



Peninsula Clean Energy Special Board of Directors Meeting

January 18, 2022

Special Agenda

- Call to Order / Roll Call
- Public Comment (for items not on the Agenda)
- Action to set the Agenda
- Regular Agenda
 - Agenda Item 1 – CC Power

Approval of Resolutions Related to CC Power

Special Board Meeting

Siobhan Doherty, Director of Power Resources

January 18, 2022

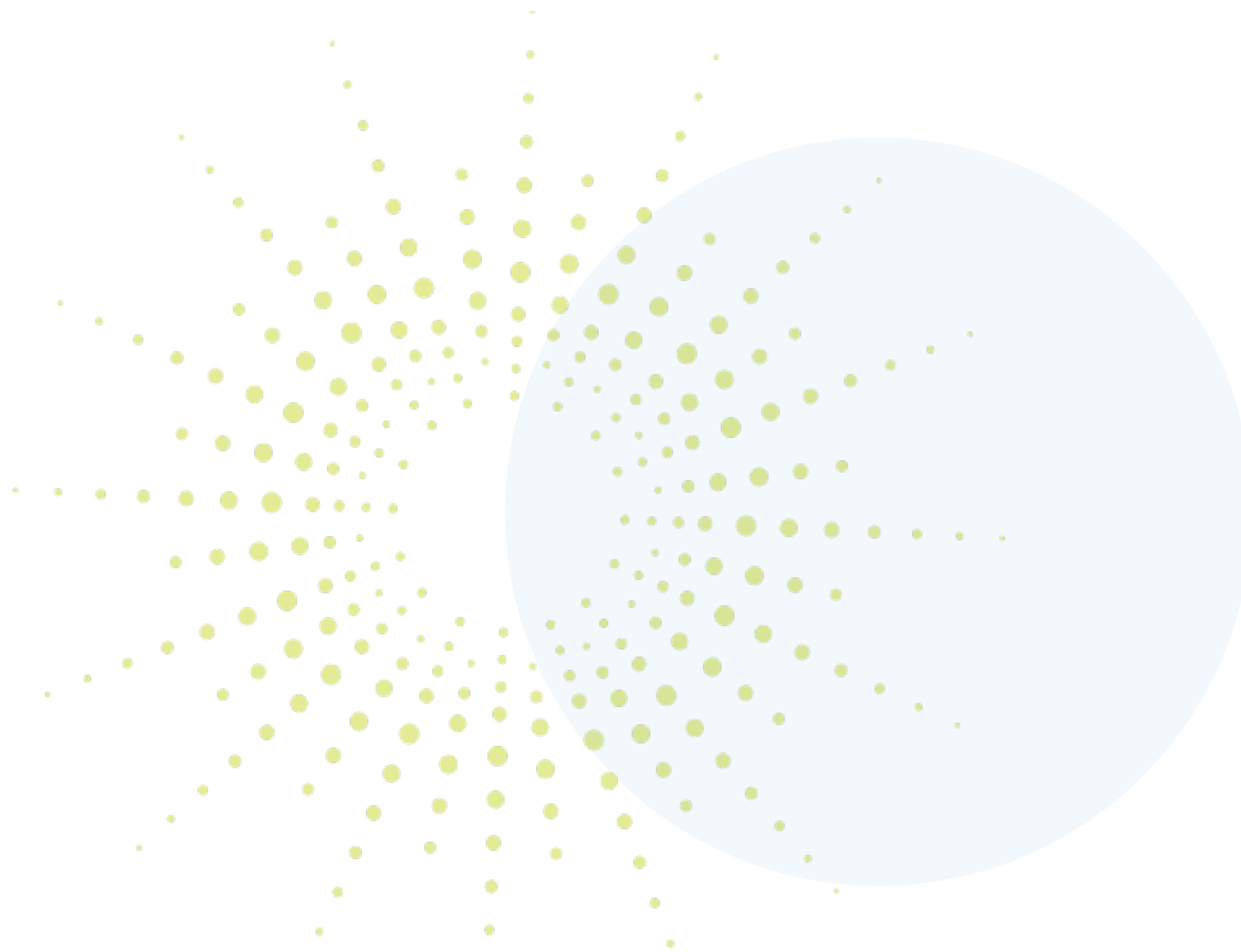
Recommendation

1. Approve Resolution directing the Chief Executive Officer to vote as a director on the California Community Power (CC Power) Board to approve the Energy Storage Services Agreement between California Community Power and Tumbleweed Energy Storage, LLC and any necessary ancillary documents for a long duration energy storage (LDS) project with a delivery term of 15 years starting at the Commercial Operation Date on or about June 1, 2026
2. Approve Resolution Delegating Authority to Chief Executive Officer to Execute on behalf of Peninsula Clean Energy as a member of CC Power the following agreements and any necessary ancillary documents for the LDS project with a delivery term of 15 years starting at the Commercial Operation Date on or about June 1, 2026, in an amount not to exceed \$100 million:
 - Project Participation Share Agreement between Peninsula Clean Energy, California Community Power and other participating CCAs
 - Buyer Liability Pass Through Agreement between Peninsula Clean Energy Authority, California Community Power and Tumbleweed Energy Storage, LLC

