Standard LSE Plan

Ava Community Energy

2026 Integrated Resource Plan

August 10, 2026

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I. Executive Summary

Ava Community Energy (Ava), a Community Choice Aggregator (CCA) and public load-serving entity (LSE) governed by elected officials from its member communities,[1] is pleased to participate in the Integrated Resource Planning (IRP) process. Ava is proud to serve one of the most dynamic and diverse communities in the State of California, with a clear mandate to spur the transition to a clean, greenhouse gas (GHG)-free energy economy while providing affordable energy to our customers.

This IRP narrative presents Ava's Preferred Conforming Portfolio that meets all applicable reliability constraints and assigned GHG benchmarks for the 2024–2027 IRP cycle. Together with the accompanying Resource Data Templates (RDTs) and Clean System Power (CSP) workbooks for the 8 MMT 2045 GHG scenario, this narrative satisfies the IRP filing requirements defined by the California Public Utilities Commission (CPUC or Commission). On July 15, 2026, Ava's Board of Directors (Board) approved the analysis and delegated final preparation of filing materials to Ava's CEO.

For the 2024–2027 IRP cycle, Ava developed a tailored configuration of GenX, an open-source capacity expansion model, to optimize the goals of reliability, GHG-emission reductions, and affordability of different resources. Leveraging the benefits afforded by this modeling framework, Ava identified an optimized least-cost portfolio that surpasses the emission reduction targets from the CPUC and meets the requirements for GHG-free procurement adopted by Ava's Board. Ava exceeds the California State goal that LSEs serve at least 60% of retail sales with qualifying renewable sources by 2030. Additionally, at least 39% of the renewable generation in Ava's Preferred Conforming Portfolio[2] would be from resources with which Ava had signed long-term contracts.

Actual procurement decisions may vary from Ava's Preferred Conforming Portfolio due to prevailing market conditions, changes in direction from Ava's Board, or CPUC action. Nonetheless, Ava staff view this IRP filing as an opportunity to communicate the overall direction of its procurement roadmap over the medium- and long-term horizons to Ava's governing board, customers, and regulatory agencies. Ava encourages stakeholders to view the Preferred Conforming Portfolio as indicative but not predictive of the organization's

[1] Ava currently serves Alameda County, unincorporated San Joaquin County, and the San Joaquin cities of Tracy, Stockton, and Lathrop. Ava

[2] In 2030 the RPS requires that 60% of Ava's retail demand be met with RPS eligible resources and 65% of it be procured through long-term contracted resources; this yields 39% in the Preferred Conforming Portfolio.

directional view on procurement decisions regarding resource types, amounts, locations, and timing of future portfolio additions. Furthermore, Ava developed an Alternate Conforming Scenario to supplement the Preferred Conforming Scenario. While directionally consistent with the Preferred Conforming Portfolio, the Alternate Conforming Scenario seeks to be more representative of the incremental resource mix Ava believes more likely to be available for contracting in future years. This is discussed in more detail in Section III.a.

The total resource mix for Ava's Preferred Conforming Portfolio is broken down by resource type in Figure 1 and Figure 2 below. These charts include Ava's baseline resources, (i.e., resources already under contract), candidate resources (i.e., incremental resources added to the portfolio as part of this IRP exercise), and expected future market transactions (e.g., Resource Adequacy [RA]-Only contracts and Day-Ahead Market purchases).

Figure 1 ELCC-Adjusted Capacity of Ava's Preferred Conforming Portfolio

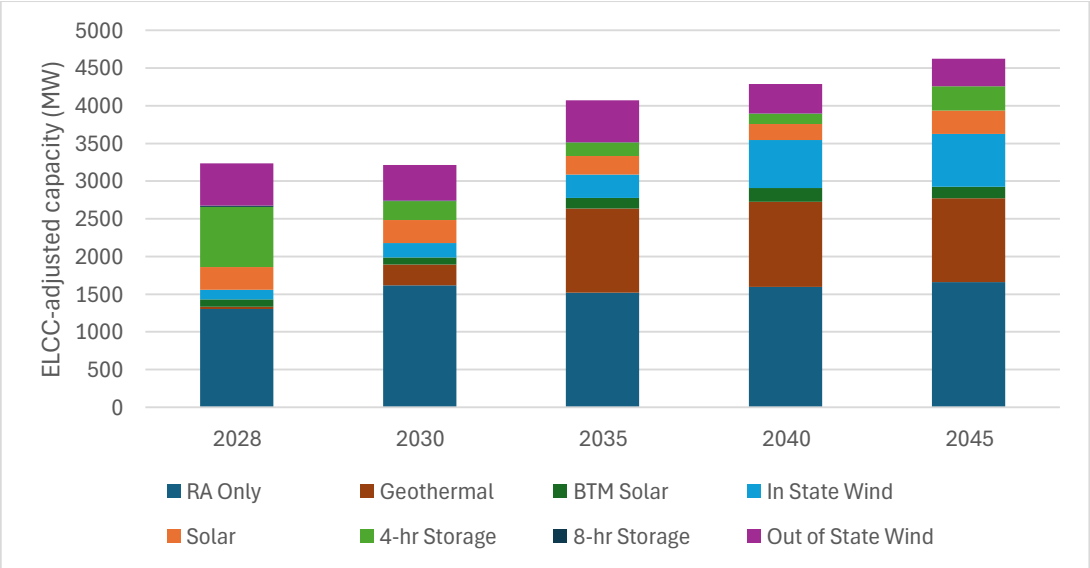
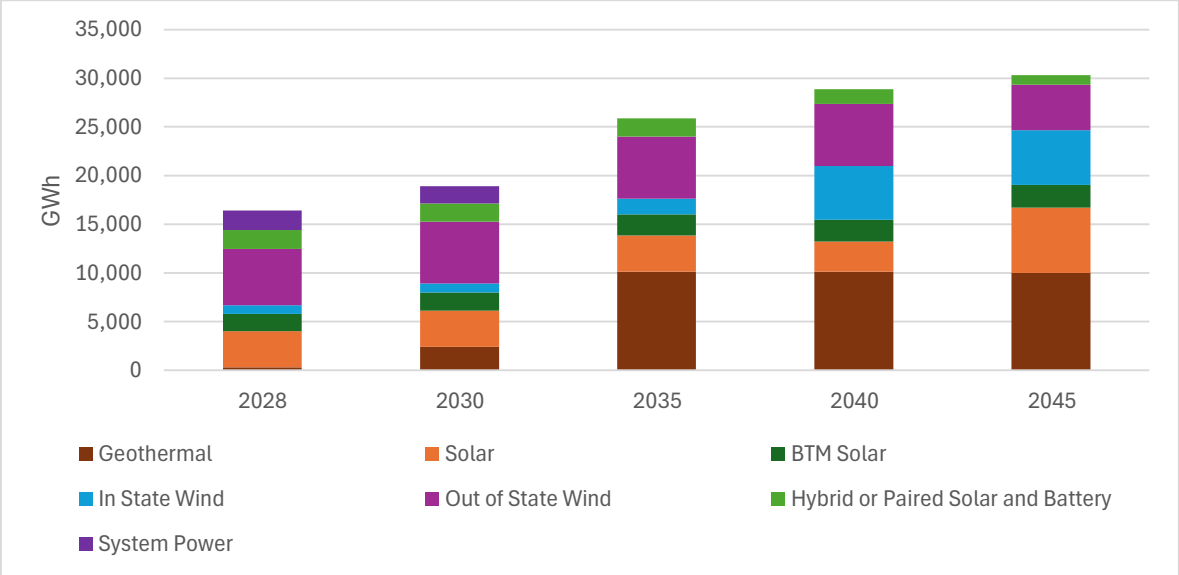


Figure 2 Annual Net Generation of Ava's Preferred Conforming Portfolio



Similarly, the total resource mix for Ava's Alternative Conforming Portfolio is broken down by resource type in Figure 3 and Figure 4 below.

Figure 3 ELCC-Adjusted Capacity of Ava's Alternative Conforming Portfolio

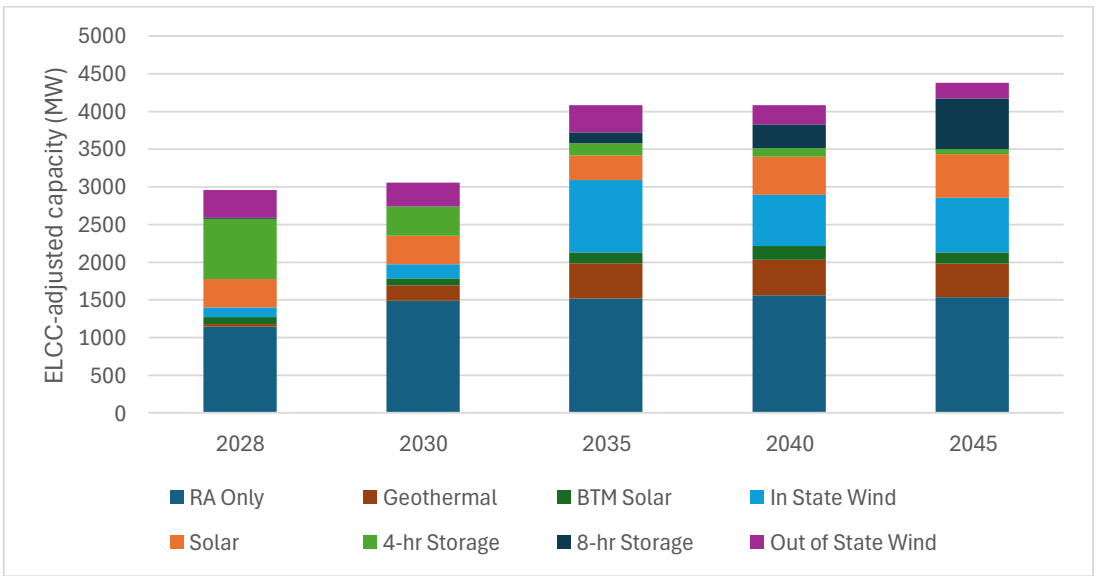
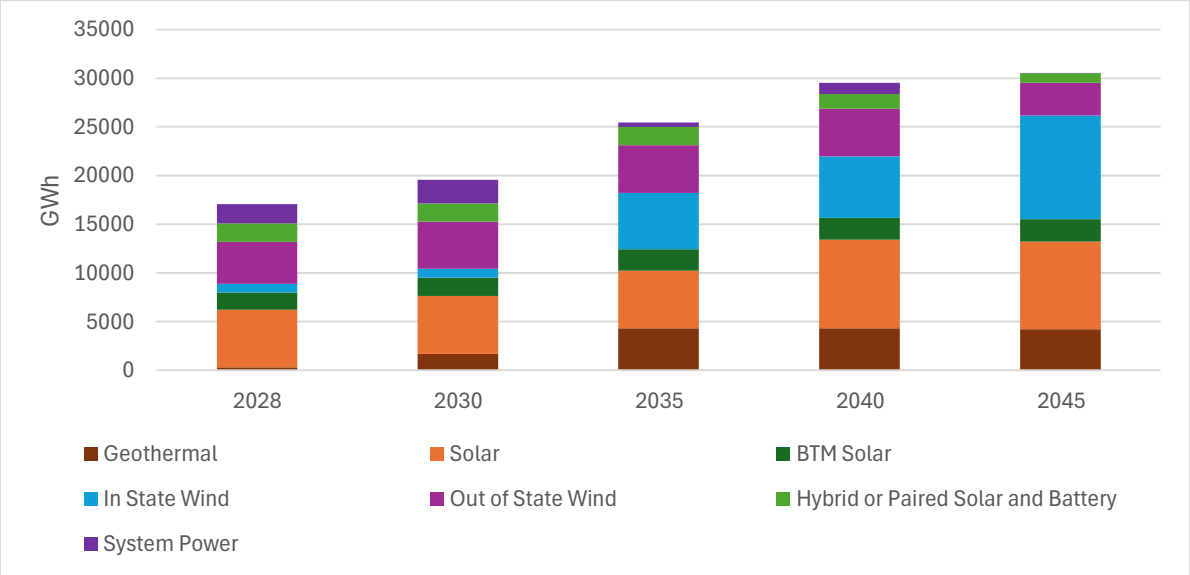


