

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Continue Electric
Integrated Resource Planning and Related
Procurement Processes

R.20-05-003
(Filed May 7, 2020)

**CLEAN POWER ALLIANCE OF SOUTHERN CALIFORNIA'S
DECEMBER 2024 INTEGRATED RESOURCE PLAN PROCUREMENT DATA
UPDATE
[PUBLIC VERSION]**

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December 2, 2024

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OF THE STATE OF CALIFORNIA**

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Integrated Resource Planning and Related
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In compliance with the requirements of California Public Utilities Code Sections 454.51 and 454.52; California Public Utilities Commission ("Commission") Decision ("D.")18-02-018, D.19-11-016, D.20-12-044, D.21-06-035, and D. 23-02-040; and Energy Division's directions emailed on November 7, 2024 and November 13, 2024, Clean Power Alliance of Southern California ("CPA") hereby provides its December 2024 Integrated Resource Plan ("IRP") Procurement Data Update to the Commission.

I. INTEGRATED RESOURCE PLAN INCLUDED AS ATTACHMENTS TO THIS FILING

CPA is filing this pleading in Rulemaking 20-05-003 ("Rulemaking") and serving it to all parties identified in this Rulemaking's service list. The confidential version of CPA's filing consists of an unredacted RDTv3 template and supporting documentation ("Supporting Documentation"), demonstrating progress of procured incremental capacity resources toward project Milestones, as required by D.20-12-044 (together, "Compliance Filing"). CPA's confidential version of the Compliance Filing has been provided to the Commission through the Commission's secure FTP site and the CPUC E-file system. Attached to this pleading are CPA's verification, pursuant to Rule 1.11, and CPA's redacted, public version of CPA's RDTv3

template. With the exception of public, non-confidential documents, CPA's Supporting Documentation has been redacted as appropriate from the public version of CPA's Compliance Filing.

II. CONCLUSION

CPA appreciates the Commission's effort in this Rulemaking and for its review of CPA's IRP Procurement Data Update.

Dated: December 2, 2024

Respectfully submitted,

/s/ C.C. Song

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Attachment A: CPA Verification

Verification

Consistent with the direction provided in Energy Division’s November 7, 2024 and November 13, 2024 Guidance Emails and Rule 1.11 of the California Public Utilities Commission’s (“Commission”) Rules of Practice and Procedure, Clean Power Alliance of Southern California provides this Verification. I am an officer of the reporting organization herein and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters which are therein stated on information or belief, and as to those matters, I believe them to be true. I declare under the penalty of perjury that the foregoing is true and correct.

Executed on December 2, 2024, at Los Angeles, California.

Respectfully submitted,

/s/ Matthew Langer

Matthew Langer

Chief Operating Officer

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Attachment B: CPA RDTv3 and Supporting Documents [Public]

hs_mfwa_contract_id	resource	alternative_resource_name	contract_status	project_interconnection_position	interconnection_substation	marginal_addition	marginal_addition_to	total_nameplate_capacity	contracted_nameplate_capacity	rep_contracted_mw_pct	contract_gwh_annual	is_hybrid_paird
energyCPAS0005b	_SUNCAT_2_A3ABT2	Arlington Solar + Storage - 132 MW BESS	Online	1196	Colorado River	NA		132	132	-	-	ExistingSolar/ExistingStorage
energyCPAS0005c	_NEW_GENERIC_SOLAR_SAXIS	Arlington Solar + Storage - 133 MW PV	Online	1196	Colorado River	NA		133	133	-	393	ExistingSolar/ExistingStorage
energyCPAS0005d	_ARLNTN_2_AR15E1	Arlington Solar + Storage - 100 MW PV	Online	1196	Colorado River	NA		100	100	-	296	ExistingSolar/ExistingStorage
energySanborn Storage	_SANBRN_2_SB8B1	Sanborn Storage	Online	1424	Windhub	NA		75	75	-	-	NotHybrid
energyCPAS0064	_NEW_GENERIC_SOLAR_SAXIS	Estrella Solar + Storage	Online	1208	Big Sky North	NA		56	56	-	164	ExistingSolar/ExistingStorage
energyCPAS0065	_NEW_GENERIC_SOLAR_SAXIS	Duggatt 3 Solar + Storage	Online	1314	Kramer	NA		123	123	-	379	ExistingSolar/ExistingStorage
energyCPAS0072	_NEW_GENERIC_SOLAR_SAXIS	Duggatt 2 Solar + Storage	Online	1313	Kramer	NA		65	65	-	202	ExistingSolar/ExistingStorage
energyCPAS0073	_NEW_GENERIC_SOLAR_SAXIS	Reουργence Solar + Storage	Online	1617	Kramer	NA		48	48	-	143	ExistingSolar/ExistingStorage
energyCPAS0063	_NEW_GENERIC_SOLAR_SAXIS	Ranford Solar + Storage	Development	1516	Vestal	NA		300	300	-	848	NewSolar/NewStorage
energyCPAS0071	_NEW_GENERIC_SOLAR_SAXIS	Ariva Solar + Storage	Online	1302	Red Bluff	NA		94	94	-	281	ExistingSolar/ExistingStorage
energyCPAS0060	_NEW_GENERIC_SOLAR_SAXIS	Desert Quartzite Solar + Storage	Development	1196/1326	Colorado River	NA		300	300	-	955	NewSolar/NewStorage
CPAS0088	_NEW_GENERIC_SOLAR_SAXIS	Prologis East Dominguez Solar	Development	WD1817		NA		1	1	-	2	NotHybrid
CPAS0089	_NEW_GENERIC_SOLAR_SAXIS	Prologis El Segundo Solar	Development	WD1814		NA		1	1	-	1	NotHybrid
CPAS0090	_NEW_GENERIC_SOLAR_SAXIS	Prologis Wilmington 1 Solar	Development	WD1815		NA		2	2	-	4	NotHybrid
CPAS0091	_NEW_GENERIC_SOLAR_SAXIS	Prologis Wilmington 2 Solar	Development	WD1818		NA		1	1	-	2	NotHybrid
CPAS0093	_NEW_GENERIC_SOLAR_SAXIS	Pinet Beverly Solar	Development	WD1798		NA		0	0	-	1	NotHybrid
CPAS0094	_NEW_GENERIC_SOLAR_SAXIS	Pinet San Gabriel Solar	Development	WD1798		NA		0	0	-	1	NotHybrid
CPAS0087	_NEW_GENERIC_GEO_THERMAL	Cape Station Geothermal	Development	geothermal_import_planned	IPP	NA		33	33	-	235	NotHybrid
CPAS0099	_NEW_GENERIC_GEO_THERMAL	Genesee 18 MW Geothermal	Development	Existing Interconnect	Eagle Rock, Fulton, Lakeville	NA		18	18	-	158	NotHybrid
CPAS0007	_NEW_GENERIC_BATTERY_STORAGE	Sagebrush Storage	Online	1325	Vincant	NA		40	40	-	-	NotHybrid
EnergyCarson1	_NEW_GENERIC_SOLAR_SAXIS	Prologis Carson 1	Development	WD1941		NA		1	1	-	1	NotHybrid
EnergyCommence4	_NEW_GENERIC_SOLAR_SAXIS	Prologis Commence 4	Development	WD1980		NA		1	1	-	2	NotHybrid
EnergyEaves1	_NEW_GENERIC_SOLAR_SAXIS	Prologis Eaves 1	Development	WD1981		NA		1	1	-	1	NotHybrid
EnergyEaves3	_NEW_GENERIC_SOLAR_SAXIS	Prologis Eaves 3	Development	WD1978		NA		1	1	-	2	NotHybrid
EnergySouthbay2D	_NEW_GENERIC_SOLAR_SAXIS	Prologis Southbay 2D	Development	WD1943		NA		1	1	-	3	NotHybrid
EnergySouthbay6	_NEW_GENERIC_SOLAR_SAXIS	Prologis Southbay 6	Development	WD1946		NA		1	1	-	3	NotHybrid
EnergySun2a	_NEW_GENERIC_WIND_OCS_AZNM	Sun2a Wind	Development	wind_import_planned	Palo Verde	NA		3515	575	-	1,815	NotHybrid
EnergyKey75LDS	_NEW_GENERIC_BATTERY_STORAGE	Key 75 MW Long Duration Storage	Development	1479	Gate	NA		300	75	-	-	NotHybrid