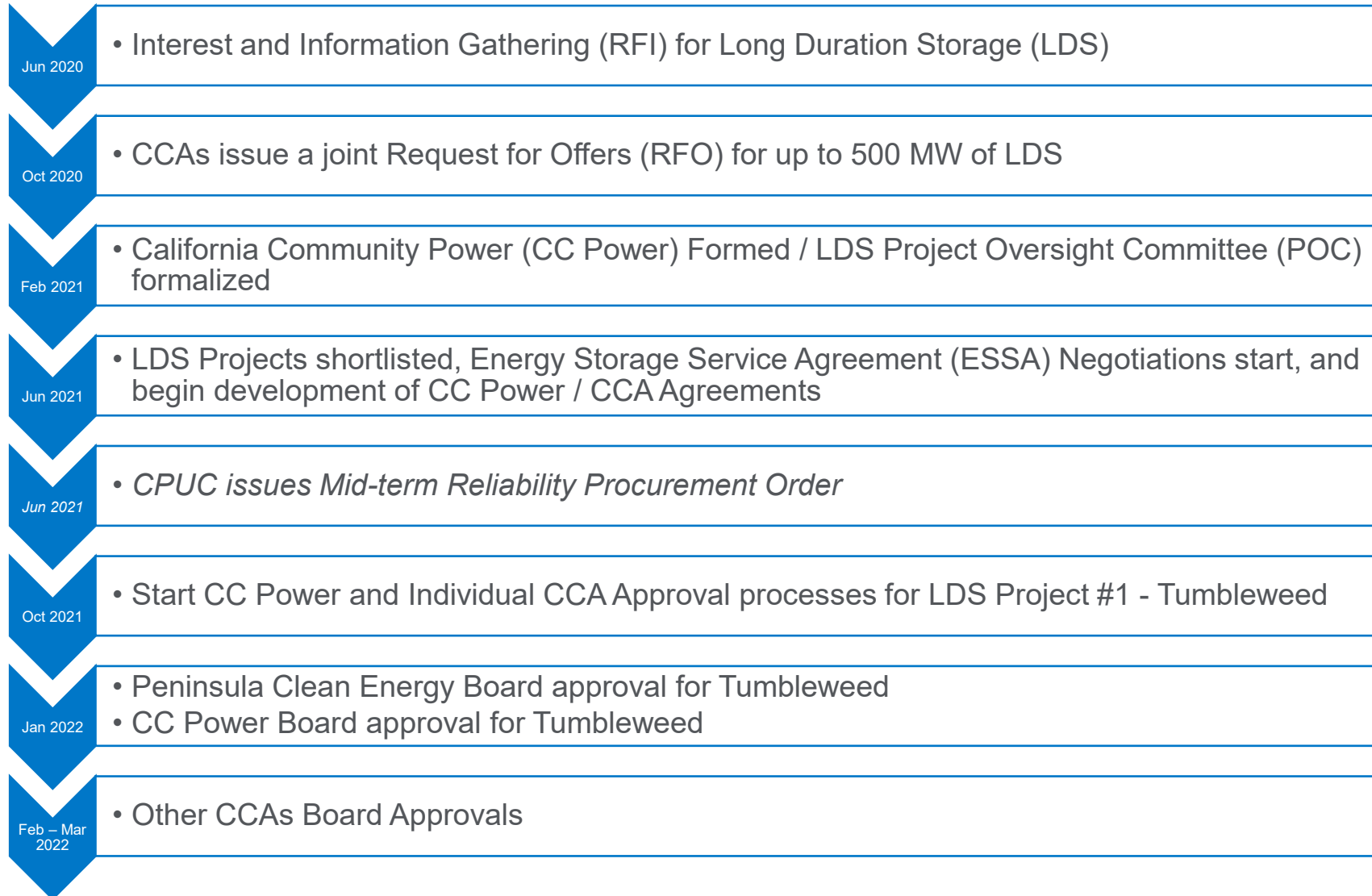
Agenda

1. Background
2. LDS Need – Mid-term Reliability Procurement Mandate
3. Contract Structure
4. Tumbleweed Project
5. Recommendation