Figure 4 Annual Net Generation of Ava's Alternative Conforming Portfolio



Ava comprehensively aligned with the CPUC's inputs and assumptions as required by the CPUC for this submission. To improve the applicability of the results from this IRP, Ava staff supplemented the inputs and assumptions provided by the Commission with internal, proprietary forecasts on expected future market pricing conditions. The CPUC-provided values can be found in the RESOLVE Upstream Data Workbooks and Public Case Viewers zip file for the 2026–2027 Transmission Planning Process (TPP).[3] This dataset includes cost data within the Pro Forma Data Viewer, which aggregates cost curves and data from customer analyses from the CPUC IRP 2025 Inputs & Assumptions Document, NREL's 2024 Annual Technology Baseline (ATB). This data was chosen as the analysis included impacts of US tariffs on various imports needed for these technologies, as well as changes to the Production Tax Credit and Investment Tax Credits on costs for specific technologies from the One Big Beautiful Bill Act (OBBBA). Effective Load Carrying Capacity (ELCC) values were taken from the CPUC's RDT. Ava staff also incorporated the annualized load forecast, annualized peak demand forecasts, and annualized behind the meter (BTM) solar forecasts developed pursuant to an ALJ January 16th 2026 Ruling. Finally, Ava staff incorporated build limits based on resource potential estimated by CPUC staff

Ava staff relied on internal assumptions for the following: Ava's actual procurement to date, expectations on future RA and REC market pricing conditions and resource availability (analyzed from broker quotes), deterministic forecasts of energy market prices based on

[3]https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/long-term-procurement-planning/2024-26-irp-cycle-events-and-materials/assumptions-for-the-2026-2027-tpp

several different scenarios (taken from a third party), and information germane to Ava's local customer programs. Ava staff selected the price curve that aligns with current policies and incorporated considerations for potential future policy interventions when evaluating the price scenarios. All load-modifying resources, including BTM solar, were modeled based on the ALJ January 16th 2026 Ruling. Ava staff also compared the CPUC's reliability procurement requirements with the combined estimate of CPUC annual peak demand and Ava's internal assumptions regarding the RA program planning reserve margin (PRM).

Once Ava completed the modeling exercise to identify the optimal portfolio, staff transferred the results into the CPUC's RDT and CSP workbooks to verify that the portfolio conformed with all the applicable reliability and environmental requirements. As shown in the RDTs and CSPs submitted with this IRP Plan, Ava's Preferred and Alternative Conforming Portfolios satisfy the reliability procurement requirement in each year from 2026–2045 and all GHG benchmarks. The calculated annual CO2 emissions from Ava's Preferred Conforming portfolio are listed below and are less than Ava's assigned GHG benchmark in each year. Negative values indicate Ava's portfolio generates clean energy in excess of its retail sales and is providing that clean energy back to the system.

Table 1 Ava Portfolio CO2 Emissions and Benchmark

Year	2030	2035	2040	2045
Ava Portfolio CO2 Emissions (MMT)	0.98	0.87	(0.02)	(0.42)
Ava GHG Benchmark (MMT)	1.11	0.92	0.77	0.39

II. Study Design

a. Objectives

Ava performed an IRP analysis exercise in accordance with the CPUC's IRP cycle requirements to inform its mid-term and long-term procurement strategy. An integral part of Ava's IRP analysis is to ensure that the planned resource mix can achieve the milestones assigned by Ava's Board of Directors. Another key objective of this planning exercise is to identify a portfolio that satisfies CPUC requirements related to system reliability and GHG-reduction targets across the entire IRP planning horizon, which currently looks forward to 2045. The resulting portfolio must be feasible to adopt and implement, and to balance the goals of system reliability, decarbonization, and affordability. The Preferred and Alternative Conforming Portfolios submitted for this IRP are the joint outcome of a series of modeling

exercises as well as discussions with Ava's Board, advisory committee, and other stakeholders.

The objectives for the analytical work described herein include:

- Satisfy the goals set forth by Ava's Board;
- Satisfy the goals of PU Code Section 454.52(a)(1);
- Satisfy all CPUC specifications for required conforming portfolios;
- Demonstrate how future portfolios achieve Ava's proportional share of the 25 MMT by 2035 and 8 MMT by 2045 GHG Benchmarks, alongside Ava's Board-adopted goal of 100% clean energy by 2030;
- Demonstrate continuous progress towards meeting or exceeding the State's RPS targets;
- Show how Ava's future portfolios will contribute to overall system reliability; and
- Provide insight into how State policy mandates and GHG emission reductions change Ava customer costs over time.

b. Methodology

i. Modeling Tool(s)

For this IRP cycle, Ava contracted with First Principles Advisory and Professors Neha Patankar and Manar Jaradat at Binghamton University (collectively, consultants) to support the modeling analysis. To model its portfolios, Ava and consultants developed an instance of GenX uniquely suited for Ava's study objectives. GenX is a highly configurable, open source, constrained linear optimization model that incorporates state-of-the-art practices for electricity resource capacity expansion.[4] For this IRP exercise, GenX was modified to include the following modules to enhance model capability: (1) a market module that models wholesale market participation by LSEs; (2) a planning reserve module that enforces a reliability requirement to ensure that capacity expansion results maintain extra capacity beyond expected peak demand; and (3) an ELCC constraint that estimates the reliability contribution of resources towards Ava's reliability requirements. GenX was also modified to ensure all resource cost components are discounted to a single year within the entire planning horizon for aggregated multi-stage outputs (2024).

[4] *See* https://genxproject.github.io/GenX.jl/dev/; *see also* https://www.energyexemplar.com/.

GenX and RESOLVE are both least-cost capacity-expansion models that co-optimize resource investment and system operations subject to reliability, policy, and technical constraints. RESOLVE is a linear optimization model with linearized unit commitment and representative dispatch; in the CPUC's IRP framework, it incorporates reliability requirements and ELCC values in coordination with probabilistic SERVM analysis. GenX is a modular linear or mixed-integer linear model that can use full-year or statistically selected representative periods and allows users to configure operational detail, including linearized or integer unit commitment, resource types, and policy constraints. Accordingly, RESOLVE provides an established California-specific framework closely aligned with the CPUC's system-planning assumptions, while GenX provides greater flexibility to tailor model structure and inputs to an individual load-serving entity's planning needs. Both remain deterministic capacity-expansion tools, and differences in their results primarily reflect differences in model configuration, inputs, and assumptions.

Although Ava made every reasonable effort to align modeling inputs, assumptions, and methodologies, certain aspects of GenX's treatment of reliability contributions, emissions, and other portfolio characteristics differ from the methodologies used in the RDT and CSP. Accordingly, Ava's internal estimates of resource reliability contributions, portfolio emissions, and clean-energy content may differ to some extent from the results reported in those templates. These methodological differences do not affect compliance; Ava's submitted portfolios satisfy all applicable requirements for this filing.

ii. Modeling Approach

The modeling framework used to create Ava's portfolios is a multi-step process that begins with investment and operational decision modeling and concludes with local portfolio optimization. By individually addressing each of the key stages that constitute a robust IRP planning methodology, Ava acquired greater clarity on potential future states of the grid and what the likely impacts would be to its portfolio. In addition, Ava was able to conduct a detailed assessment of the trade-offs between its long-term goals and associated costs of such targets, and as a result, Ava is better positioned to make timely, orderly, and cost-efficient procurement decisions for its customers.

The GenX model consists of multiple layers. In the first layer, the process begins with capacity expansion modeling of the CAISO system in a manner similar to the CPUC's IRP instance of E3's RESOLVE model. E3's RESOLVE model uses a probabilistic method to optimize capacity expansion by sampling random days of resource performance from each month, while GenX applies a deterministic approach that optimizes capacity expansion

using a representative week from each month. Start-up and shut-down decisions in the GenX model are modeled at the individual power plant level. GenX also accounts for the commitment of capacity to supply frequency regulation and operating reserves, approximates resource adequacy requirements through a capacity reserve margin requirement, and effectively incorporates public policy constraints, including CO2 emission limits, renewable energy portfolio standards, and minimum technology deployment mandates.

For model inputs, the GenX model can condense a full year of data, such as retail demand and resource capacity factor profiles, into representative periods during the input processing stage, using a built-in time-domain reduction package. For model results, the GenX model can simulate a full year of operational decisions at an hourly resolution and represent operations using multiple sub-periods, such as a representative week for each month. GenX allows the user to create specific constraints—policy, environmental, physical—to these inputs, as well with specific resource technologies (i.e., minimum/maximum amount to build, minimum/maximum amount to procure generally, etc.).

iii. Alternative Assumptions

Ava has incorporated several alternative assumptions to either reflect real-world expectations or policy-specific constraints:

1. Ava modeled short-term RA purchase as a potential RA-only resource to account for any shortages in RA supply in the event that there aren't enough resources to procure to meet reliability targets. There are two reasons why Ava adopted this approach: first, it is realistic to assume that an LSE will need to procure short-term RA due to postponed CODs or facility outages. An LSE will not avoid procuring RA due to the compliance nature of the program. Secondly, Ava wanted the model to avoid optimizing for any "new" gas projects simply for RA to make certain that the model was optimizing for cleaner, non-thermal resources.
2. Ava opted to have no new builds in year 2026. This assumption was made due to the reality that 2026 will be over halfway finished by the time each LSE's IRP is submitted, so it stands to reason that this IRP will not be timely enough to influence any procurement decisions for resources that achieve commercial operation in 2026. Ava therefore went with its current fleet of resources used to meet its compliance requirements (based on IRP inputs) and internal procurement requirements (both by its Board of Directors and other alternative assumptions in

the modeling) for 2026. Any shortage in any compliance item is met by an internal market price for that product (REC/CF, RA, energy, etc.).

3. Ava's optimization takes into account the organization's planned use of Power Cost Indifference Adjustment (PCIA) above-market cost allocation to its customers as a natural hedge in the portfolio. This planned market exposure is included as a zero-cost resource (as its use as a risk management tool is not price sensitive) and GenX optimizes for a portfolio that includes this risk mitigation strategy.
4. To ensure that the Preferred Conforming Portfolio complied with both IRP and anticipated RA requirements, Ava constrained the capacity buildout to meet the greater of either (1) the Reliability Procurement Requirement specified by the CPUC or (2) the peak demand multiplied by the expected PRM.
5. VAMO renewable energy credits are excluded from the CSP Calculator calculations, although their inclusion would improve the reported emissions results.
6. Anticipated CAM capacity is included in capacity estimates and counted toward Ava's Reliability Procurement Requirement.