can_charge_from_grid	total_generator_mw	contracted_generator_mw	total_storage_mw	contracted_storage_mw	solar_technology_sub_type	storage_technology_sub_type	total_storage_depth_mwh	contracted_storage_depth_mwh	viability_cod_reasonableness	viability_technical_feasibility	viability_financing_itecontrol	resource_mix	d1911016_vamo_gbgfre	buy_sell_own
NO	133	133	132	132	1Axis	Li	528	528				[solar, 233] [battery, 132]		
NO	133	133	132	132	1Axis	Li	528	528				[solar, 233] [battery, 132]		
NO	100	100	132	132	1Axis	Li	528	528				[solar, 233] [battery, 132]		
NO	56	56	74.642	74.642	1Axis	Li	298.568	298.568				[battery, 75]		
YES	123	123	61.5	61.5	1Axis	Li	112	112				[solar, 56] [battery, 28]		
YES	65	65	52	52	1Axis	Li	246	246				[solar, 123] [battery, 61.5]		
NO	48	48	40	40	1Axis	Li	208	208				[solar, 65] [battery, 52]		
YES	300	300	240	240	1Axis	Li	160	160				[solar, 48] [battery, 40]		
YES	93.5	93.5	71	71	1Axis	Li	960	960	4	3	4	[solar, 300] [battery, 240]		
YES	300	300	150	150	1Axis	Li	284	284				[solar, 93.5] [battery, 71]		
							600	600	4	3	0	[solar, 300] [battery, 150]		
									3	3	3	[solar, 1.0]		
									3	3	3	[solar, 0.6]		
									3	3	3	[solar, 1.8]		
									3	3	3	[solar, 0.6]		
									4	3	3	[solar, 0.4]		
									4	3	3	[solar, 0.27]		
									2	3	2	[geothermal, 33]		
									4	3	4	[geothermal, 18]		
			40	40		Li	160	160	4	3	3	[battery, 40]		
									2	3	3	[solar, 0.68]		
									2	3	3	[solar, 1.24]		
									2	3	3	[solar, .68]		
									2	3	3	[solar, .67]		
									2	3	3	[solar, 1.32]		
									2	3	3	[solar, 1.38]		
			75	75		Li	600	600	4	3	4	[wind, 575]		
									3	3	2	[battery, 75]		