Background



RFO Background and Timeline

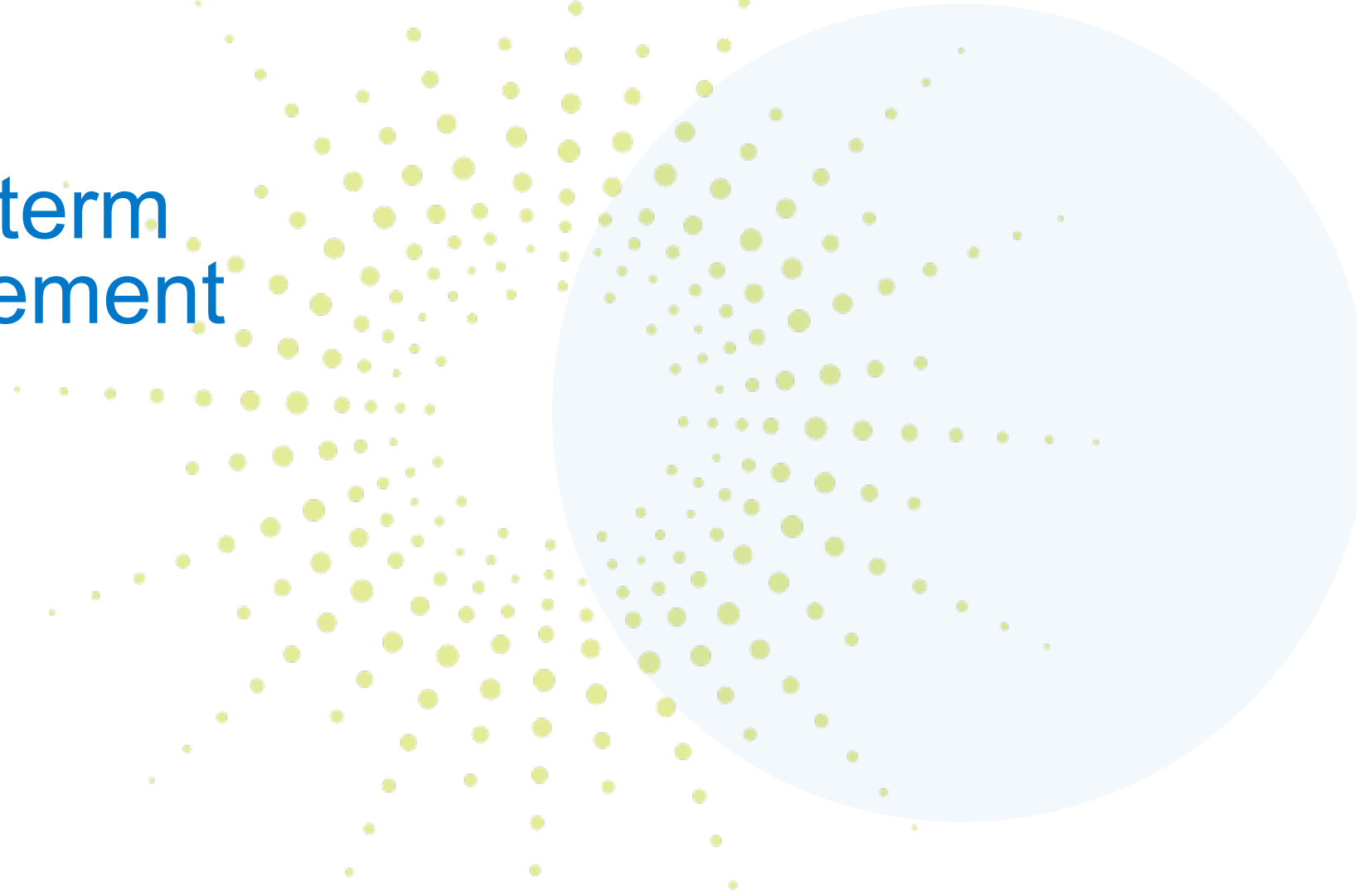


Participating CCAs

- 7 CCAs are participating in this joint procurement effort



LDS Need – Mid-term Reliability Procurement Mandate



Mid-Term Reliability Decision (2023 – 2026)

- D.21-06-035 adopted by CPUC on June 24, 2021, to address mid-term reliability needs
- LSEs required to collectively procure 11,500 MW of new resources
- Allocated to LSEs by load share
- Resources must be zero-emission or RPS eligible (no fossil resources)
- 4,500 MW of obligation subject to specific category requirements (next slide)

Peninsula Clean Energy Allocation

Procurement Obligation in NQC¹ MW for Peninsula Clean Energy by Category and Year

Procurement Category	2023	2024	2025	2026	Total
Zero-emissions generation, generation paired with storage, or demand response resources ²	-	-	47	-	47
Firm zero-emitting resources ³	-	-	-	19	19
Long-duration storage resources ^{3, 4}	-	-	-	19	19
Remaining New Capacity Required	-	-	-	-	132
Total Annual Net Qualifying Capacity (NQC) Requirements	38	113	28	38	217

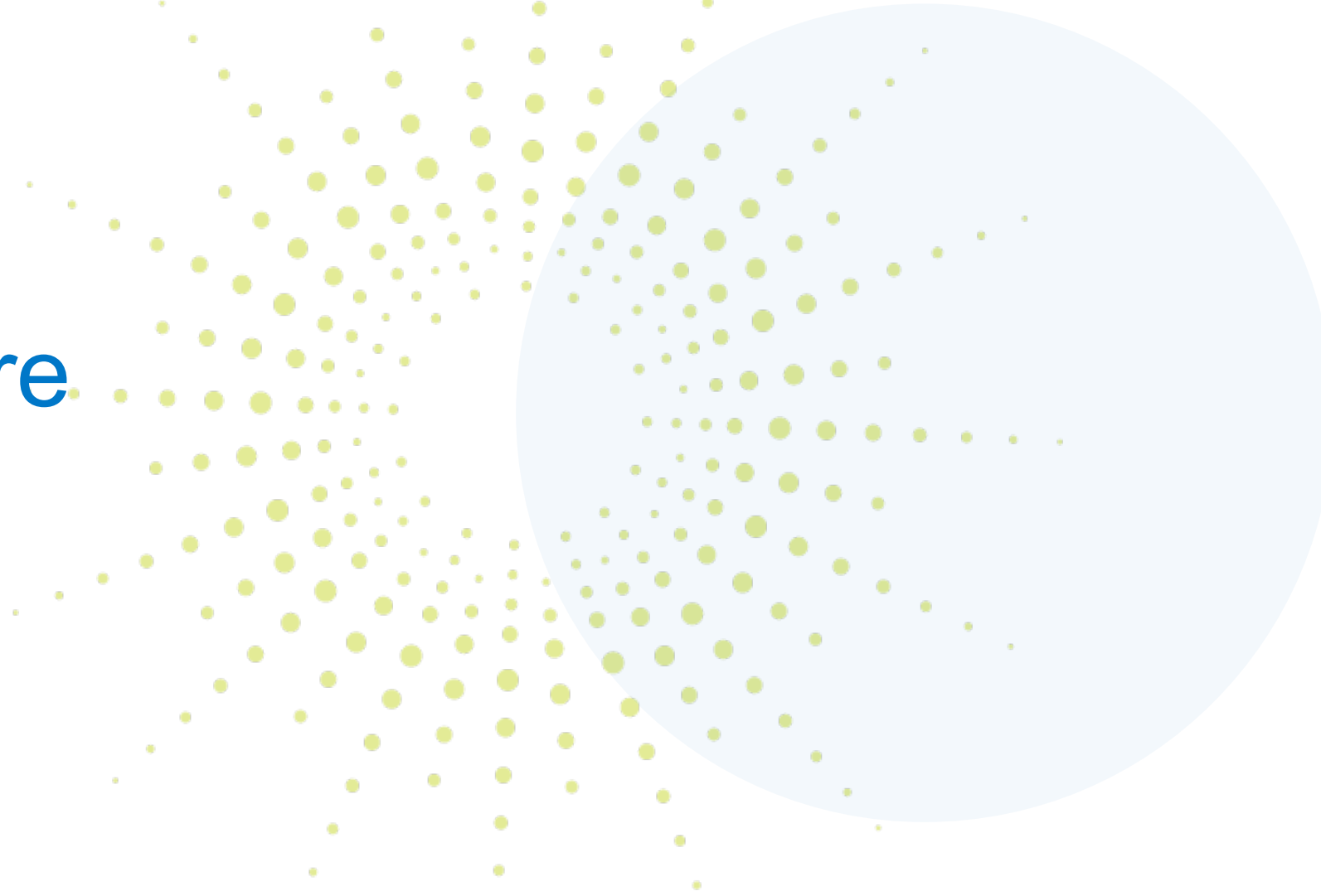
1. *Obligation is in NQC MW (not nameplate) and subject to ELCC factor*
2. *Zero-emissions resources required to replace Diablo Canyon must be procured by 2025 but may occur in any of the years 2023-2025; therefore, the columns do not add to the total.*
3. *LSEs may request an extension by February 1, 2023, up to 2028 for the LLT resources.*
4. *4. Minimum 8-hour discharge*