III. Study Results

a. Conforming and Alternative Portfolios

Pursuant to the *Administrative Law Judge Ruling Setting Requirements for Individual Resource Plans Due June 1, 2026*, an LSE "must submit one 'conforming portfolio' that achieves GHG emissions that are equal to or less than the LSE's proportional Share of the 25 MMT by 2035 and 8 MMT by 2045 GHG target."[5] Ava intends to achieve portfolio emissions levels that are less than its expected share of both the 25 MMT 2035 and 8 MMT 2045 benchmark, and has developed a preferred conforming portfolio as well as an alternative conforming portfolio for the 2026 IRP cycle. Table 2, below, lists the resources and corresponding nameplate capacities associated with Ava's preferred conforming portfolio for the calendar years explicitly modeled in GenX. For additional project related information, please refer to the RDT attachments.

[5] ALJ Ruling, pp. 8–9.

Table 2 Nameplate Capacity (MW) of Ava's Preferred Conforming Portfolio Capacity by Project Type and Technology[6]

Project	Tech	Project Type	2026	2028	2030	2031	2035	2040	2045
Contracted RA	Aggregate	Baseline	1830	1186	1157	678	701	13	0
ALES01LT2535	Storage	Baseline	5	5	5	5	5	0	0
MRPP01LT2439	Storage	Baseline	16	16	16	16	16	16	0
MRPP04LT2439	Thermal	Baseline	97	97	97	97	97	0	0
OCES01LT2333	Solar+Storage	Baseline	100	100	100	100	100	0	0
Altamont Winds LLC	Wind	Baseline	55	55	55	55	55	55	0
Imperial Sun Solar LLC	Solar+ Storage	Baseline	0	100	200	200	200	200	0
Corsac Generating Station 1 LLC	Geothermal	Baseline	0	0	40	40	40	40	40
Daggett Solar Power 3 LLC	Solar+ Storage	Baseline	63	63	63	63	63	0	0
IP Easley 1 LLC	Solar	Baseline	0	75	75	75	75	0	0
IP Easley 2 LLC	Solar	Baseline	0	75	75	75	75	0	0
EDPR CA Solar Park VI LLC + Sonrisa BESS LLC	Solar+ Storage	Baseline	0	192	384	384	384	384	384
San Gabriel Project LLC	Storage	Baseline	0	50	100	100	100	100	100
Golden Fields Solar III, LLC	Solar	Baseline	112	112	112	112	112	0	0
Henrietta D Energy Storage LLC	Storage	Baseline	10	10	10	10	10	0	0
Kola Energy Storage, LLC	Storage	Baseline	125	125	125	125	125	125	125
MRP Pacific Marketing LLC	Storage	Baseline	96	96	96	96	96	96	0

[6] Capacity amounts are not adjusted by ELCC in this table.

Project	Tech	Project Type	2026	2028	2030	2031	2035	2040	2045
IP Oberon II, LLC	Solar+ Storage	Baseline	250	250	250	250	250	0	0
PCIA	Aggregate	Baseline	541	123	124	112	20	19	23
Rosemary Solar, LLC	Solar+ Storage	Baseline	0	70	140	140	140	140	140
EDPR Scarlet I LLC	Solar+ Storage	Baseline	130	130	130	130	130	130	0
EDPR Scarlet III LLC	Storage	Baseline	0	70	70	70	70	70	0
Sun Pond, LLC	Solar+ Storage	Baseline	85	85	85	85	85	85	85
SunZia Wind South LLC	Wind	Baseline	175	175	175	175	175	175	0
SunZia Wind North LLC	Wind	Baseline	75	75	75	75	75	75	0
Tecolote Wind LLC	Wind	Baseline	100	100	100	100	0	0	0
Tumbleweed Energy, LLC	Long-Duration Storage	Baseline	50	50	50	50	50	0	0
Tulare Solar Center, LLC	Solar	Baseline	56	56	56	56	56	56	0
Zeta Solar, LLC	Solar+ Storage	Baseline	0	38	75	75	75	75	75
California Geothermal	Geothermal	Candidate	0	35	275	352	1239	1239	1239
Lithium-Ion battery 8hr CA	Li-ion Battery	Candidate	0	0	40	40	90	90	895
New Mexico to SCE (PV) wind	Wind	Candidate	0	1072	1072	1072	1072	1072	1072
Greater Bay Area Wind	Wind	Candidate	0	247	247	494	494	494	494
Kern Wind	Wind	Candidate	0	0	0	0	0	0	245
Northern Bay Area Wind	Wind	Candidate	0	0	0	0	0	1893	1893
Short-term RA	Aggregate	Candidate	600	509	975	1208	767	1808	1975
SCE East of Pisgah Wind	Wind	Candidate	0	255	509	509	509	509	509
SCE Eastern Wind	Wind	Candidate	0	0	0	21	21	21	21
North of Lugo Solar	Solar	Candidate	0	980	980	980	980	980	2484

Project	Tech	Project Type	2026	2028	2030	2031	2035	2040	2045
Baja California Wind	Wind	Candidate	0	53	53	53	53	53	53

Ava also developed an alternative portfolio in response to recent developments concerning the proposed Reliable and Clean Power Procurement Program (RCPPP) in Rulemaking (R.) 20-05-003.

On June 23, 2026, the Administrative Law Judge issued the Ruling Seeking Comments on Additional Proposal for a Reliable and Clean Power Procurement Program, which presented an additional potential program design framework for stakeholder consideration. The proposal would more directly link the IRP planning process, including aggregation of load-serving entity LSE IRPs into a PSP and development of a portfolio for use in the California Independent System Operator's Transmission Planning Process (TPP), to binding procurement requirements. Under the proposal, LSE procurement could be required to align with the most recently adopted PSP or TPP portfolio, including technology-specific or attribute-based requirements.

Although the PSP provides valuable information for system planning, Ava is concerned that binding and granular procurement requirements derived from a portfolio based on a static set of inputs and assumptions may not reflect subsequent changes in market conditions. Technology-specific requirements could obligate LSEs to procure resources that prove less available or more costly than anticipated. The prospect of such requirements may also cause LSEs to adopt more conservative assumptions in their individual IRPs and prioritize resources with greater certainty regarding cost, availability, and development feasibility. This concern is particularly relevant for resource types subject to substantial uncertainty.

Accordingly, Ava developed an Alternative Conforming Portfolio that limits cumulative geothermal capacity to 500 MW by 2040 and 750 MW by 2045. These limits reflect the comparatively greater uncertainty surrounding the future availability, cost, and development of geothermal resources. Table 3, below, lists the resources and corresponding nameplate capacities associated with Ava's Alternative Conforming Portfolio for the calendar years explicitly modeled in GenX. Should the CPUC adopt the most June 23, 2026 RCPPP Proposal, this Alternative portfolio would replace the portfolio described above as Ava's Preferred Conforming Portfolio.

Table 3 Nameplate Capacity (MW) of Ava's Alternative Conforming Portfolio Capacity by Project Type and Technology

Project	Tech	Project Type	2026	2028	2030	2031	2035	2040	2045
Contracted RA	Aggregate	Baseline	1830	1186	1157	678	701	13	0
ALES01LT2535	Storage	Baseline	5	5	5	5	5	0	0
MRPP01LT2439	Storage	Baseline	16	16	16	16	16	16	0
MRPP04LT2439	Thermal	Baseline	97	97	97	97	97	0	0
OCES01LT2333	Solar + Storage	Baseline	100	100	100	100	100	0	0
Altamont Winds LLC	Wind	Baseline	55	55	55	55	55	55	0
Imperial Sun Solar LLC	Solar + Storage	Baseline	0	100	200	200	200	200	0
Corsac Generating Station 1 LLC	Geothermal	Baseline	0	0	40	40	40	40	40
Daggett Solar Power 3 LLC	Solar + Storage	Baseline	63	63	63	63	63	0	0
IP Easley 1 LLC	Solar	Baseline	0	75	75	75	75	0	0
IP Easley 2 LLC	Solar	Baseline	0	75	75	75	75	0	0
EDPR CA Solar Park VI LLC + Sonrisa BESS LLC	Solar + Storage	Baseline	0	192	384	384	384	384	384
San Gabriel Project LLC	Storage	Baseline	0	50	100	100	100	100	100
Golden Fields Solar III, LLC	Solar	Baseline	112	112	112	112	112	0	0
Henrietta D Energy Storage LLC	Storage	Baseline	10	10	10	10	10	0	0
Kola Energy Storage, LLC	Storage	Baseline	125	125	125	125	125	125	125
MRP Pacific Marketing LLC	Storage	Baseline	96	96	96	96	96	96	0
IP Oberon II, LLC	Solar + Storage	Baseline	250	250	250	250	250	0	0

Project	Tech	Project Type	2026	2028	2030	2031	2035	2040	2045
PCIA	Aggregate	Baseline	541	123	124	112	20	19	23
Rosemary Solar, LLC	Solar + Storage	Baseline	0	70	140	140	140	140	140
EDPR Scarlet I LLC	Solar + Storage	Baseline	130	130	130	130	130	130	0
EDPR Scarlet III LLC	Storage	Baseline	0	70	70	70	70	70	0
Sun Pond, LLC	Solar + Storage	Baseline	85	85	85	85	85	85	85
SunZia Wind South LLC	Wind	Baseline	175	175	175	175	175	175	0
SunZia Wind North LLC	Wind	Baseline	75	75	75	75	75	75	0
Tecolote Wind LLC	Wind	Baseline	100	100	100	100	0	0	0
Tumbleweed Energy, LLC	Long-Duration Storage	Baseline	50	50	50	50	50	0	0
Tulare Solar Center, LLC	Solar	Baseline	56	56	56	56	56	56	0
Zeta Solar, LLC	Solar + Storage	Baseline	0	38	75	75	75	75	75
California Geothermal	Geothermal	Candidate	0	35	193	252	500	500	500
Lithium-Ion battery 8hr CA	Li-ion Battery	Candidate	0	0	422	422	652	1060	2079
New Mexico to SCE (PV) wind	Wind	Candidate	0	615	615	615	615	615	615
Greater Bay Area Wind	Wind	Candidate	0	247	247	494	494	494	494
Kern Wind	Wind	Candidate	0	0	0	0	0	245	245
Northern Bay Area Wind	Wind	Candidate	0	0	0	0	1768	1893	1893
Short-term RA	Aggregate	Candidate	600	322	813	1013	763	1764	1825
SCE East of Pisgah Wind	Wind	Candidate	0	255	509	509	509	509	509
SCE Eastern Wind	Wind	Candidate	0	0	0	0	54	54	54
North of Lugo Solar	Solar	Candidate	0	1687	1687	1687	1687	3183	3183
Baja California Wind	Wind	Candidate	0	53	145	145	145	145	145

Project	Tech	Project Type	2026	2028	2030	2031	2035	2040	2045
SCE Eastern Solar	Solar	Candidate	0	0	0	0	0	0	1761

Ava began executing long-term offtake agreements in 2019 and has released eight long-term resource RFOs since its inception. Presently, over 20 of Ava's long-term contracted assets are operational resources[7] and numerous additional resources are scheduled to achieve commercial operation in the next few years. The Tumbleweed Energy, LLC Storage Project, included as a Baseline resource in the above Table 2 and Table 3, was originally a 50 MW 4-hour duration Storage Agreement, and on June 1, 2026, was expanded to an operational 50 MW 8-hour long-duration Storage Agreement. The Contracted RA Project, included as a Baseline resource in the above Table 2 and Table 3, is an aggregate of individual agreements for Resource Adequacy only, supplied by a variety of sources and technologies.