counterparty	generator_supplier	developer_name	capacity_area	capacity_sub_area	cpuc_approval_ref	county	COD_year	COD_month	COD_day	contract_start_date_year	contract_start_date_month	contract_start_date_day	contract_end_date_year	contract_end_date_month	contract_end_date_day	contract_execution_date_year
non-LSE supplier		NEXTERA	SCE			RiversideCounty	2022	8	21	2022	8	21	2039	11	30	2020
non-LSE supplier		NEXTERA	SCE			RiversideCounty	2023	11	1	2023	11	1	2039	10	31	2020
non-LSE supplier		NEXTERA	SCE			RiversideCounty	2022	3	21	2022	3	21	2039	11	30	2020
non-LSE supplier		TERRA GEN	Kern			KernCounty	2021	11	1	2021	11	15	2036	11	14	2020
non-LSE supplier		AES	BigCreekVentura			LosAngelesCounty	2023	12	31	2023	12	31	2039	12	30	2022
non-LSE supplier		CLEARWAY	SCE			SanBernardinoCoun	2023	11	17	2023	11	17	2038	11	16	2022
non-LSE supplier		CLEARWAY	SCE			SanBernardinoCoun	2023	12	8	2023	12	8	2038	12	7	2022
non-LSE supplier		NEXTERA	SCE			SanBernardinoCoun	2023	9	14	2023	9	14	2044	9	13	2022
non-LSE supplier		AES	BigCreekVentura			TulareCounty	2024	12	31	2024	12	31	2039	12	30	2022
non-LSE supplier		CLEARWAY	SCE			RiversideCounty	2024	4	23	2024	4	23	2039	4	22	2022
non-LSE supplier		EDF RENEWABLES	SCE			RiversideCounty	2025	3	1	2025	3	1	2040	2	28	2022
non-LSE supplier		PROLOGIS	LABasin		CPA Advice Letter 0019-E	LosAngelesCounty	2025	3	12	2025	3	12	2040	3	13	2022
non-LSE supplier		PROLOGIS	LABasin		CPA Advice Letter 0019-E	LosAngelesCounty	2025	2	10	2025	2	10	2040	2	10	2022
non-LSE supplier		PROLOGIS	LABasin		CPA Advice Letter 0019-E	LosAngelesCounty	2025	3	17	2025	3	17	2040	3	16	2022
non-LSE supplier		PROLOGIS	LABasin		CPA Advice Letter 0019-E	LosAngelesCounty	2025	3	28	2025	3	28	2040	3	27	2022
non-LSE supplier		PIVOT ENERGY	LABasin		CPA Advice Letter 0019-E	LosAngelesCounty	2024	12	31	2024	12	31	2039	12	30	2022
non-LSE supplier		PIVOT ENERGY	LABasin		CPA Advice Letter 0019-E	LosAngelesCounty	2024	12	31	2024	12	31	2039	12	30	2022
non-LSE supplier		FERNV				Boyer	2028	6	1	2028	6	1	2044	5	31	2022
non-LSE supplier		GEYSERS POWER COMPANY	PGE			LakeCounty	2026	6	1	2026	6	1	2046	5	31	2023
non-LSE supplier		TERRA GEN	SCE			KernCounty	2024	6	1	2024	6	1	2040	12	31	2023
non-LSE supplier		PROLOGIS	LABasin		CPA Advice Letter 24-E	LosAngelesCounty	2025	5	30	2025	5	30	2045	5	30	2023
non-LSE supplier		PROLOGIS	LABasin		CPA Advice Letter 24-E	LosAngelesCounty	2025	5	26	2025	5	26	2045	5	26	2023
non-LSE supplier		PROLOGIS	LABasin		CPA Advice Letter 24-E	LosAngelesCounty	2025	8	18	2025	8	18	2045	8	17	2023
non-LSE supplier		PROLOGIS	LABasin		CPA Advice Letter 24-E	LosAngelesCounty	2025	7	1	2025	7	1	2045	6	30	2023
non-LSE supplier		PROLOGIS	LABasin		CPA Advice Letter 24-E	LosAngelesCounty	2025	5	30	2025	5	30	2045	5	29	2023
non-LSE supplier		PROLOGIS	LABasin		CPA Advice Letter 24-E	LosAngelesCounty	2025	5	22	2025	5	22	2045	5	21	2023
non-LSE supplier		AZPS				NewMexico	2026	10	31	2026	10	31	2041	10	30	2023
non-LSE supplier		NEXTERA	GreaterFresno			FresnoCounty	2026	12	1	2026	12	1	2041	11	30	2024