Effective Load Carrying Capacity Factors

- Requirements are based on Net Qualifying Capacity
- Long duration storage assigned an NQC of 78.2%
- Each MW of nameplate capacity = .782 MW NQC

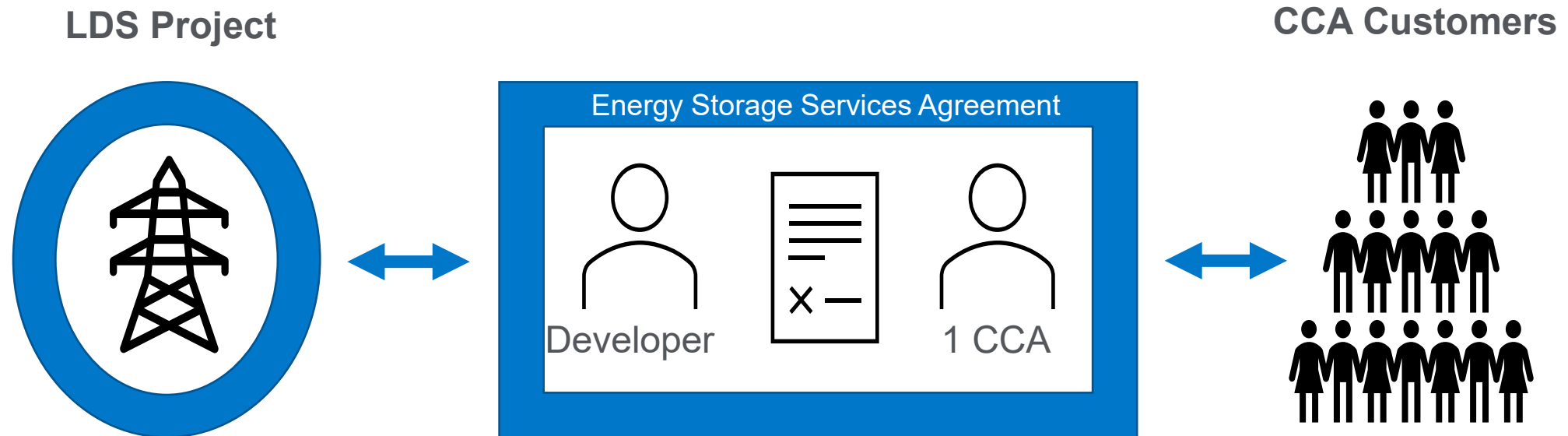
Peninsula Clean Energy NQC Allocation	Nameplate Equivalent
19 MW	24.30 MW