To date, Ava has contracted with 17 RPS-eligible generating resources of varying types and in some cases with co-located energy storage to reduce emissions and to cover our load.[8] These resources are described below as physical, in development resources, consistent with the definitions provided in the RDTs. Contracts not included in the CPUC's Baseline resource list were added to the RDTs as physical resources in development for Ava's preferred conforming portfolio to ensure completeness.[9]

Table 4 Ava's current list of contracted long-term generation ("development resources")

Project	Developer	Technology	Forecasted COD	Generation Capacity (MW)	Storage Capacity (MW)
Golden Fields Soar III, LLC	Clearway	Solar	Online	112.00	0.00
Altamont Winds, LLC	Greenbacker	Wind	Online	54.80	0.00
Tulare Solar Center, LLC	Idemitsu	Solar	Online	55.83	0.00
Tecolote Wind LLC	Pattern	Wind	Online	100.00	0.00

[7] This number is inclusive of bundled generation plus attributes, RA-only offtake, and financial hedge agreements with tenors of 10 years or greater.

[8] To date, Ava entered into contract with an additional five small, RPS-eligible distributed generation resources to contribute to the Disadvantaged Communities Green-Tariff (DAC-GT) program. Each of these resources will be 3 MW or smaller in nameplate capacity. They were excluded from the IRP analysis due to their small size and direct obligation to perform/contribute to obligations of the DAC-GT program.

[9] *See* the RDTs for Ava's Preferred Conforming Portfolio and Alternate Conforming Portfolio.

Project	Developer	Technology	Forecasted COD	Generation Capacity (MW)	Storage Capacity (MW)
Daggett Solar Power 3 LLC	Clearway	Solar + Storage	Online	50.00	12.50
IP Oberon II, LLC	IPX (formerly Intersect)	Solar + Storage	Online	125.00	125.00
EDPR Scarlet I LLC	EDP Renewables	Solar + Storage	Online	100.00	30.00
Sun Pond, LLC	Longroad Energy	Solar + Storage	Online	42.50	42.50
SunZia North, LLC	Pattern	Wind	Online	74.60	0.00
SunZia South, LLC	Pattern	Wind	Online	175.40	0.00
Easley I, LLC	IPX (formerly Intersect)	Solar	3/31/2027	75.00	0.00
Easley II, LLC	IPX (formerly Intersect)	Solar	3/31/2027	75.00	0.00
EDPR CA Solar Park VI LLC	EDP Renewables	Solar + Storage	6/30/2027	200.00	184.00
Zeta Solar, LLC	Longroad Energy	Solar + Storage	7/26/2027	37.50	37.50
Imperial Sun, LLC	Atlantica	Solar + Storage	7/29/2027	100.00	100.00
Rosemary Solar, LLC	Longroad Energy	Solar + Storage	6/1/2028	70.00	70.00
Corsac Generating Station 1 LLC	Fervo	Geothermal	4/1/2030	40.00	0.00

b. Preferred Conforming Portfolios

Ava's Preferred Conforming Portfolio meets the CPUC's requirements of "conforming" and is consistent with the relevant statutory requirements of PU Code Section 454.52(a)(1). Below is a description of how Ava's planned resource mix satisfies each of those requirements.

- The GHG reduction targets established by the State Air Resources Board for the electricity sector are set such that economywide GHG emissions reductions of 40 percent from 1990 levels by 2030 are achieved. By Ava meeting its assigned 25 MMT by 2035 and 8 MMT by 2045 benchmarks —as reflected in the accompanying CSP Calculators, this requirement is satisfied.
- Article 16 (commencing with Section 399.11) of Chapter 2.3 requires LSEs to meet at least 60 percent of retail sales with eligible renewable energy resources by December 31, 2030. Based on CSP accounting methodologies, Ava's conforming portfolio is expected to meet 95% of retail sales with eligible RPS energy by 2030.

- Along with its current projections on future market pricing conditions, Ava uses the resource input cost assumptions provided by the CPUC. Ava's IRP modeling methodology applies these assumptions and identifies the least-cost portfolio that satisfies all defined reliability, GHG, and RPS constraints. As a result, Ava's Preferred Conforming Portfolio minimizes impacts on ratepayer's bills.
- By satisfying Ava's reliability procurement requirement provided to Ava directly by the CPUC, Ava believes it has demonstrated how its Preferred Conforming Portfolio meets the near-term and forecast long-term resource adequacy requirements of Section 380.
- Net of expected curtailments, Ava's planned resource mix is forecasted to provide at least 65 percent of its RPS requirement for each compliance period from contracts of 10 years or more in duration. Please see Table 5 and Table 6 for supporting values.
- Ava's planned resource mix is a diverse mix of resources that spans multiple technology types. In instances in which transmission upgrades are possible or likely the organization will work with the appropriate stakeholders to assess commercial viability in a timely and costly manner. Ava incorporates eligible energy resources procured on behalf of its customers by the Department of Water Resources into Ava's preferred Conforming Portfolio.
- In these ways, and in concert with Ava's suite of programmatic initiatives detailed in Proposed Procurement Activities and Potential Barriers, Ava's portfolio strengthens the diversity, sustainability, and resilience of the bulk transmission and distribution systems; local communities; and enhances distribution systems and demand-side energy management.
- Ava will continue to monitor the cost and availability of alternative supply-side and demand-side resources that can minimize air pollutant emissions, particularly in disadvantaged communities.

Accounting for ELCC adjustments to nameplate capacity, Ava's Preferred Conforming Portfolio differs from the portfolios submitted in 2022 by including:

- Substantially more geothermal, reflecting the increased value of clean, firm capacity.
- No offshore wind, reflecting increased development uncertainty and significant federal barriers.
- Moderately less storage, reflecting lower storage ELCCs.
- Comparable amounts of solar.
- The inclusion of out-of-state wind, which provides geographic and resource diversity and a generation profile that can complement California solar production.

c. GHG Emissions Results

This section discusses the emissions results for Ava's Preferred Conforming Portfolio and Alternative Portfolio as calculated by the CSP calculator.[10]

While Ava's portfolio meets the accepted definition of a 100% Renewable/CO2-Free Portfolio (eligible renewable or carbon-free resources as a share of retail sales, calculated on an annual basis), the modeling specifications developed by staff allowed the use of system power to shape the renewable output and account for transmission and distribution losses. When the resulting Preferred Conforming Portfolio was input into the CSP, some emissions were attributed to the portfolio as an artifact of the CSP's accounting methodology, which models supply and demand on an hourly basis and allocates each LSE a proportional share of system emissions from Combined Heat and Power (CHP) resources. Table 5 shows Ava's CPUC-assigned GHG benchmarks for 2028, 2030, 2035, 2040, and 2045. Ava's Preferred Conforming Portfolio and Alternative Conforming Portfolio are compliant with the CPUC's targets in all years.

Table 5 CO2 Emissions Summary of Ava's Preferred Conforming Portfolio[11]

CO2	*Unit*	2028	2030	2035	2040	2045
Coal	MMt/yr	-	-	-	-	-
IFM CHP	MMt/yr	0.25	0.24	0.26	-	-
Biogas	MMt/yr	-	-	-	-	-
Biomass	MMt/yr	-	-	-	-	-
System Power Unadjusted	MMt/yr	0.82	0.72	(0.36)	(0.51)	0.09
System Power	MMt/yr	0.73	0.63	(0.28)	(0.42)	0.06
Asset Controlling Supplier	MMt/yr	-	-	-	-	-
Total	MMt/yr	0.98	0.87	(0.02)	(0.42)	0.06

[10] The CSP tool is an excel-based workbook provided by the CPUC that calculates emissions from CAISO system's dispatchable thermal generation and unspecified imports and allocates them to LSEs based on their planned IRP portfolios.

[11] CHP emissions shown in Table 5 represent Ava's pro rata share of behind-the-meter Combined Heat and Power (CHP) interconnected to the CAISO-controlled electric grid. CHP emissions are determined by the CSP calculator as a function of LSE load, unrelated to the 'actual' GHG-emission profile of any specific LSE's resource portfolio. Avais required to include this allocation in its CSP.

CO2	*Unit*	2028	2030	2035	2040	2045
Ava emissions benchmark[12]	MMT/yr	-	1.11	.92	.77	.40
Average emissions intensity	tCO2/MWh	0.081	0.064	(0.001)	(0.021)	0.003
Oversupply Emissions Credits	MMt/yr	0.36	0.27	0.70	0.90	0.36

Table 6 shows the same CSP results, but for the Alternative Conforming Portfolio.

Table 6 CO2 Emissions Summary of Ava's Alternative Conforming Portfolio13

CO2	Unit	2028	2030	2035	2040	2045
Coal	MMt/yr	-	-	-	-	-
IFM CHP	MMt/yr	0.25	0.24	0.26	-	-
Biogas	MMt/yr	-	-	-	-	-
Biomass	MMt/yr	-	-	-	-	-
System Power Unadjusted	MMt/yr	0.80	0.98	0.22	0.53	0.39
System Power	MMt/yr	0.71	0.86	0.17	0.44	0.27
Asset Controlling Supplier	MMt/yr	-	-	-	-	-
Total	MMt/yr	0.96	1.10	0.42	0.44	0.27
Ava emissions benchmark	MMT/yr	-	1.11	.92	.77	.40
Average emissions intensity	tCO2/MWh	0.079	0.080	0.024	0.023	0.013
Oversupply Emissions Credits	MMt/yr	0.62	0.25	0.47	0.41	0.35

The only inputs specified by Ava for the CSP workbook were the CPUC-issued retail sales and BTM solar forecasts and Ava's supply portfolio information, which are copied over from

[12] LSEs were assigned a benchmark for 2028. 2028 results are informational only.

[13] CHP emissions shown in Table 5 represent Ava's pro rata share of behind-the-meter Combined Heat and Power (CHP) interconnected to the CAISO-controlled electric grid. CHP emissions are determined by the CSP calculator as a function of LSE load, unrelated to the 'actual' GHG-emission profile of any specific LSE's resource portfolio. Avais required to include this allocation in its CSP.

the RDT. For this exercise, Ava did not include any custom hourly load shapes or user-specified production profiles.

The tables below provide a summary of proportion of energy in Ava's portfolios provided by RPS and GHG-free resources according to the methodology used in the CSP. Please refer to the CSP calculator file for more information on the emission calculations used to generate the results shown in these tables.

Table 7 CSP Summary of Ava's Preferred Conforming Portfolio

	Unit	2028	2030	2035	2040	2045
Retail Sales	GWh	12,112	13,715	17,748	19,658	20,658
RPS-Eligible Delivered Renewable	GWh	11,056	13,096	20,305	23,235	23,473
GHG free	GWh	11,057	13,115	20,310	23,262	23,480
RPS-Eligible Delivered Renewable Percentage	% of retail sales	91%	95%	114%	118%	114%
GHG-free Percentage	% of retail sales	91%	96%	114%	118%	114%

Table 8 CSP Summary of Ava's Alternative Conforming Portfolio

	Unit	2028	2030	2035	2040	2045
Retail Sales	GWh	12,112	13,715	17,748	19,658	20,658
RPS-Eligible Delivered Renewable	GWh	11,108	12,515	18,955	20,824	23,240
GHG free	GWh	11,108	12,519	18,959	20,825	23,267
RPS-Eligible Delivered Renewable Percentage	% of retail sales	92%	91%	107%	106%	112%
GHG-free Percentage	% of retail sales	92%	91%	107%	106%	113%

d. Local Air Pollutant Minimization and Disadvantaged Communities

i. Local Air Pollutants

The following tables provide a breakdown of the air pollutant emissions (e.g., Particulate Matter (PM) 2.5, SO_2, and NO_X) associated with Ava's Preferred Conforming Portfolio as calculated by the CSP. As previously mentioned, Ava's primary sources of air pollutants are the result of its reliance on system power, as well as its CPUC-assigned allocation of Combined Heat and Power (CHP) resources. To minimize the generation of local air

pollutants and their corresponding impacts on disadvantaged communities, Ava will continue to monitor the cost and availability of alternative candidate projects as well as the percentage of total supply for the portfolio made up by market purchases.