previous_COD_month	previous_COD_day	remediation_plan	signed_contract	notice_to_proceed	public_contract	buying_energy_capacity	NQC_reporting_source	procurement_origin	csp_resource_category	csp_annual_2024	csp_annual_2026	csp_annual_2030	csp_annual_2035	macro_supertype	notes
8	21	NO	YES	NO	YES	EnergyCapacity	Calculated	RPS, D2106035	NA					physical	33 MW of solar came online on 11/1/2023. The so
11	1	NO	YES	NO	YES	EnergyCapacity	Calculated	RPS, D1911016	NA					newgeneric	33 MW of solar came online on 11/1/2023. The so
3	21	NO	YES	NO	YES	EnergyCapacity	Calculated	RPS, D1911016	NA					physical	32 MW of solar came online on 11/1/2023. The so
11	1	NO	YES	NO	YES	EnergyCapacity	Calculated	RPS, D1911016	NA					physical	itted an advice letter to request swap. The dispos
12	31	NO	YES	NO	YES	EnergyCapacity	Calculated	RPS, D2106035	NA					newgeneric	Original contract execution date was 11/6/2020
12	1	NO	YES	NO	YES	EnergyCapacity	Calculated	RPS, D2106035	NA					newgeneric	Original contract execution date was 10/2/2020
12	19	NO	YES	NO	YES	EnergyCapacity	Calculated	RPS, D2106035	NA					newgeneric	Original contract execution date was 6/4/2021
9	14	NO	YES	NO	YES	EnergyCapacity	Calculated	RPS, D2106035	NA					newgeneric	Original contract execution date was 6/4/2021
12	31	NO	YES	NO	YES	EnergyCapacity	Calculated	RPS, D2106035	NA					newgeneric	Original contract execution date was 9/4/2021
6	1	NO	YES	NO	YES	EnergyCapacity	Calculated	RPS, D2106035	NA					newgeneric	Original contract execution date was 6/4/2021
3	1	NO	YES	NO	YES	EnergyCapacity	Calculated	RPS, D2106035	NA					newgeneric	Original contract execution 9/3/2021.
		NO	YES		YES	EnergyOnly	Calculated	RPS	NA					newgeneric	
		NO	YES		YES	EnergyOnly	Calculated	RPS	NA					newgeneric	
		NO	YES		YES	EnergyOnly	Calculated	RPS	NA					newgeneric	
		NO	YES		YES	EnergyOnly	Calculated	RPS	NA					newgeneric	
		NO	YES		YES	EnergyOnly	Calculated	RPS	NA					newgeneric	
6	1	NO	YES	NO	YES	EnergyCapacity	Calculated	RPS, D2106035	NA					newgeneric	
6	1	NO	YES	NO	YES	EnergyCapacity	Calculated	RPS, D2106035	NA					newgeneric	
6	1	NO	YES	NO	YES	EnergyCapacity	Calculated	D2106035	NA					newgeneric	
		NO	YES		YES	EnergyOnly	Calculated	RPS	NA					newgeneric	
		NO	YES		YES	EnergyOnly	Calculated	RPS	NA					newgeneric	
		NO	YES		YES	EnergyOnly	Calculated	RPS	NA					newgeneric	
		NO	YES		YES	EnergyOnly	Calculated	RPS	NA					newgeneric	
		NO	YES		YES	EnergyOnly	Calculated	RPS	NA					newgeneric	
10	31	NO	YES	NO	YES	EnergyCapacity	Calculated	RPS, D2106035	NA					newgeneric	
6	1	YES	YES	NO	YES	EnergyCapacity	Calculated	RPS, D2106035	NA					newgeneric	owever, the contract was assigned to the Key reso

AMENDMENT NO. 1 TO ENERGY STORAGE AGREEMENT

This Amendment No. 1 (the “**Amendment**”) to the ESA (as defined below), is dated as of September 19, 2024 (the “**Amendment Effective Date**”), between Clean Power Alliance of Southern California, a California joint powers authority (“**Buyer**”), and Key Energy Storage, LLC, a Delaware limited liability company (“**Seller**”). Seller and Buyer are each a “**Party**” and together the “**Parties**”.

RECITALS

- A. Buyer and Desert Sands Energy Storage I, LLC (“**Desert Sands I**”) entered into that certain Energy Storage Agreement, dated as of April 10, 2023 (as may be further amended, amended and restated, supplemented, or otherwise modified from time to time, the “**ESA**”).
- B. Section 14.7 of the ESA permitted Desert Sands I to transfer and assign the ESA to an Affiliate of Desert Sands I who is developing the Key Storage Project if Full Capacity Deliverability Status for at least the Guaranteed Capacity was not obtained by January 1, 2025.
- C. Desert Sands I received notice from the CAISO that Full Capacity Deliverability Status for at least the Guaranteed Capacity will not be obtained by January 1, 2025.
- D. Desert Sands I has assigned and transferred all of its right, title, duties, obligations and interests in, to and under the ESA to Seller.
- E. The Parties desire to amend the ESA to reflect that assignment and transfer contemplated under ESA Section 14.7 and to change certain other provisions of the ESA as set forth herein.

NOW, THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

- 1. Definitions. Capitalized terms used and not defined in this Amendment have the respective meanings assigned to them in the ESA.
- 2. Amendments to the ESA.
 - (a) The ESA Cover Sheet is revised to delete each of the following items in its entirety and to replace it with the following:
 - (i) **Seller:** Key Energy Storage, LLC
 - (ii) **Description of Facility:** A 75 MW / 600 MWh battery energy storage system, located in Fresno County, California
 - (iii) **Milestones:**

Milestone	Expected Date for Completion
Evidence of Site Control	Complete
Documentation of Conditional Use Permit if required: CEQA [] Cat Ex, [] Neg Dec, [] Mitigated Neg Dec, [X]EIR (provided CUP type subject to change)	December 1, 2025
Seller’s receipt of Phase I and Phase II Interconnection study results for Seller’s Interconnection Facilities	Complete
Executed Interconnection Agreement	██████████
Financial Close	██████████
Expected Construction Start Date	██████████
Initial Synchronization	August 1, 2026
Network Upgrades completed (evidenced by delivery of permission to parallel letter from the Transmission Provider)	August 1, 2026
Expected Date of CAISO Commercial Operation	October 1, 2026
Expected Commercial Operation Date	December 1, 2026

(iv) **Guaranteed Construction Start Date:** June 1, 2026, as such date may be extended by Seller’s payment of Daily Delay Damages pursuant to Section 1(b) of Exhibit B and/or a Development Cure Period pursuant to Section 4 of Exhibit B.

(v) **Guaranteed Commercial Operation Date:** December 1, 2026, as such date may be extended by Seller’s payment of Commercial Operation Delay Damages pursuant to Section 2 of Exhibit B and/or a Development Cure Period pursuant to Section 4 of Exhibit B.

(vi) **Storage Rate:**

Contract Year	Storage Rate
1 – 15	██████████/kW-mo (flat) with no escalation

(b) ESA Section 1.1 is revised by replacing the following defined terms in their entirety:

(i) **“Battery Charging Factor”** means the quotient (expressed as a decimal) of (a) the Charging Energy recorded in the applicable Capacity Test after the earlier of (i) reaching 100% SOC or (ii) the time elapsed in the charging phase equals eight (8) hours *divided by* (A) the then-current Guaranteed Efficiency Rate, *plus* (B) thirty (30) minutes, *divided by* (b) the Installed Capacity x eight (8) hours, not to exceed one (1).