Contract Structure

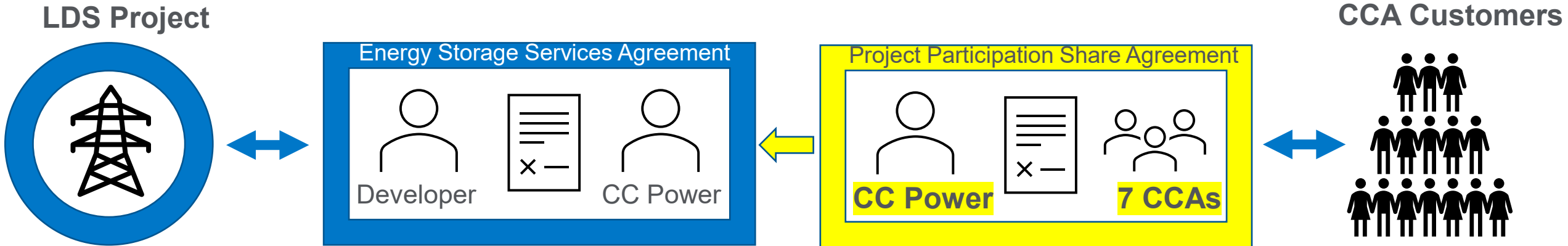


Typical CCA Contracting

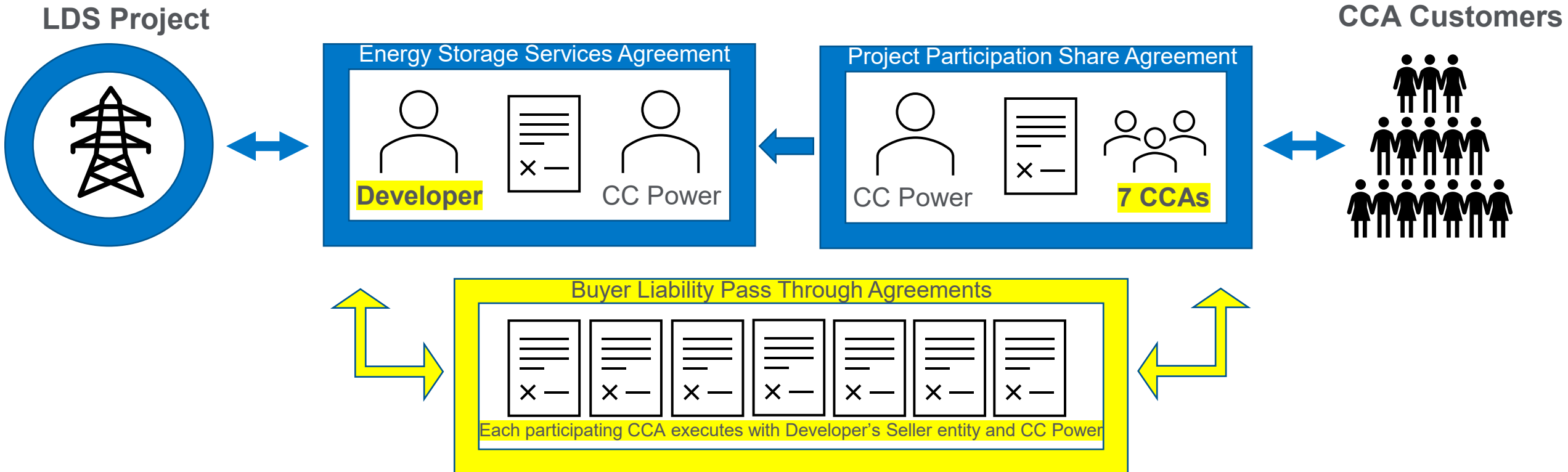
Typically, a CCA will procure storage services on behalf of its customers by directly entering into an Energy Storage Services Agreement (ESSA) with a developer. The ESSA addresses (1) payment obligations, (2) liability for damages, and (3) operational control of the storage unit.