Table 9 Preferred Conforming Portfolio of PM 2.5 Emissions

PM2.5	Unit	2028	2030	2035	2040	2045
Coal	tonnes/yr	-	-	-	-	-
IFM CHP	tonnes/yr	14	14	14	-	-
Biogas	tonnes/yr	-	-	-	-	-
Biomass	tonnes/yr	-	-	-	-	-
System Power	tonnes/yr	46	40	(20)	(29)	5
Total	tonnes/yr	60	54	(6)	(29)	5
Average emissions intensity	kg/MWh	0.0049	0.0039	(0.0003)	(0.0015)	0.0002

Table 10 Preferred Conforming Portfolio SO_2 Emissions

SO2	Unit	2028	2030	2035	2040	2045
Coal	tonnes/yr	-	-	-	-	-
IFM CHP	tonnes/yr	1	1	2	-	-
Biogas	tonnes/yr	-	-	-	-	-
Biomass	tonnes/yr	-	-	-	-	-
System Power	tonnes/yr	4	4	(2)	(3)	0
Total	tonnes/yr	6	5	(0)	(3)	0
Average emissions intensity	kg/MWh	0.0005	0.0004	(0.0000)	(0.0001)	0.0000

Table 11 Preferred Conforming Portfolio NO_x Emissions

NOx	Unit	2028	2030	2035	2040	2045
Coal	tonnes/yr	-	-	-	-	-
IFM CHP	tonnes/yr	42	39	42	-	-
Biogas	tonnes/yr	-	-	-	-	-
Biomass	tonnes/yr	-	-	-	-	-
System Power	tonnes/yr	48	41	(26)	(48)	5
Total	tonnes/yr	90	81	16	(48)	5
Average emissions intensity	kg/MWh	0.0074	0.0059	0.0009	(0.0025)	0.0002

The following tables provide a breakdown of the air pollutant emissions (e.g., Particulate Matter (PM) 2.5, SO_2, and NO_X) associated with Ava's Alternative Conforming Portfolio as calculated by the CSP.

Table 12 Alternative Conforming Portfolio of PM 2.5 Emissions

PM2.5	Unit	2028	2030	2035	2040	2045
Coal	tonnes/yr	-	-	-	-	-
IFM CHP	tonnes/yr	14	14	14	-	-
Biogas	tonnes/yr	-	-	-	-	-
Biomass	tonnes/yr	-	-	-	-	-
System Power	tonnes/yr	44	55	12	30	22
Total	tonnes/yr	59	68	26	30	22
Average emissions intensity	kg/MWh	0.0048	0.0050	0.0015	0.0015	0.0011

Table 13 Alternative Conforming Portfolio SO_2 Emissions

SO2	Unit	2028	2030	2035	2040	2045
Coal	tonnes/yr	-	-	-	-	-
IFM CHP	tonnes/yr	1	1	2	-	-
Biogas	tonnes/yr	-	-	-	-	-
Biomass	tonnes/yr	-	-	-	-	-
System Power	tonnes/yr	4	5	1	3	2
Total	tonnes/yr	6	7	3	3	2
Average emissions intensity	kg/MWh	0.0005	0.0005	0.0001	0.0001	0.0001

Table 14 Alternative Conforming Portfolio NO_x Emissions

NOx	Unit	2028	2030	2035	2040	2045
Coal	tonnes/yr	-	-	-	-	-
IFM CHP	tonnes/yr	42	39	42	-	-
Biogas	tonnes/yr	-	-	-	-	-
Biomass	tonnes/yr	-	-	-	-	-
System Power	tonnes/yr	45	55	9	15	23
Total	tonnes/yr	86	95	52	15	23
Average emissions intensity	kg/MWh	0.0071	0.0069	0.0029	0.0008	0.0011

ii. Focus on Disadvantaged Communities

There are 28 zip codes in Ava's service area that overlap census tracts designated as Disadvantaged Communities (DACs) according to the IRP definition that relies on CalEnviroScreen 4.0. These communities represent an approximate population of 331,000 people. The identified zip codes are as follows:

1. 95205 – August
2. 95204 – Country Club
3. 95231 – French Camp
4. 95215 – Garden Acres
5. 95330 – Lathrop
6. 94601 – Oakland
7. 94603 – Oakland
8. 94606 – Oakland
9. 94607 – Oakland
10. 94608 – Oakland
11. 94609 – Oakland
12. 94612 – Oakland
13. 94621 – Oakland
14. 94577 – San Leandro
15. 94578 – San Leandro
16. 95202 – Stockton
17. 95203 – Stockton
18. 95204 – Stockton
19. 95205 – Stockton
20. 95206 – Stockton
21. 95210 – Stockton
22. 95206 – Taft Mosswood
23. 95376 – Tracy
24. 95215 – Unincorporated San Joaquin County
25. 95206 – Unincorporated San Joaquin County
26. 95242 – Unincorporated San Joaquin County
27. 95330 – Unincorporated San Joaquin County
28. 95336 – Unincorporated San Joaquin County

Ava is committed to serving its DACs through numerous cross-organizational efforts, including in areas of procurement, local program development, increased customer engagement, and equitable policies. Increasing the deployment of clean energy resources in communities disproportionately impacted by air pollution is a key priority for Ava. The DAC Green Tariff (DAC-GT) program expands access to renewable energy in DACs, as designated using CalEnviroScreen 3.0, 4.0, or subsequent versions, by both supporting the development of new clean energy projects in or within 5 miles of a DAC and providing electricity bill savings to eligible customers. Specifically, the program provides participating California Alternate Rates for Energy (CARE) and Family Electric Rate Assistance (FERA) customers who reside in DACs with 100% renewable energy at a 20% discount. Through the DAC-GT program, Ava has procured 7.28MW renewable nameplate capacity from local, distribution-connected projects sited in DACs in Ava's service area. Ava is in the process of

procuring an additional 11.25MW renewable nameplate capacity through its 2026 DAC-GT Request for offers. There are currently over 4,000 CARE and FERA program participants. At full capacity, the DAC-GT program will be able to serve over 7,700 customers.

In addition to the DAC-GT program, in FY 2025–26 Ava conducted the Health-e Communities Pilot, a residential stove electrification pilot program for low-income customers. The Pilot improved participant's indoor air quality through the elimination of natural gas and improving participant's cooking experience through induction technology. In total the Pilot completed 162 gas-to-induction stove installations and led to deep learnings about electrification program implementation and indoor air quality impacts. Additionally, Ava's efforts to support increased EV adoption, like Ava Charge, a publicly available DC Fast Charging network, will reduce criteria air pollutants improving human health outcomes for all residents, especially those in the most vulnerable communities located along interstate corridors. These programs can be a model for intentional procurement of CO2-free power to displace fossil-fueled generation and transportation fuel on behalf of our communities at the most risk of environmental injustices.

Equity is also a single thread guiding Ava's transportation electrification initiatives. Since 2019, Ava has analyzed transportation electrification gaps, needs, and opportunities in our service territory. Nearly half of the residents in our Alameda County service area are renters in multi-family properties that currently have limited access to at-home charging infrastructure. In San Joaquin County that figure is closer to 15%. Significantly, home charging access is often complicated by the age of the properties where renters live. Ava found that almost all the multi-family properties in much of our service territory are over 50 years old, meaning that many of these properties would require costly electrical upgrades above and beyond the cost of installing home charging equipment. Moreover, renters may not have the authority to make the upgrades needed to install home charging equipment because they do not own the property.

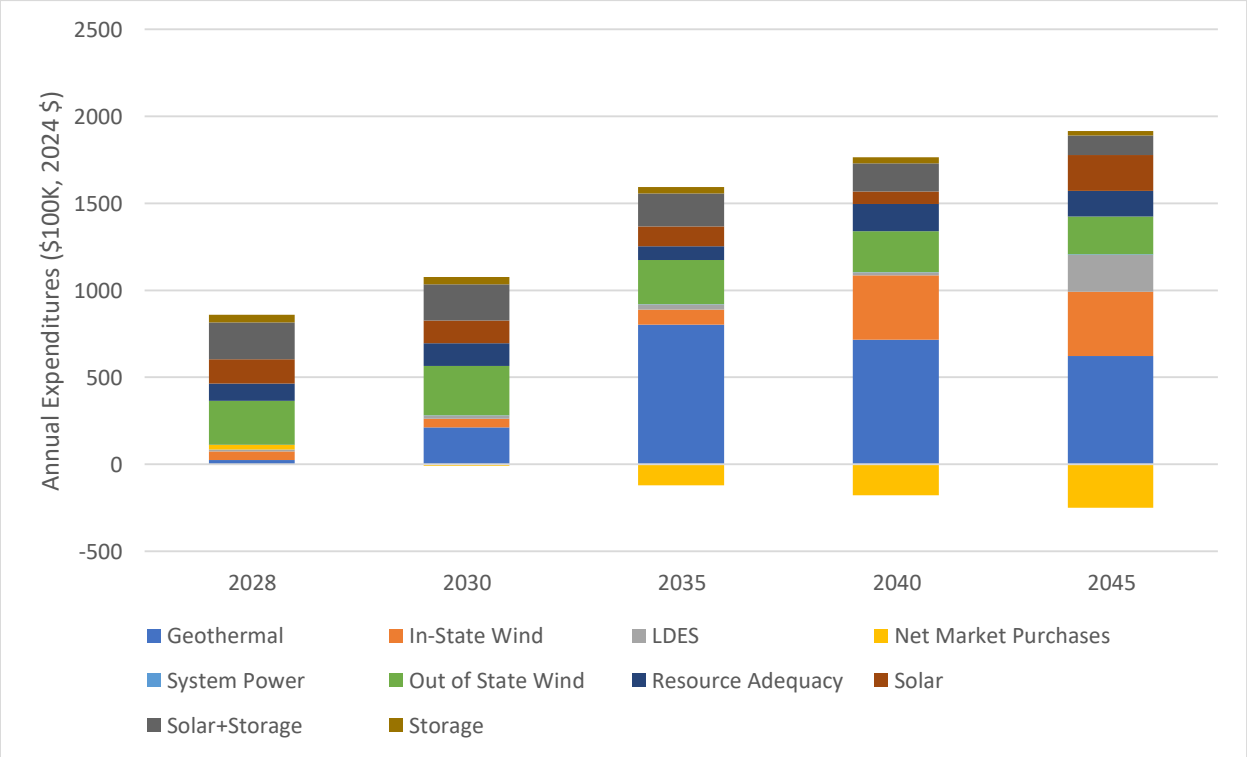
Recognizing these systematic challenges to EV adoption for nearly half the residents in our service area, Ava is prioritizing deployment of reliable, convenient, and cost-effective public fast charging. Ava's EV fast charging network, thus far operating 31 plugs at one active site in downtown Oakland, will reduce barriers to access for community members who cannot charge at home to ensure that *all* residents in Ava's service area, especially renters, can join in and benefit from the transition to clean energy transportation.[14]

[14] *See infra* at 43.