- (ii) “**Battery Discharging Factor**” means the quotient (expressed as a decimal) of (a) the Facility Energy after reaching 0% SOC or the first eight (8) hours of the discharging phase of the applicable Capacity Test, as applicable *divided by* (b) the Installed Capacity x eight (8) hours, not to exceed one (1).
- (iii) “**SOC**” or “**State of Charge**” means (a) the Stored Energy Level relative to (b) the Effective Capacity multiplied by eight (8) hours, expressed as a percentage. The “SOC” shall represent the range of Stored Energy Level reserved exclusively for Buyer’s use; *provided*, Seller may represent such range anywhere within the actual available capability of the Facility.
- (iv) “**RA Shortfall Month**” means, for purposes of calculating an RA Deficiency Amount under Section 3.5(b), any month shown on an RA Plan, commencing with the RA Plan for the Showing Month that includes the RA Guarantee Date (including any month during the period between the RA Guarantee Date and the first day of the first Showing Month for Buyer which actually includes the Facility’s Resource Adequacy Benefits or any Replacement RA, if applicable), for which there is an RA Shortfall.
- (c) ESA Section 1.1 is revised by adding the following new defined term:
- (i) “**High Operating Limit**” or “**HOL**” means a real-time calculated number representing the instantaneous maximum power level at which the Facility can discharge Energy to the Delivery Point, as communicated via the EMS.
- (ii) “**Low Operating Limit**” or “**LOL**” means a real-time calculated number representing the instantaneous maximum power level at which the Facility can charge Energy to the Facility, as communicated via the EMS.
- (iii) “**Outage Management System**” or “**OMS**” has the meaning set forth in the CAISO Tariff.
- (iv) “**RA Plan**” has the meaning set forth for “Resource Adequacy Plan” in the CAISO Tariff with respect to Buyer’s monthly or annual Resource Adequacy showings.
- (v) “**RA Shortfall**” means, for a given Showing Month (as determined fifteen (15) Business Days prior to the Showing Deadline for such Showing Month), the difference, expressed in kW, of (a) the Facility’s Qualifying Capacity *minus* (b) the sum of (i) the portion of the Net Qualifying Capacity of the Facility for such month which is able to be shown on Buyer’s monthly or annual RA Plan to the CAISO and CPUC *plus* (ii) Replacement RA provided by Seller with respect to an expected shortfall in Resource Adequacy Benefits of the Facility for such Showing Month, if applicable.
- (vi) “**Replacement RA**” means resource adequacy benefits equivalent to Resource Adequacy Benefits (including satisfying the same Slice-of-Day operations profile and related characteristics) that would have been provided by the

Facility with respect to the applicable month in which a RA Deficiency Amount is due to Buyer, and located within SP 15 TAC Area and, to the extent that the Facility would have qualified as a Local Capacity Area Resource for such month, described as a Local Capacity Area Resource.

(vii) “SOD” or “Slice-of-Day” has the meaning set forth in the Resource Adequacy Rulings.

(d) In ESA Section 3.4(d), the phrase “(X) the Qualifying Capacity of the Facility with respect to such Showing Month, minus (Y) the expected Net Qualifying Capacity of the Facility” is replaced by the phrase “the expected RA Shortfall”.

(e) ESA Section 3.5(a) is deleted and replaced with the following:

(a) RA Deficiency Determination. Subject to Section 3.5(c), for each RA Shortfall Month Seller shall pay to Buyer the RA Deficiency Amount as liquidated damages, as set forth in Section 3.5(b), as the sole remedy for the Capacity Attributes that Seller failed to convey to Buyer.

(f) ESA Section 3.5(b)(i) is deleted and replaced with the phrase “the RA Shortfall”.

(g) ESA Section 3.6(e)(iii) is revised by deleting the word “Net”.

(h) Section 14.7 is deleted and replaced with the following “Intentionally Omitted”.

(i) ESA Exhibit A is deleted in its entirety and replaced as shown in the attached Schedule 1, which from and after the Amendment Effective Date shall be the new Exhibit A.

(j) ESA Section (g) of ESA Exhibit D is deleted in its entirety and replaced with the following:

(g) Master Data File and Resource Data Template. The Parties will cooperate to comply with the applicable deadlines for filing and updating the information for the Facility in the Master Resource Database and Master Data File. Seller shall provide the data to the CAISO (and to Buyer) that is required for the CAISO’s Master Data File and Resource Data Template (or successor data systems) for the Facility consistent with this Agreement at least five (5) Business Days before the deadline for submission to CAISO and Buyer (as SC) shall promptly provide such data to CAISO. Seller shall provide the data that is required for the CPUC’s Master Resource Database for the Facility consistent with this Agreement to Buyer for review and approval at least five (5) Business Days before the deadline for submission of such to the CPUC. Neither Party shall change such data without the other Party’s prior written consent. At least once per Contract Year, Seller shall cooperate with Buyer to review and confirm that the data provided for the CAISO’s Master Data File and Resource Data Template (or successor data systems) and CPUC’s Master Resource Database for this Facility remains consistent with the actual operating characteristics of the Facility and provide such information and

any additional supporting documentation to Buyer for review at least five (5) Business Days prior to submission to the CAISO or CPUC as applicable.