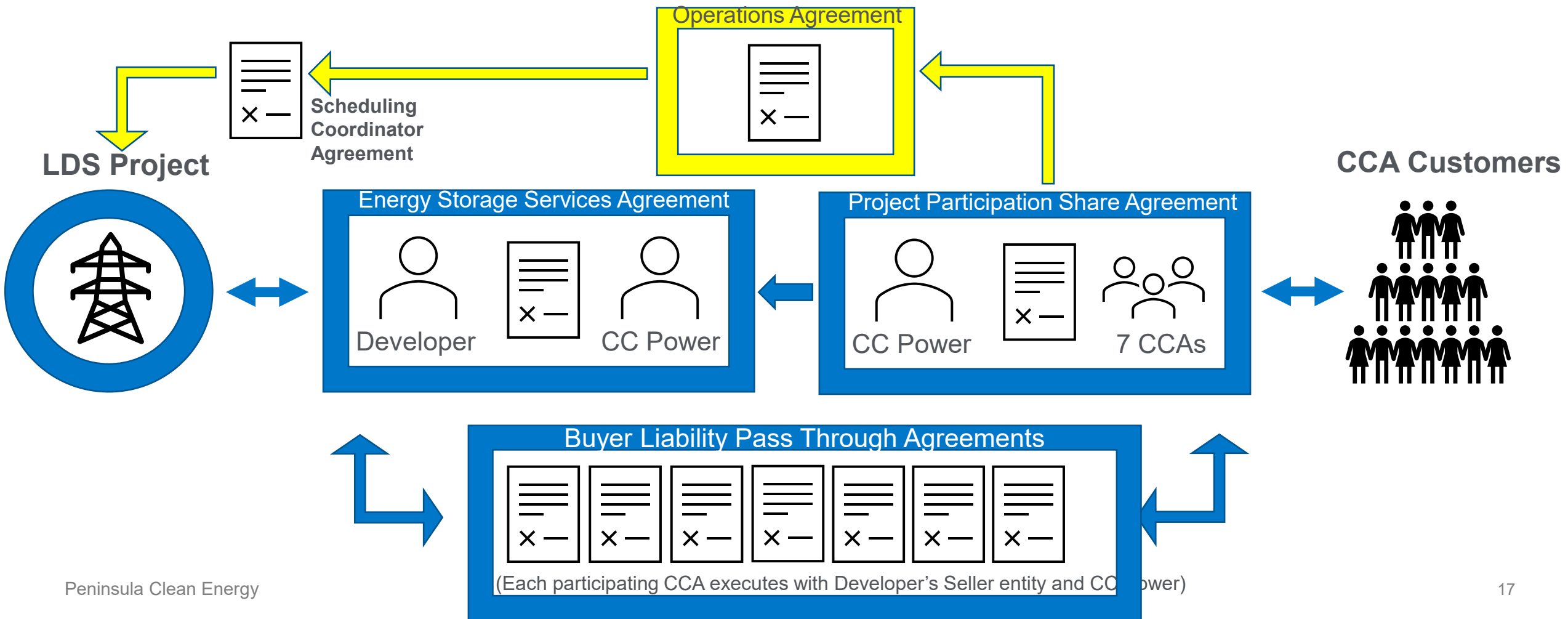
Project Participation Share Agreement



Liability for Damages



Operational Control

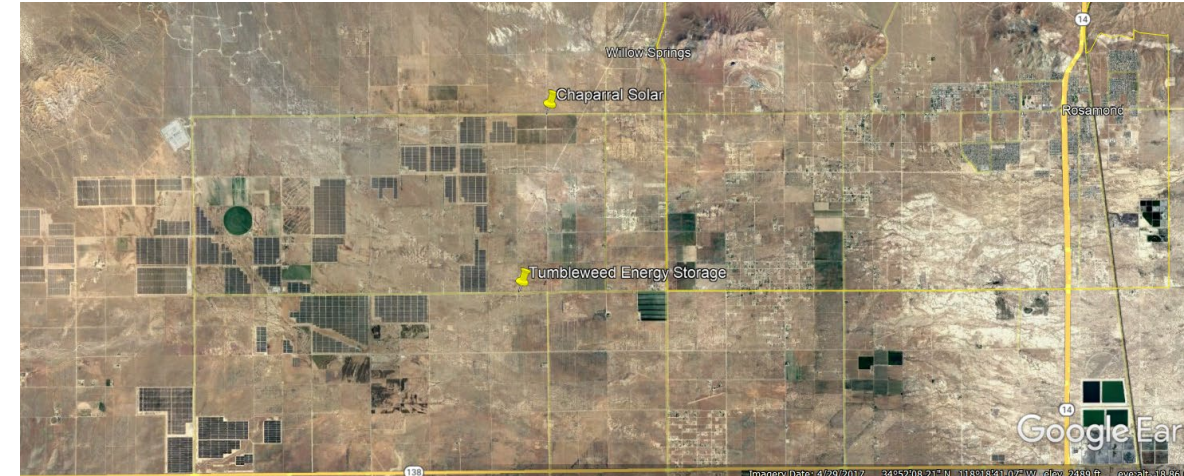


Tumbleweed Project



LS Power Tumbleweed

- **Developer** – REV Renewables / LS Power
- **Location** – Kern County, CA (in CAISO)
- **Product** – Full Toll, w/RA and A/S rights
- **Capacity/Technology** – 69 MW Li-ion (NMC/LFP) contract w/Full Capacity Deliverability Status
- **COD/Term** – 6/1/2026, 15 years
- **Discharge Duration** – 8 hours



Environmental Review

- Staff worked with several environmental non-profits to develop a system for evaluating the environmental impact of projects. Staff studied the geospatial footprint of the project to evaluate whether the project is located in a restricted or high conflict area for renewable energy development:
 - Protected areas at the federal, state, regional, local level (e.g. County-designated conservation areas, BLM Areas of Critical Environmental Concern, critical habitat for listed species, national, state, county parks, etc.).
 - Identified and mapped important habitat and habitat linkages, especially for threatened and endangered species (either state or federally listed).
- For this project, the analysis showed that the project was not located in a protected area based on the USGS Protected Areas Database (PAD-US) or in an area not suitable for renewable energy development as identified by the Renewable Energy Transmission Initiative (RETI).

USGS PAD-US: <https://www.usgs.gov/core-science-systems/science-analytics-and-synthesis/gap/science/protected-areas>
RETI: <https://reti.databasin.org/>

Tumbleweed Shares

- Project Capacity was allocated based on CPUC obligation

CCA	CPUC PD Capacity Obligation MW NQC in 2026	Entitlement Share	Tumbleweed Allocation (MW)
CPSF	15.5	16.06%	11.08
PCE	19	19.69%	13.59
RCEA	3.5	3.62%	2.50
SJCE	21.5	22.28%	15.37
SVCE	20.5	21.25%	14.66
SCPA	12.5	12.95%	8.94
VCE	4	4.15%	2.86
Total	96.5	100.00%	69

ESSA Contract Structure

- Pay for the use of the storage project of the project at a fixed-price rate per kW-month
- No escalation
- Contract term: 15 years
- CC power is entitled to all product attributes from the facility:
 - Energy Arbitrage
 - Ancillary services
 - Resource adequacy.

Contract Details – Credit / Collateral

- Buyer's Liability Pass Through Agreement (BLPTA)
 - Executed by CCA, Developer and CC Power
 - Each CCA guarantees payment performance of CC Power under ESSA
 - No LCs or cash collateral required
- Project Participation Agreement
 - 25% step-up cap – Each CCA commits to take up to 25% additional capacity if another CCA defaults
 - 3 months payment obligation posting per CCA to CC Power

Workforce Requirements

All construction work shall

- Comply with CA prevailing wage requirements
- Be conducted using a project labor agreement, community workforce agreement, work site agreement, collective bargaining agreement, or similar agreement providing for terms and conditions of employment with applicable labor organizations

Environmental and Environmental Justice Requirements

- Seller required to obtain and maintain all permits and approvals requires
- Seller represents and warrants that it has not and will not knowingly utilize equipment or resources that rely on work or services exacted from any person under the threat of a penalty and for which the person has not offered himself or herself voluntarily

Board Authorization MW

- Each CCA is seeking authority to procure a maximum amount of MW to cover:
 - Contingency should not all CCA's gain board authority; and
 - 25% step-up per PPSA
- Peninsula Clean Energy is sizing its requested authorization to its total LDS requirement