e. Cost and Rate Analysis

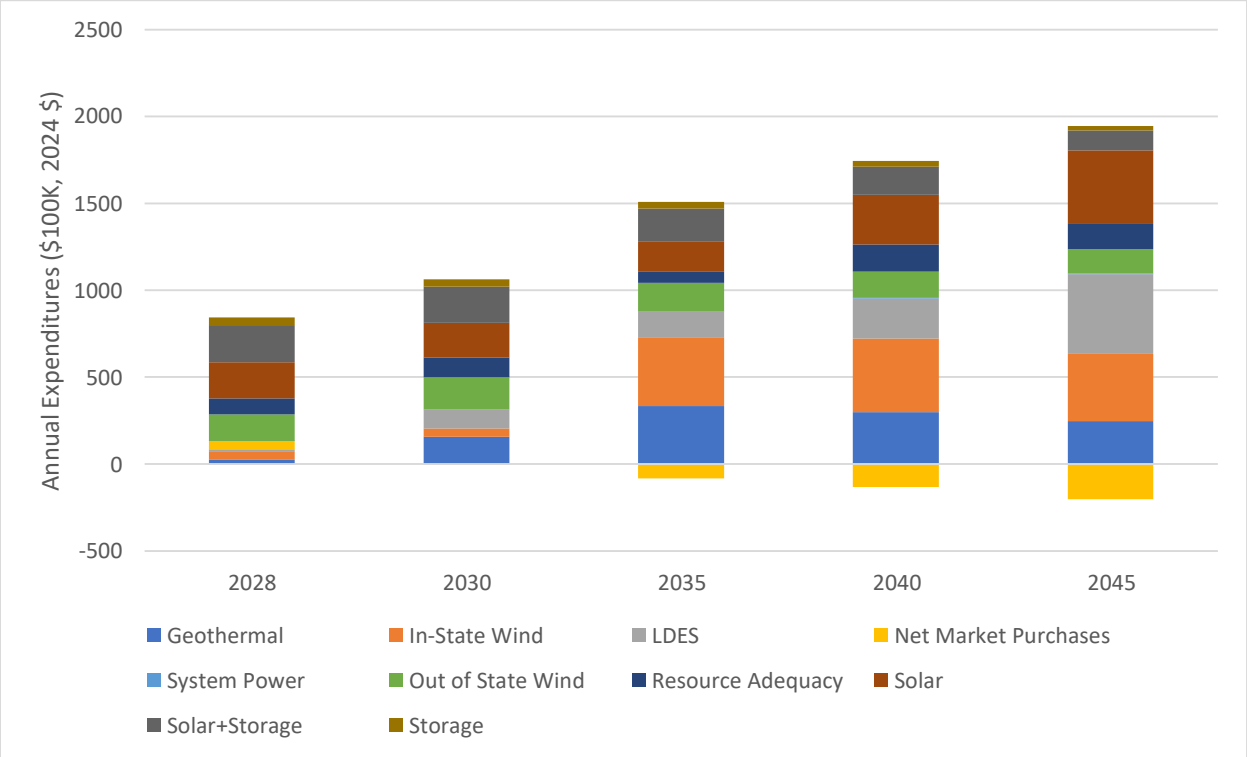
Affordability is a key component of Ava's long-term procurement strategy. The figures below provide an estimate of the inflation-adjusted total net costs[15] of the Preferred Conforming Portfolio and Alternative Portfolio listed in real 2024 USD for select calendar years with a breakdown of the total by major cost category.

Figure 5 Inflation-Adjusted Expenses ($M, 2024 $USD) of Ava's Preferred Conforming Portfolio



[15] Total net costs equal expenditures to serve load in CAISO plus payments to counterparties Ava has signed PPAs and other bilateral agreements with minus offsetting revenue from generation scheduled into the CAISO market.

Figure 6 Inflation-Adjusted Expenses ($M, 2024 $USD) of Ava's Alternative Conforming Portfolio



The all-in portfolio costs of Ava's Preferred and Alternative Conforming Portfolios are $75.09/MWh and $75.07/MWh, respectively.

Currently, Ava offers its customers two different product choices: (1) Bright Choice, which offers a fixed percentage savings[16] relative to PG&E's generation rates for an electricity mix containing a larger percentage of renewables than the baseline PG&E product; and (2) Renewable 100, which offers a 100% renewable electricity mix at a small fixed per-kWh premium relative to PG&E's generation. Though Ava is investigating decoupling from PG&E rates, the timing of such a move will depend on our internal analytical capabilities, the rate at which we are able to build up the operating reserves necessary to ensure our long-term financial health, and the direction provided by Ava's Board.

Ava strives to maintain stable costs for our customers while collecting sufficient revenues by conducting extensive planning and risk-management to intelligently safeguard against the risks of extreme fluctuations in future energy prices.

[16] Over the course of Ava's operating history, this discount ranged from 1% to 5%.

f. System Reliability Analysis

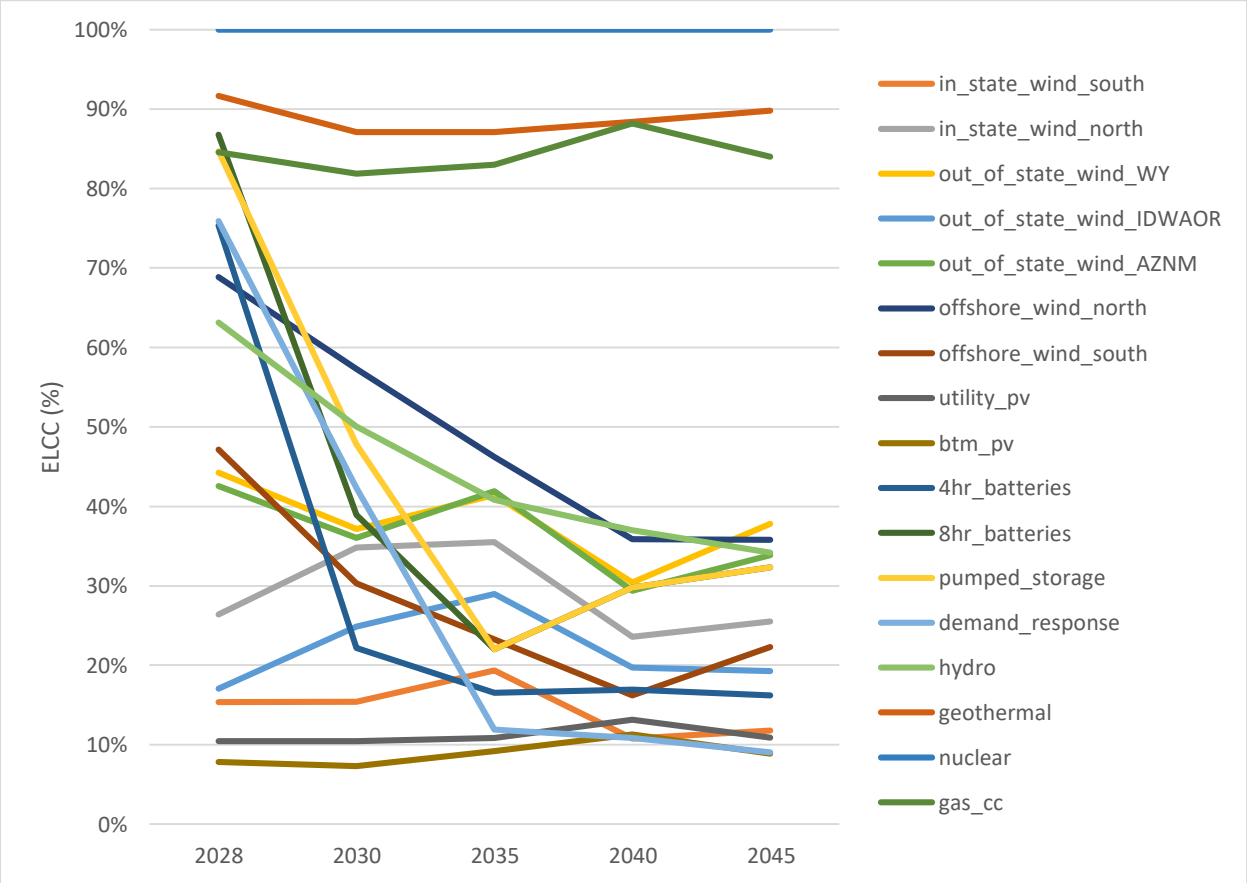
Ava's Preferred Conforming Portfolio satisfies Ava's reliability procurement requirement and illustrates how Ava contributes its commensurate share of system reliability to the grid. As a part of its IRP filing requirements, every CPUC-jurisdictional entity must demonstrate how it plans to meet its annual reliability requirements for every year in the IRP planning horizon. Ava's Reliability Procurement Requirement is shown below, [redacted] As discussed previously, to ensure that the Preferred Conforming Portfolio complied with both IRP and anticipated RA requirements, [redacted]

Figure 7 Ava's Reliability Procurement Requirement

[redacted]

Ava can satisfy its reliability procurement requirement by either procuring bundled PPAs or RA-Only contracts; the amount of nameplate capacity that qualifies as firm is determined by the underlying physical resource backing the contract. For the 2026 IRP cycle, the CPUC provided marginal ELCCs that are based on a "Perfect Capacity" construct. These ELCCs vary by year and reflect the ability of the resource type to provide reliable capacity during periods of high demand in net load. These ratings also account for the grid-level interactions of a given resource type with another, which is becoming increasingly more important as the grid sources more of its firm MWs from renewable and energy-limited resources. A sample of ELCC assignments for certain resource types and select calendar years for both GHG scenarios are listed below.

Figure 8 Marginal ELCC Assignments



The tables and charts below display the annual reliability need Ava must satisfy and the corresponding composition of its marginal ELCC supply by contract type. Ava acknowledges that there is an increasing amount of project development risk in its portfolio, given that the percentage of its IRP portfolio of RA supply from projects that have not yet achieved commercial operation increases over time. Some of this risk can be managed through prudent procurement: for example, Ava would seek to diversify its contracts across multiple developers, resource types, and expected CODs. Some of this risk can also be managed with procurement of short-term contracts. Ava will continue to monitor this risk factor and update the CPUC with any material updates related to project delays in a timely manner.