(k) In ESA Exhibit I the second paragraph is deleted in its entirety and replaced with the following:

I hereby certify that a Capacity Test conducted on [Date] demonstrated (i) an [Installed or Effective] Capacity of ___ MWs or the sum of the total Facility Energy measured at the Facility Meter divided by eight (8) hours, (ii) a Battery Charging Factor of __%, (iii) a Battery Discharging Factor of __% and (iv) an Efficiency Rate of __%, all in accordance with the testing procedures, requirements and protocols set forth in Section 4.9 and Exhibit Q of the Agreement;

(l) ESA Exhibit N is deleted in its entirety and replaced as shown in the attached Schedule 2, which from and after the Amendment Effective Date shall be the new Exhibit N.

(m) In ESA Exhibit O, Parts II.D(2) and (3), the phrase “four (4) hours” is replaced with the phrase “eight (8) hours”.

(n) The defined term “A” in ESA Exhibit P is deleted in its entirety and replaced with the following

“**A**” is the “**Available Effective Capacity**”, which shall equal the greater of the HOL and the absolute value of the LOL, considering the conditions of the Facility in total to receive Charging Energy and deliver Facility Energy to the Delivery Point, in such Calculation Interval (based on normal operating conditions pursuant to the manufacturer’s guidelines), but “A” shall never exceed the Effective Capacity.

(o) Section (b) of ESA Exhibit P is deleted in its entirety and replaced with the following:

(b) The Available Effective Capacity and Available Storage Capability in the above calculations shall be the lower of (i) such amounts reported by Seller’s real-time EMS data feed to Buyer for the Facility for such Calculation Interval, such that available Effective Capacity is calculated as set forth in the definition above, and available Storage Capability is calculated as the product of (A) the count of available system cells, *multiplied by* (B) the capability, in MWh, expected from each system cell under normal operating conditions pursuant to the manufacturer’s guidelines, and (ii) Seller’s most recent Availability Notice (as updated pursuant to Section 4.10), which, with respect to the Available Effective Capacity, shall be calculated as the average of the “Gen Max” and “Load Max” (or equivalent successor terms which may be used by the SC or CAISO from time to time) amounts reported in Seller’s Availability Notice and recorded in OMS for such Calculation Interval, and with respect to the Available Storage Capability, shall be calculated as “Max Energy” minus “Min Energy” (or equivalent successor terms which may be used by the SC or CAISO from time to time) amounts reported in Seller’s Availability Notice and recorded in OMS for such Calculation Interval and

for which calculation the Battery Charging Factor and Battery Discharging Factor shall not be applied, provided that any such revised Availability Notice indicating an increase in the Facility's availability for the applicable Calculation Interval is submitted by Seller at least sixty (60) minutes prior to the time the Buyer is required to schedule or bid the Facility in the Real-Time Market. Except as otherwise expressly provided in this Agreement, the calculations of Available Effective Capacity and Available Storage Capability in the foregoing sentence shall be based solely on the availability of the Facility to charge or discharge Energy between the Facility and the Delivery Point, as applicable (excluding for reasons at the high-voltage side of the Delivery Point or beyond). Any Calculation Interval in which the Facility fails to respond due to the failure of the Facility's telemetry to maintain connectivity to the CAISO (except to the extent caused by the CAISO) such that it cannot receive ADS or AGC signals shall be deemed an Unavailable Calculation Interval; *provided*, any such Calculation Interval shall not be deemed an Unavailable Calculation Interval if the Facility does respond with respect to such Calculation Interval as directed by Buyer, Buyer's Scheduling Coordinator or the CAISO via telephone or email.

(p) ESA Exhibit Q, (i) the reference in the row titled "Storage Unit Name" of "Desert Sands Energy Storage I" is deleted and replaced with "Key Energy Storage – CPA 75 MW ESA", and (ii) the reference in the row titled "Interconnection Voltage (kV)" of "220" is deleted and replaced with "500".

3. Limited Effect. Except as expressly provided in this Amendment, all of the terms and provisions of the Agreement are and will remain in full force and effect and are hereby ratified and confirmed by the Parties. Without limiting the generality of the foregoing, the amendments contained herein will not be construed as an amendment to or waiver of any other provision of the Agreement or as a waiver of or consent to any further or future action on the part of either Party that would require the waiver or consent of the other Party. On and after the Amendment Effective Date, each reference in the Agreement to "this Agreement," "the Agreement," "hereunder," "hereof," "herein" or words of like import will mean and be a reference to the Agreement as amended by this Amendment.

4. Miscellaneous.

(a) This Amendment is governed by and construed in accordance with, the laws of the State of California, without regard to the conflict of laws provisions of such State.

(b) This Amendment shall inure to the benefit of and be binding upon each of the Parties and each of their respective successors and permitted assigns.

(c) The headings in this Amendment are for reference only and do not affect the interpretation of this Amendment.

(d) This Amendment may be executed in counterparts, each of which is deemed an original, but all of which constitutes one and the same agreement. Delivery of an executed

counterpart of this Amendment electronically or by facsimile shall be effective as delivery of an original executed counterpart of this Amendment.

(e) This Amendment constitutes the sole and entire agreement between the Parties with respect to the subject matter contained herein, and supersedes all prior and contemporaneous understandings, agreements, representations and warranties, both written and oral, with respect to such subject matter.

(f) Each Party shall pay its own costs and expenses in connection with this Amendment (including the fees and expenses of its advisors, accounts and legal counsel).

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have executed this Amendment effective as of the date first written above.

Signed: KEY ENERGY STORAGE, LLC

Signed: CLEAN POWER ALLIANCE OF SOUTHERN CALIFORNIA

DocuSigned by:

Petter Skantzze

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By: Petter Skantzze
Title: Vice President

By: Theodore Bardacke
Title: Chief Executive Officer

Date: 9/27/24

Date: 09/17/24



SCHEDULE 1

FACILITY DESCRIPTION

Site Name: Key Energy Storage – CPA 75 MW ESA

Site includes all or some of the following APNs: 085-040-58S*

City: N/A

County: Fresno

Zip Code: 93234

Latitude and Longitude: 36.134124, -120.133174

Facility Description: A standalone battery energy storage facility with a net nameplate capacity of 75 MW / 600 MWh located in unincorporated Fresno County, CA. The Facility is a portion of a larger 300 MW energy complex (i.e., the Facility comprises 75/300 of the energy complex). Seller may install additional inverter capacity to account for production and delivery losses.