Peninsula Clean Energy NQC Allocation	Nameplate Equivalent
19 MW	24.30 MW

Recommendation and Approval



Recommendation

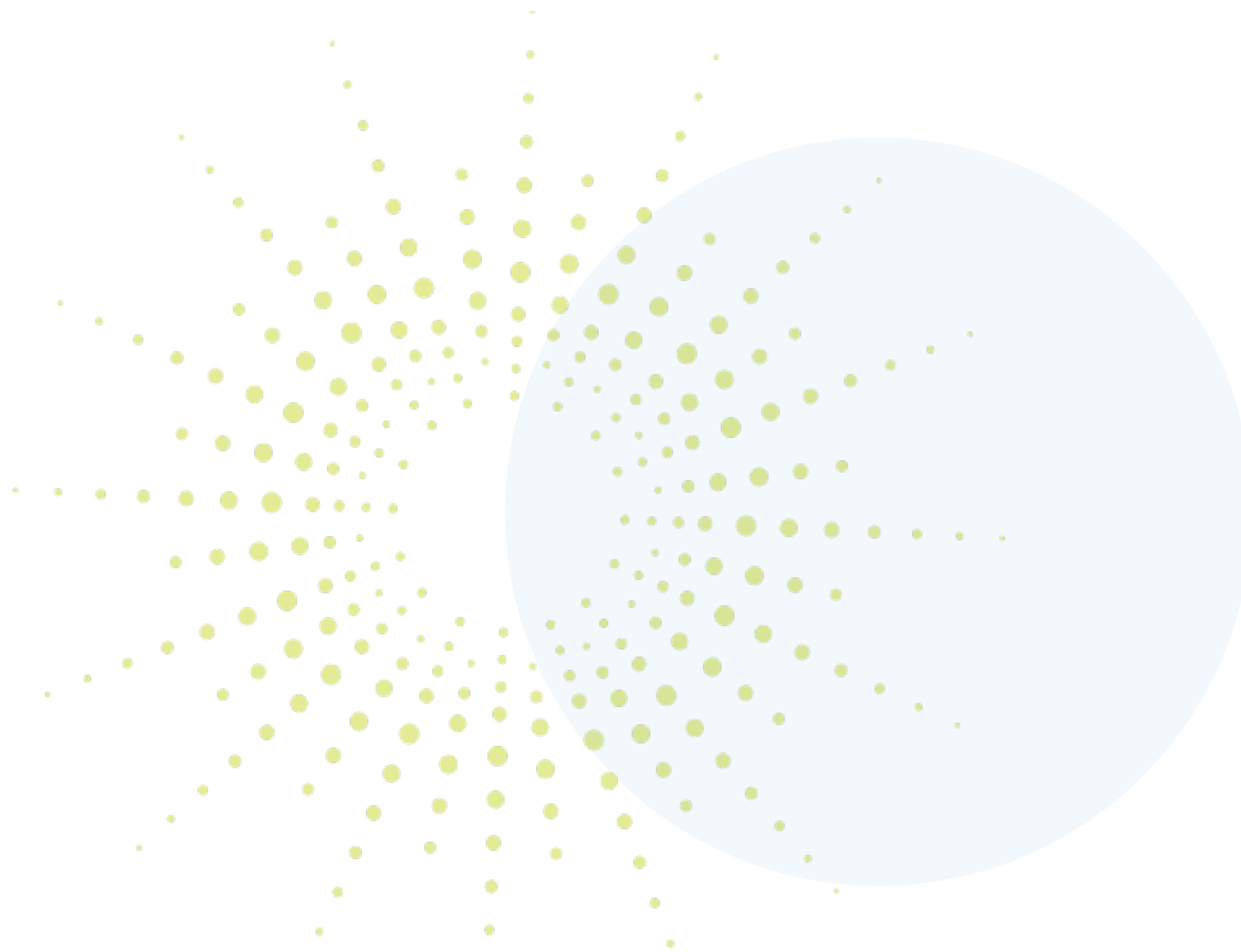
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Thank you! Questions?

A sustainable world with
clean energy for everyone.



Appendix



Mid-Term Reliability Decision (2023 – 2026)

- D.21-06-035 adopted by CPUC on June 24, 2021, to address mid-term reliability needs
- LSEs required to collectively procure 11,500 MW of new resources
 - Measured in net qualifying capacity not nameplate capacity
- Follow-on to November 7, 2019, CPUC decision mandating 3,300 MW procurement for 2021-2023 to maintain reliability
- Contract of at least 10 years
- Allocated to LSEs by load share
- Resources must be zero-emission or RPS eligible (no fossil resources)
- 4,500 MW of obligation subject to specific category requirements (next slide)

Procurement Timing

- Timing of overall procurement requirement and specific categories assigned in tranches between 2023 and 2026

Procurement Obligation in NQC¹ MW for All LSEs by Category and Year

Procurement Category	2023	2024	2025	2026	Total
Zero-emissions generation, generation paired with storage, or demand response resources ²	-	-	2,500	-	2,500
Firm zero-emitting resources ³	-	-	-	1,000	1,000
Long-duration storage resources ^{3, 4}	-	-	-	1,000	1,000
Remaining New Capacity Required			-	-	7,000
Total Annual Net Qualifying Capacity (NQC) Requirements	2,000	6,000	1,500	2,000	11,500

1. Obligation is in NQC MW (not nameplate) and subject to ELCC factor
2. Zero-emissions resources required to replace Diablo Canyon must be procured by 2025 but may occur in any of the years 2023-2025; therefore, the columns do not add to the total.
3. LSEs may request an extension by February 1, 2023, up to 2028 for the LLT resources.
4. 4. Minimum 8-hour discharge

Penalties for Non-Compliance

- If an LSE fails to meet its procurement obligations, “penalties” may be imposed
- IOUs will be ordered to backstop with costs assigned to LSE and/or its customers based on a methodology to be determined
- LSE will be subject to on-going financial penalties per MW not procured until deficiency is cured.
- Also possible, but currently unclear, if existing (or new) RA compliance penalties and CAISO backstop procurement would be applicable.

CC Power Tumbleweed Approval Process

Step 1: CC Power Board issues 60-day notice to consider ESSA for approval in December - Today

Step 2: CC Power Board approves ESSA, PPSA, BLPTA & Operating Agreement condition on individual CCA Approval