Figure 9 RDT Reliability Need and Effective Supply by Contract Status of Ava's Preferred Conforming Portfolio

Figure 10 RDT Reliability Need and Effective Supply by Contract Status of Ava's Alternative Conforming Portfolio

Table 15 Load and Resource Table by Contract Status for Ava's Preferred Conforming Portfolio

	2028	2030	2035	2040	2045
Online	1,390	1,086	1,052	62	12
Development	610	306	285	262	97
Review	-	-	-	-	-
PlannedExisting	431	798	637	1,595	1,659
PlannedNew	718	930	1,957	2,188	2,704
BTM PV	94	94	141	180	150
LSE reliability need (MW)	[redacted]				
LSE total supply (effective MW)	3,243	3,217	4,072	4,288	4,622
Net capacity position (+ve = excess, -ve = shortfall) (effective MW)	[redacted]				

Table 16 Load and Resource Table by Contract Status for Ava's Alternative Conforming Portfolio

	2028	2030	2035	2040	2045
Online	1,384	1,087	1,051	62	12
Development	610	306	285	262	97
Review	-	-	-	-	-
PlannedExisting	272	665	633	1,556	1,533
PlannedNew	598	900	1,975	2,023	2,588
BTM PV	94	94	141	180	150
LSE reliability need (MW)	[redacted]				
LSE total supply (effective MW)	2,959	3,053	4,085	4,083	4,379
Net capacity position (+ve = excess, -ve = shortfall) (effective MW)	[redacted]				

[redacted]

g. Existing Resource Planning

Ava, like most CCAs, has a preference for energy produced by non-GHG emitting resources. Given our Board-approved goal of achieving a CO2-free portfolio for Ava's retail demand by 2030, as calculated on a net annual basis, Ava has no plans to enter into long-term contracts with GHG-emitting resources. As such, existing in- and out-of-state hydro resources would generally be attractive to Ava.[17] Staff actively monitor the market to identify opportunities to contract with existing hydro resources—either through short-term transactions or through long-term contracts. Ava has been successful in entering into short-term transactions with

[17] *C.f. infra*, p. 34.

existing hydro resources to date and does not have any long-term hydro resources in its portfolio at this time. If such resources became available in the coming years, Ava would evaluate those resources for portfolio fit and consider adding these resources to its portfolio. However, Ava recognizes the demand for these resources and the increasing uncertainty associated with their fuel supply as the western United States is increasingly frequently faced with droughts or the potential for droughts and other effects of climate change, such as a greater variance of geographically relevant snowpack and rainfall. Given the uncertainty of hydro resource availability, existing long-term hydro resources are not assumed to contribute to Ava's Preferred Conforming Portfolio. Ava does not assume existing wind, solar, or battery storage resources in its portfolios but will evaluate existing resources for cost competitiveness in relation to generation profile in future procurements as these resources roll off their long-term contracts. Ava assumes, in the long run, 0% of its portfolio will be served by contracted coal or nuclear resources, consistent with Board-approved organizational goals. Outside the IRP context, Ava notes that its nuclear allocation from PG&E contributes towards Ava's clean energy targets in earlier years.

While Ava will evaluate opportunities to contract with existing clean resources, there are currently no specific existing CAISO resources Ava has plans to contract with in the future. Due to the limited and uncertain availability, Ava's approach to contracting with existing resources should be regarded as opportunistic and resulting from such resources submitting offers for long-term or short-term contracts to Ava at a price and forecasted net present value that is competitive with new-build resources.

Ava's 2026 Preferred and Alternative portfolios contain comparable amounts of existing resources to Ava's 2022 portfolios.

h. Hydro Generation Risk Management

Similar to Ava's 2022 portfolios, Ava's Preferred Conforming Portfolio does not include any expectations of long-term hydro asset contracts, whether with in-state or out-of-state hydro resources. Ava does intend to enter into short-term transactions for large hydroelectricity, likely from out-of-state resources, to help Ava achieve its goals of having a CO2-free portfolio by 2030. That said, Ava's ability to meet RPS and RA compliance obligations is unrelated to and unthreatened by its ability to procure *excess* carbon-free energy from hydro assets.

California and western North America are seeing increased levels of extreme heat duration and intensity. Concurrently, precipitation in the form of rain and snow are proving to be a

less consistently reliable as 'fuel source' for hydro power across this same area. Ava's primary exposure to drought and other climate-related reductions in hydroelectric generation is through their effects on CAISO energy markets and forward electricity prices. This exposure is exacerbated by low-level snow water content across the state of California that has been measured so far for 2026, [18] which further decreases hydro generation and increases spot prices across the CAISO. Because Ava procures a portion of its energy needs through short-term transactions, persistent drought will increase market forward prices and result in higher prices being offered for forward transactions than would be associated with average or above average hydro years. Any Ava demand exposed to the CAISO day-ahead and real-time market will be subjected to greater price volatility in hours of exposure.

Ava manages its exposure to high forward market prices by implementing its Board- and Risk Oversight Committee-approved Risk Management Regulations ("Risk Regs"). [redacted]

i. Long-Duration Storage Planning

Since the prior IRP submittal, Ava has successfully brought online an 8-hour battery and is contracted for an additional 8-hour battery resource in project development. Ava executed an agreement with Tumbleweed LLC to expand the 4-hour battery to 8-hour at the current 50 MW nameplate capacity. The Tumbleweed 8-hour battery became operational on June 1, 2026, and accounts for 42 MW of long-duration storage NQC which is greater than the 37 MW MTR requirement. Additionally, Ava has contracted for a 13.33 MW 8-hour battery resource with MRP Pacific Marketing III LLC that is expected to come online during the summer of 2027.

Long duration storage has seen limited deployment in the California energy mix. Ava recognizes the need for resources that can go beyond the 4-hour energy storage product. However, the economics for these resources remains a barrier to scaling deployment. Ava is assessing whether to contract additional long duration storage to meet compliance requirements associated with the new D.26-02-057 procurement order.

[18] *See* https://cdec.water.ca.gov/reportapp/javareports?name=PLOT_SWC.

j. Clean Firm Power Planning

i. Geothermal in Ava's Preferred and Alternate Portfolios

Ava received multiple offers for geothermal resources that fit the Clean Firm Power requirements in its 2020 Renewable Energy and Storage RFO.[19] Though Ava elected not to execute contracts with any of the geothermal resources offered in the RFO, when the CPUC released the MTR procurement order Ava was able to initiate bilateral negotiations with one of the projects that had been previously offered. In April 2022, Ava executed a contract with Corsac Generating Station 1 LLC for a 40 MW geothermal facility which will be constructed in Churchill Country, Nevada. The facility is scheduled to achieve commercial operation in April 2030. This resource will contribute value from renewable generation to Ava's portfolio and serve as a firm baseload resource and hedge against price and supply stack volatility. Ava also looks forward to incorporating the high-capacity factor RA into its RA position. Ava must obtain import allocation rights (IAR) to ensure energy generated by the resource is fully deliverable into CAISO and that the resource will provide RA value, thus there is some risk associated with the project. Ava is working closely with the developer, Fervo Energy, to monitor CAISO transmission planning and evaluate probability that IAR will be available at the intended delivery point. If in Ava and Fervo's estimation the ability to obtain IARs at the intended point is at risk, Ava has some contractual ability to change the delivery point to a different CAISO branch group. In February of 2026, CPUC issued Decision (D.) 26-02-057 under the formal IRP proceeding docket Rulemaking (R.) 25-06-019 that requires a portion of the procurement mandate to be at least 25% from clean, firm power or long duration energy storage to come online on or before 2032. As such, Ava issued an RFO in May of 2026, which includes the request for clean, firm power as well as long duration energy storage to potentially meet or make progress in meeting the incremental procurement order.

Ava has allocated the required volume of Maximum Import Capability (MIC) to the Corsac Generating Station project to ensure the resource counts for MTR and RA value when it achieves commercial operation. While there are abundant potential geothermal resources in the western United States, Ava believes additional transmission development in California and specifically in northern California is necessary to help the State meet its emission reduction and reliability goals.

[19] https://Ava.org/2020-rfo/

ii. California Community Port Geothermal Coordination

Ava is a member of California Community Power (CC Power), a joint procurement agency comprised of nine CCAs. CC Power has played a role in driving procurement of geothermal capacity to meet the state's future clean firm energy needs. CC Power recognizes that the long-term need for clean firm power for its members goes well beyond the needs of MTR, and recently announced Geothermal Exploration, Offtake and Development Engagement (GEODE) agreements with three geothermal developers with innovative approaches to development targeted at unlocking scale-up of in-state geothermal capacity.[20] CC Power sees these proactive relationships between offtakers and industry as pivotal in overcoming commercial and infrastructure challenges geothermal opportunities face. Additionally, as a joint procurement entity representing 30,000 GWh of collective annual load, CC Power is able to engage with a larger diversity of developers and opportunities with different risk profiles than what could be pursued by an individual load serving entity.

iii. CC Power GEODE Agreement Capacity

Ava's IRP does *not* explicitly include its participation in CC Power's GEODE agreements. While some CC Power members elected to explicitly include these agreements, Ava elected to not call them out specifically because of their early development status, however, the large volume of geothermal procurement sought in Ava's preferred and alternate portfolios demonstrates the need for and value of significant incremental geothermal development.

The GEODE agreements are principally focused on development opportunities in Northern California that both avoid import constraints and directly offset power costs for CC Power's members. CC Power has coordinated with its GEODE partners in representing expected development opportunities in the IRP. Two GEODE projects, Atlantica and XGS, have site control. Atlantica and XGS are planning to deploy advanced closed-loop technology, which both enables development beyond the geologic constraints of conventional hydrothermal development and minimizes water requirements. Closed-loop technology has been demonstrated in the field and recently through commercial development in Germany.[21]

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[20] See "CC Power Signs 3 GEODE Agreements to Incentivize California Geothermal Development" (April 13, 2026) at https://cacommunitypower.org/cc-power-signs-3-geode-agreements-to-incentivize-california-geothermal-development/

[21] See "Eavor's First-of-Its-Kind Closed-Loop Geothermal Project Produces Grid Power in Germany" (January 8, 2026) at https://www.powermag.com/eavors-first-of-its-kind-closed-loop-geothermal-project-produces-grid-power-in-germany/

Through its GEODE agreement, the Zanskar project is applying its unique capabilities leveraging artificial intelligence and modeling to discover new hydrothermal systems. Zanskar has not secured site control for GEODE yet but is actively evaluating in-state opportunities. CC Power is including a 20 MW New Mexico project and 100 MW of California development split between three commercially attractive opportunities in California in its IRP to represent the expected transmission requirement to facilitate development. The GEODE projects are represented with online dates in the early 2030s but could be accelerated if transmission is readily available. GEODE projects are reported as "Review" status in the RDT to reflect the active commercial discussions between CC Power and developers on specific project opportunities.