Delivery Point: The P-node for the Facility (as defined below)

Facility Meter: See Exhibit R

Facility Metering Points: See Exhibit R

P-node: To be established prior to the Commercial Operation Date at the Gates 500kV bus. Seller shall promptly notify Buyer following the establishment of the P-node.

Transmission Provider: Pacific Gas & Electric

Additional Information: None

* Seller represents the APNs identified above are sufficient for Seller to build the Facility. Seller may add additional APNs without the consent of Buyer.

SCHEDULE 2

NOTICES

<p>Key Energy Storage, LLC ("Seller")</p>	<p>CLEAN POWER ALLIANCE OF SOUTHERN CALIFORNIA, a California joint powers authority ("Buyer")</p>
<p>All Notices:</p> <p>Street: 700 Universe Blvd. City: Juno Beach, FL 33408 Attn: Business Management Phone: 561-691-7723 (Office) 561-301-4685 (Mobile) Email: DL-NEXTERA-WEST-INTERNATIONAL-REGION@nexteraenergy.com and Emre.Ergas@nexteraenergy.com</p>	<p>All Notices:</p> <p>Street: 801 S Grand, Suite 400 City: Los Angeles, CA 90017 Attn: Chief Executive Officer Phone: (213) 269-5870 E-mail: tbardacke@cleanpoweralliance.org</p>
<p>Reference Numbers:</p> <p>Duns: To be provided separately Federal Tax ID Number: To be provided separately</p>	<p>Reference Numbers:</p> <p>Duns: Federal Tax ID Number:</p>
<p>Invoices:</p> <p>Attn: Business Management Phone: 561-691-7723 (Office) 561-301-4685 (Mobile) E-mail: NEER-REVENUE-TEAM.SharedMailbox@nexteraenergy.com and DL-NEXTERA-WEST-INTERNATIONAL-REGION@nexteraenergy.com</p>	<p>Invoices:</p> <p>Attn: CPA Settlements Phone: (213) 269-5870 E-mail: settlements@cleanpoweralliance.org</p>
<p>Scheduling:</p> <p>Attn: Day-Ahead – Christin Neff; Real-Time – PMI RT desk Phone: Day-Ahead - 561-304-6053; Real-Time – 561-625-7100 Email: dl-nepm-dayaheaddesk-wecc@nexteraenergy.com and nepm.realtimedesk@nexteraenergy.com</p>	<p>Scheduling:</p> <p>Attn: Day Ahead Scheduling Phone: (817) 303-1104 Email: TenaskaComm@tnsk.com</p>
<p>Confirmations:</p> <p>Attn: Confirmation Email: DL-Confirmations-Juno-PMI@nexteraenergy.com</p>	<p>Confirmations:</p> <p>Attn: Vice President, Power Supply Email: energycontracts@cleanpoweralliance.org</p>

<p>Key Energy Storage, LLC (“Seller”)</p>	<p>CLEAN POWER ALLIANCE OF SOUTHERN CALIFORNIA, a California joint powers authority (“Buyer”)</p>
<p>Payments: Attn: CPA Settlements Phone: (561) 694-4725 E-mail: DL-NEXTERA-WEST-INTERNATIONAL-REGION@nexteraenergy.com</p>	<p>Payments: Attn: Vice President, Power Supply E-mail: settlements@cleanpoweralliance.org</p>
<p>Wire Transfer: [Seller shall provide to Buyer the information below prior to the Commercial Operation Date.] BNK: ABA: ACCT:</p>	<p>Wire Transfer: BNK: River City Bank ABA: [REDACTED] ACCT: XXXXXX8042</p>



September 27, 2024

COMMERCIAL OPERATION DATE CERTIFICATE

This certification (“**Certification**”) of Commercial Operation is delivered by Eryn M. Donnelly (“**Engineer**”) to Clean Power Alliance of Southern California, a California joint powers authority (“**Buyer**”) in accordance with the terms of that certain Energy Storage Agreement dated July 7, 2023 (“**Agreement**”) by and between Sagebrush ESS IIB, LLC and Buyer. All capitalized terms used in this Certification but not otherwise defined herein shall have the respective meanings assigned to such terms in the Agreement.

Engineer hereby certifies and represents to Buyer the following:

1. The Facility is fully operational, reliable and interconnected, fully integrated and synchronized with the Transmission System.
2. The Facility’s Installed Capacity is no less than ninety-five percent (95%) of the Guaranteed Capacity and the Facility is capable of charging, storing and discharging Energy, all within the operational constraints and subject to the applicable Operating Restrictions.
3. Authorization to parallel the Facility was obtained by the Transmission Provider, Southern California Edison on September 9, 2024.
4. The Transmission Provider has provided documentation supporting full unrestricted release of the Facility for Commercial Operation by Southern California Edison on September 9, 2024.
5. The CAISO has provided notification supporting Commercial Operation, in accordance with the CAISO Tariff on September 11, 2024.
6. Seller has segregated and separately metered Station Use to the extent reasonably possible in accordance with Prudent Operating Practice, and any such meter(s) have the same or greater level of accuracy as is required for CAISO certified meters used for settlement purposes.
7. The Facility and its meters have been designed and installed in a manner such that all Energy used for Auxiliary Use and Station Use within the Facility is separately metered.
8. The total rated power of the Facility inverters is at least equal to the Installed Capacity (MW) charging and discharging at 45°C ambient air temperature.