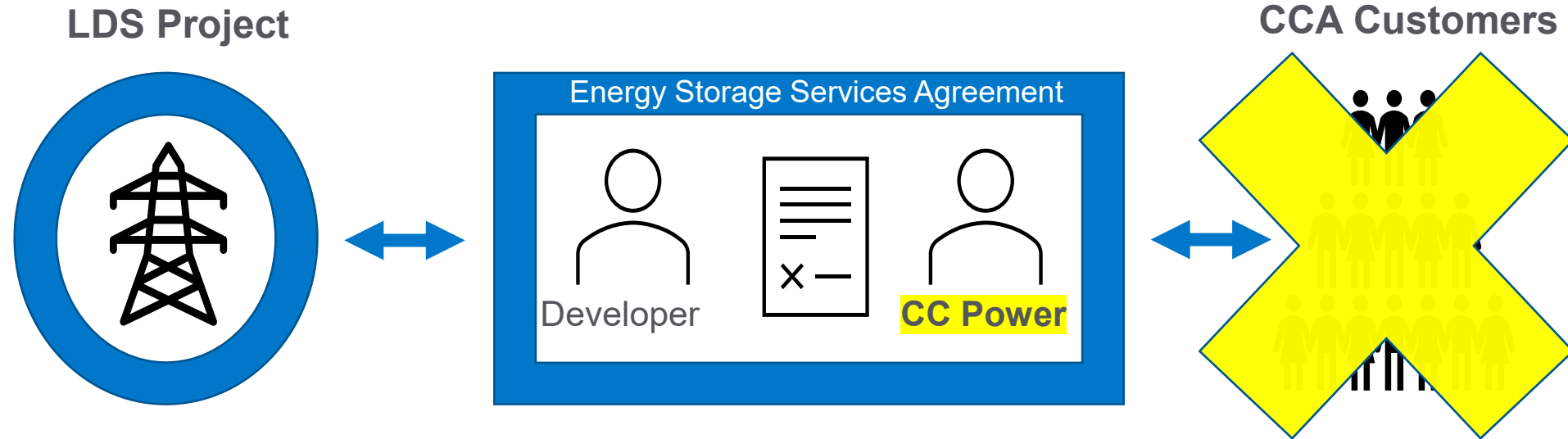
Step 3: CCAs seek respective Board Approvals of PPSA, BLPTA and Operating Agreement ✓

Step 4: Tumbleweed Agreements become effective

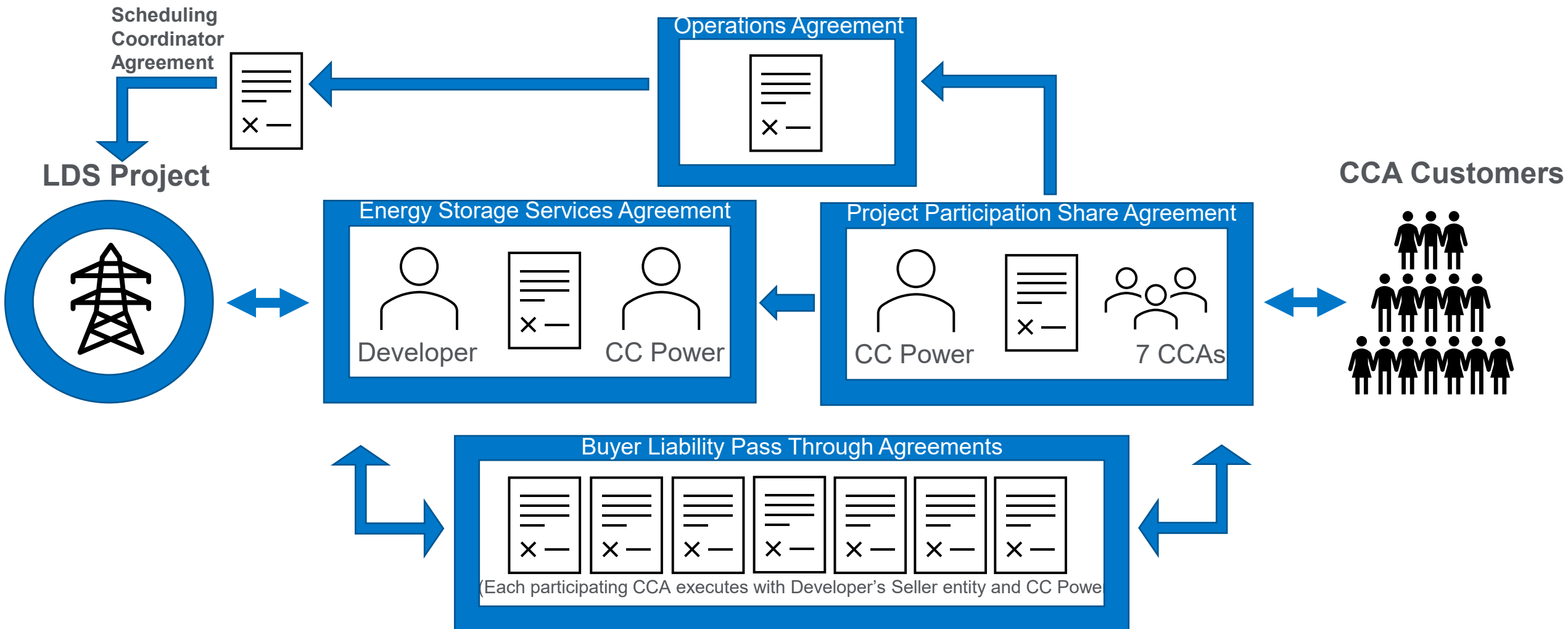


Process will be repeated for additional LDS Project Agreements – condition on negotiations and interest from other CCAs

Contracting Through CC Power



Overall Structure



Project Owner – REV Renewables

- A subsidiary of LS Power
- LS Power was founded in 1990
 - Developed more than 660 miles of high voltage transmission,
 - Developed, constructed, managed, or acquired more than 45,000 MW of power generation, including utility-scale solar, wind, hydro, natural gas-fired and battery energy storage projects.
 - Actively invests in distributed energy resources including CPower Energy Management, Endurant Energy, EVgo and Rise Light & Power, as well as renewable fuels.
- LS Power formed REV Renewables to accelerate investment in renewable energy and storage technologies.
- REV owns 1.9 GW of operating energy storage across the U.S. including 600MW of operating battery energy storage.
- REV has an additional 1.3 GW of battery energy storage in development.

Adjournment