: Tranche 4 LDES 2026 Firm Zero-Emitting: Tranche 4 Firm ZE

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## Notes on Data

- The following data uses MTR ELCCs where possible this means the numbers appear lower than the D.19-11-016 February's filings as well as any Summer Reliability reporting on these projects
  - The resource type table uses MTR ELCCs
  - The tables also include some manual data fixes by Staff
- SDG&E and some ESPs did not use this opportunity to voluntarily report procurement toward MTR
  - The following MTR data excludes these LSEs' procurement and obligations to prevent skewing the data
- The following MTR progress report is not inclusive of the additional 4,000 MW NQC procurement 2026-2027 obligations proposed in the January 13, 2023, Supplemental MTR and TPP PD.

\* <u>Proposed Decision Re: Decision Ordering Supplemental Mid-Term Reliability Procurement (2026-2027) And Transmitting</u> <u>Electric Resource Portfolios To California Independent System Operator For 2023-2024 Transmission Planning Process.</u>

# MTR Procurement by LSE Type and Online Date

LSE Type	Obligation 2023	Tranche 1 Claimed	Obligation 2024	Tranche 2 Claimed	Obligation 2025	Tranche 3 Claimed	Obligation 2026 (LLT resources)	Tranche 4 LDES Claimed	Tranche 4 Firm ZE Claimed	Total Obligation	Total MTR Claimed
ССА	620	630	1,854	1,042	463	409	620	108	120	3,556	2,308
ESP	126	170	378	71	94	-	126	-	-	724	241
IOU	1,087	896	3,261	1,684	815	105	1,087	-	-	6,250	2,685
Grand Total	1,833	1,696	5,494	2,797	1,372	514	1,833	108	120	10,530	5,235

- This table shows the NQC of LSEs by type showing the progress made towards the obligation and online date, by year. The data is not cumulative in order to separately show Tranche 4 LDES and Firm ZE progress.
- This table excludes LSEs (and their obligations) that did not voluntarily report on their MTR procurement, so the total obligation shown is 10,530 MW instead of the 11,500 MW.
- LSEs are not collectively on track to meet their 2023 requirements under MTR according to this table but would likely have enough D.19 excess to fill the gap if all expected projects come online.
- By June 2024, LSEs are required to bring 8,000 total MWs online (between 2023 and 2024 obligations).
  - By August 2022, LSEs showings included procurement for at least ~4,500 MW of that with significant variations by LSE. While this means significantly more procurement will need to occur, this data was collected prior to the first compliance filing of February 2023. Staff will be monitoring subsequent data updates closely for more progress toward the 2024 target. About one third of 2025 procurement has occurred and low volumes of LLT procurement.

#### MTR Procurement by Resource Type and Online Date

Row Labels	Online by 8/1/23	Online by 6/1/24	Online by 6/1/25	Online by 6/1/26	Grand Total
Battery	1,395	1,327	295	81	3,097
DR	24				24
Geothermal	26	52	12	37	126
Solar	635	1,049	150	23	1,857
Wind	113		17		130
Grand Total	2,193	2,428	473	140	5,235

• Similar to procurement pursuant to D.19-11-016, most LSEs are procuring standalone batteries or paired renewable-plus-storage resources for MTR

# Takeaways

- Most LSEs have begun conducting MTR procurement, but significantly more procurement is needed to meet the full obligations.
- At the time of the data reporting, collectively LSEs are behind in 2024 and for LLT procurement; however, contracting efforts have been ongoing.
- LSEs will be subject to important compliance milestones for LLT procurement in February 2023 (extension requests to 2028 due) and December (backstop procurement for LLT) 2023.

### **Questions?**



Contact Sophie Babka for questions regarding this presentation at:

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