[Signature page follows]

EXECUTED by Engineer on and as of the date first above written.



LUMINATE, LLC

Eryn M. Donnelly, P.E.
Director

CLEAN POWER ALLIANCE OF SOUTHERN CALIFORNIA REMEDIATION PLAN FOR INCREMENTAL CAPACITY RESOURCES

Clean Power Alliance of Southern California (CPA) provides this remediation plan for resources procured pursuant to the Midterm Reliability (MTR) Order D.21-06-035. Despite project delays being wholly outside of CPA's control, CPA has made every effort to remedy delays to online dates and ultimately amended contracts to ensure delayed projects come online.

Additionally, CPA has updated the CPUC monthly, with the status of project delays through the Procurement Status Report.

Since the June 1, 2024 filing, Dinuba Biomass has reported contract failure and CPA has terminated the contract; CPA is currently in conversations with other vendors to find a replacement resource for Dinuba Biomass. Two other projects, Chalan Solar and Storage, and Desert Sands Long Duration Storage have reported delays.

Dinuba Biomass

The Dinuba facility is a repowered biomass facility with an original Guaranteed Commercial Operation Date (GCOD) of January 10, 2024. The facility required repairs and equipment upgrades to achieve commercial operations. Prior to contract execution, the counterparty indicated that it may need additional time to secure financing or identify an investment partner but did not anticipate that process to cause delays to the January 10, 2024 GCOD. The PPA allows for the extension of the GCOD for up to 180 days from January 10, 2024, to allow Community Renewable Energy Services (the Seller) additional time to secure financing. On October 9, 2023, the Seller informed CPA that all long lead time items had been ordered, and it was finalizing financing for commencement of the facility repairs. On October 31, 2023, the Seller informed CPA that it expected financial close for the repairs to occur before December 31, 2023. In December 2023, Dinuba notified CPA that it was again facing delays related to financing. After months of seeking financing for the project without finding a financing partner, Dinuba informed CPA in July 2024 that it could no longer move forward with the project. Consequently, the PPA was terminated in August 2024.

CPA intended to utilize the Dinuba Biomass resource for its D.21-06-035 Tranche 6 Long-Lead Time procurement obligations. CPA is currently negotiating a PPA with another developer for a baseload resource to ensure that CPA meets its D.21-06-035 Long Lead Time resource requirement.

Chalan Solar and Storage

In September 2022, Chalan (the Seller) notified CPA of delays to the Conditional Use Permit approval from Kern County. Chalan also communicated potential delays to the Initial Synchronization Date provided by PG&E. In October 2022, CPA and Chalan amended the PPA to resolve matters with respect to Chalan's claimed delays. The amendment included a COD

extension to 12/31/2024 and a material increase to the renewable rate (\$/MWh) and storage rate (\$/kW-mo.) reflecting the counterparty's increased cost to deliver the project within the MTR compliance timeline. Absent these contract modifications, the contract would likely have been terminated, and the project would not have reached COD in time to contribute to MTR compliance. In addition, the contracted storage capacity was amended to account for an increase of up to 40 MW. The additional 40 MW was planned to come online by 6/1/2025, depending on how much additional deliverability Chalan was able to secure. However, in January 2024, the Seller informed CPA that the battery expansion of 40 MW was no longer feasible given CAISO interconnection study timelines and the requirement to file a new Interconnection Agreement to expand the facility. Seller also communicated to CPA that the project schedule for the project would be affected because the Seller was experiencing delays with obtaining construction permits from Kern County required to start construction of the facility.

In July 2024, the Seller informed CPA of further project schedule delays and cost increases because special status species who are protected under Federal and State laws were discovered at the project site. Due to the presence of the species at the site, the Seller needs to make accommodations for the species and obtain additional permits before construction start in order to keep the project alive. However, the milestone changes and additional price increases are not allowed under the PPA. Parties are currently considering a PPA amendment to address this issue.

CPA will not need the Chalan resource to meet its D.21-06-035 Tranche 4 procurement obligations. Therefore, the resource has been removed from the resource data template. CPA plans on using two of its existing PPAs, Rexford Solar + Storage and Desert Quartzite Solar + Storage, to meet the Tranche 4 obligations.

Desert Sands 75 MW Long Duration

In April 2023, CPA and Desert Sands Energy Storage I, owned by NextEra Energy Resources, entered into an Energy Storage Agreement (ESA) for the eight-hour duration Desert Sands I energy storage facility. The ESA permitted Desert Sands I to transfer and assign the ESA to an affiliate of Desert Sands I who is developing the Key Energy Storage project if Full Capacity Deliverability Status for the 75 MW facility was not received by January 1, 2025. Desert Sands I received notice from the CAISO that FCDS was not received. As such, CPA and Desert Sands I amended the ESA to reflect the assignment. A copy of the amendment effectuating such assignment has been included in the materials of CPA's December 1, 2024 filing. Since CPA has an existing agreement with Key Energy Storage LLC for another portion of the Key Energy Storage facility, other Milestone 1 documentation, including evidence of site control and an Executed Interconnection Agreement, was provided in the June 1, 2024 filing for the Key Energy Storage facility.

Under the amended ESA, the storage capacity and duration has not changed. The Commercial Operation Date of the contract was amended to December 1, 2026, a delay of six months from

the original Commercial Operation Date. This amendment has preserved deliverability that is required in order to meet compliance, and CPA expects the facility will come online in 2026. Therefore, CPA is still on track for compliance with its Tranche 6, long duration energy storage D.21-06-035 procurement obligation.