iv. CC Power Strategic Geothermal Capacity Coordination

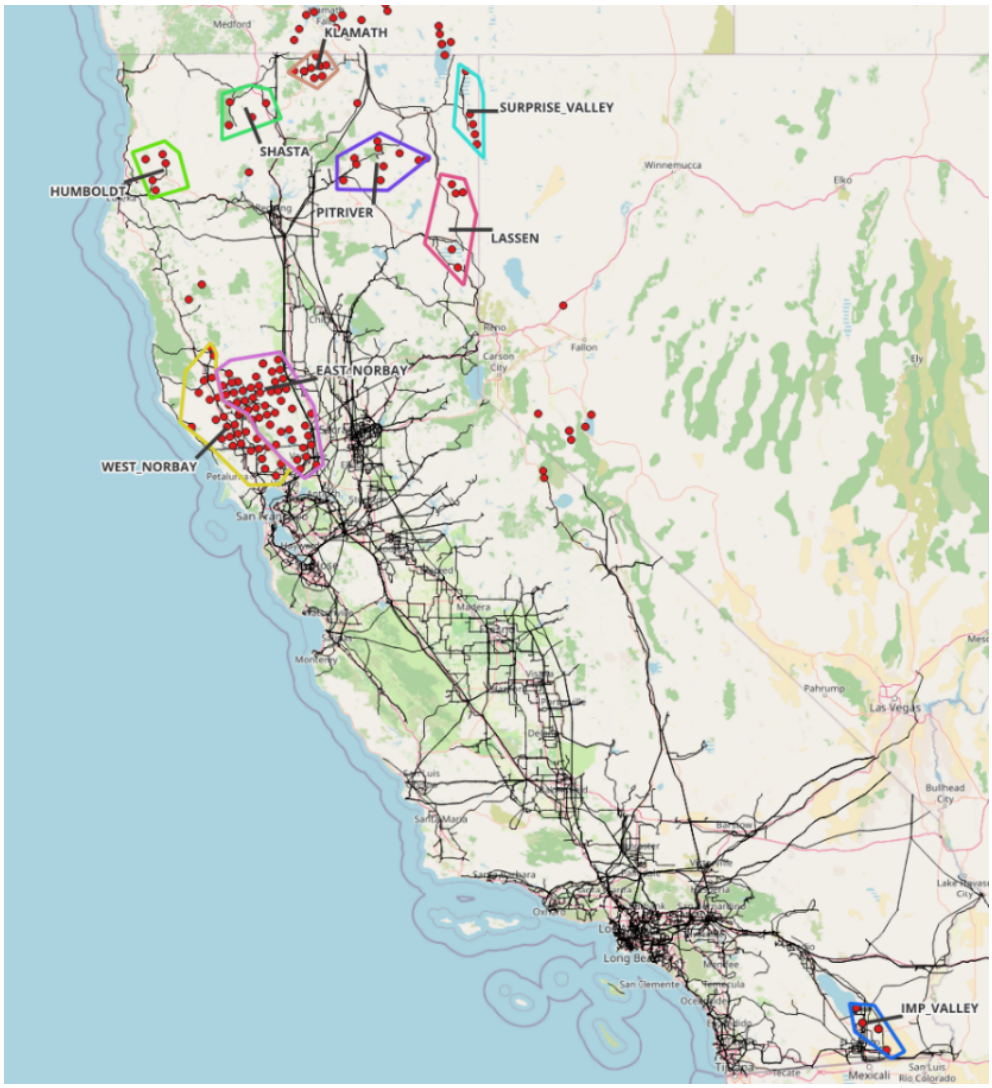
Ava has engaged with CC Power on representing geothermal capacity needs beyond the opportunities described above. Preliminarily, CC Power entities anticipated nearly 500 MW of additional geothermal development need to meet 2045 needs; however Ava's detailed IRP analysis identified a need for significant additional geothermal development. Ava's preferred or alternate portfolio results could double or triple the collective CC Power need for geothermal resources. A key challenge with geothermal development is that even with next-generation technologies, the best opportunities are locationally constrained. Accordingly, it's critical that transmission is proactively planned to areas that are commercially viable for both developers and offtakers. CC Power strongly discourages the Commission from taking the default approach of mapping resource potential to areas with sufficient transmission capacity and instead work to support infrastructure that provides access to high-quality resource areas as recommended by American Clean Power.[22]

In the interest of providing a consistent indication of development areas with both high-quality resources and commercial offtake interest, CC Power members have taken a methodical process to mapping and representing long-term geothermal needs. First, CC Power has leveraged one of the best available datasets on next-generation geothermal potential: supply curves from Wilson Ricks and Jesse Jenkins' May 2025 study on national-

[22] See page 10–11 of "American Clean Power – California Opening Comments on the Proposed Decision Requiring 2029-2032 Electric Resource Procurement and Transmitting Portfolios for the 2026-27 Transmission Planning Process" at https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M598/K100/598100948.PDF

scale adoption of EGS.[23] The Ricks & Jenkins study leverages the recent Stanford thermal modeling already used by the Commission, but also specifically characterizes near-field EGS resources—which are likely to be the first and most economical projects to be developed. CC Power applied both technological and economic filters to the supply curve data (depth ≤ 4.5 km, temperature ≤ 275C, inferred LCOE ≤ $100/MWh, project capacity > 50 MW). Data points that met CC Power's filter criteria are represented as the red dots in Figure 11.

Figure 11 CC Power Strategic Geothermal Mapping



[23] Paper at https://zero.lab.princeton.edu/wp-content/uploads/2025/06/Ricks-Jenkins-2025-Pathways-to-national-scale-adoption-of-enhanced-geothermal-Joule.pdf; leveraged datasets available at https://zenodo.org/records/15485307

Using the filtered data, CC Power identified clusters of opportunities with distinct transmission needs: West North Bay, East North Bay, Humboldt, Shasta, Klamath, Pit River, Surprise Valley, Lassen, and Imperial Valley (see colored polygons in Figure 11). CC Power members strongly prefer resources in CAISO due to import capacity constraints, and accordingly did not carry Imperial Valley, Klamath, and Shasta further in the analysis. Although Surprise Valley and Lassen are currently outside the CAISO, CC Power is encouraged by the 2026–27 focus on adding import capacity to the Hilltop substation in Northeastern California and sees a lot of synergies with creating better access to Northern Nevada resources and in-state wind.

Based on the supply curve filtering, the six remaining areas of interest individually represent 0.8 to 13.5 GW each of theoretical capacity. CC Power has represented its interest using two tiers: East North Bay and West North Bay with 150 MW of total interest (out of 10+ GW theoretical capacity each) and the other four areas with 50 MW of interest (out of 0.8 to 1.6 GW of theoretical capacity each). Given Ava's preferred and alternate portfolio needs in great excess of the collective CC Power requested geothermal development, Ava choose to refer to a single, somewhat generic regions for geothermal development in each portfolio, and selected the "Northeast CA" candidate resource pool intending for it to be representative of Ava's preference for in-state geothermal resources that would not require MIC for deliverability.

k. Non-CAISO, including Out-of-State, Wind Planning

Cost declines in solar resources from the early 2000s until approximately 2021 have largely resulted in lower pricing for solar generation, and lower costs on a levelized basis, as compared to wind. However, the diurnal production profile of solar means that wind resources can potentially act as an important complementary resource in LSEs' portfolios, supplementing renewable production in overnight and winter hours and reducing the need for load shifting from battery or demand-side resources. Ava has issued several RFOs since 2021 and considers the value and risks of out of state, wind imports, among other technologies. One recently acquired wind resource comes from New Mexico and intends to utilize as much MIC as available to import the generation and capacity from this resource. However, for planning purposes, MIC and other transmission development considerations are the main roadblock for bringing out of state wind to the Ava supply portfolio. [redacted]

[redacted]

Ava has one energy-only (no RA) out-of-state wind resource in its portfolio and generating electricity at this time. Ava is aware of and following CAISO's Transmission Planning Process (TPP) solicitation of interest regarding Idaho-area (and other States) out-of-state wind and in the CAISO's corollary to its TPP, the 20-year Transmission Outlook in which transmission projects that support access to out-of-state resources are evaluated. Ava is interested in out-of-state wind resources should project economics appear more favorable than the economic assumptions underpinning the IRP analysis.

l. Offshore Wind Planning

In this IRP analysis cycle, Ava has not selected OSW resources for its Preferred Conforming Portfolio nor for its Alternate Conforming Portfolio. While there has been significant interest in offshore wind (OSW) development in the California and Pacific Coast region, a range of multi-jurisdictional challenges have clouded the development timelines for OSW resources regionally.

m. Transmission Planning

Recognizing that transmission upgrades can constitute cost-effective investments in firm power, a key part of Ava's IRP plan includes looking for opportunities to increase the deliverability of existing and new generation facilities. Based on the information available at this time, Ava does not expect to incur any transmission-related restrictions on its procurement strategy for either baseline or planned resources.

Currently, there are no baseline resources with a "Development" status that require any transmission upgrades to achieve FCDS. As for planned resources, the only resource category in Ava's portfolio that may require an upgrade to the existing transmission system is offshore wind. Where viable, Ava is observing the potential for procurement of offshore wind depending on costs and the longer-term capability for development, availability, and other considerations. As for its plan to procure wind in the near-term horizon, Ava conducts procurement RFOs to assess market conditions related to costs, location, and timing of new resources. It will emphasize the addition of wind to the portfolio, but the final amount, location, and timing will ultimately depend on the market pricing offered by project developers.

While Ava strives to execute contracts for long-term resources across a diverse geographic area to mitigate risks associated with congestion and limited deliverability in select load pockets, Ava currently has no firm restrictions regarding the location of any of its planned candidate resources, as long as full capacity deliverability (FCDS) status is attainable.[24] The modeling framework used in this year's IRP has limited ability to account for transmission related constraints (e.g., congestion and interconnection capability) during the optimization stage. Moreover, the model assumes that any additional costs stemming from an Area Distribution Network Upgrade (ADNU) project are accounted for in the CapEx assumptions. Ava recognizes these limitations and will evaluate opportunities to mitigate the impacts of these limitations in future modeling exercises. At this time, Ava has no stated objection to the CPUC or CAISO relocating their candidate projects, assuming similar availability and costs for any given replacement project.

A significant transmission constraint on the feasibility of Ava's Preferred Conforming Portfolio is the transmission and interconnection capacity to support sufficient amounts of new resources, particularly geothermal resources.[25] Similarly, Ava recognizes significant challenges with the development of out-of-state resources, such as geothermal and renewable resources, as significantly constrained by the lack of sufficient MIC to support new resource development to serve California loads.[26]

IV. Action Plan

The IRP study is a valuable planning tool and provides guidance that contributes to Ava's procurement strategy. However, neither Ava's IRP analysis nor the make-up of its Preferred Conforming or Alternate Portfolios should be viewed as an explicit roadmap or firm commitment for future procurement. While Ava values the lessons learned through the IRP analysis, Ava will make procurement decisions and enter into contracts based on the resources available in the market and the cost and value proposition of those resources based on current and forward market projections at the time the resources in question are offered to Ava. Ava also notes that there remains significant uncertainty around the availability and timing of new resource types such as incremental geothermal development.

[24] A limited exception to Ava's preference for geographically diverse resources is that Ava does have a preference for projects sited in its own service territory for their contribution to local reliability, local air pollution reduction, and to minimize basis risk.

[25] *See* narrative discussion *supra*, p. 33 et seq.

[26] *See, e.g.*, narrative discussion *supra*, p. 38.

Since the COVID-19 pandemic began in 2020, supply-chain disruptions have increased costs, constrained the availability of critical components, and contributed to delays for renewable and conventional generation projects. Although some pandemic-era disruptions have eased, resource development now faces substantial additional uncertainty from changes in federal policy. The accelerated phaseout of federal tax credits for wind and solar projects, new restrictions tied to foreign-sourced components, increased tariffs on imported equipment and key materials, and heightened federal review of renewable energy development on public lands may increase project costs, limit equipment availability, and delay or prevent projects from reaching commercial operation. No load-serving entity can independently resolve these market, trade, tax, and permitting constraints, leaving Ava exposed to continued uncertainty regarding resource availability, pricing, and construction timelines.

a. Proposed Procurement Activities and Potential Barriers

The following sections describe Ava's planned procurement activities flowing from the IRP portfolio analysis and Preferred Conforming Portfolio, as well as potential barriers to those actions.

i. Resources to meet IRP mandated procurement requirements, including D.21-06-035 and D.23-02-040

Table 17 All Ava Reliability IRP Procurement

Resource Name	Expected or Actual COD	Procurement Activity for Contracting
OhmConnect DR	1/1/2020	Bilateral Negotiation
Golden Fields Solar	3/3/2021	2018 California Renewable Energy RFO
Scott Haggerty Wind Energy Center	7/2/2021	2018 California Renewable Energy RFO
Henrietta D Energy Storage	12/28/2021	2020 Renewable Energy and Storage RFO
Sunrun OCEI	1/1/2022	Oakland Clean Energy Initiative RFO
Luciana -Tulare Solar	4/29/2022	2018 California Renewable Energy RFO
Sun Streams 2, LLC	6/1/2023	Bilateral negotiation
Daggett Solar Power 3 LLC	9/5/2023	2020 Renewable Energy and Storage RFO
IP Oberon II, LLC	1/1/2024	2020 Renewable Energy and Storage RFO
EDPR Scarlet I LLC	5/3/2024	Amended & Restated PPA executed 9/30/2025
Tumbleweed Energy, LLC*	4hr: 7/16/2024 8hr: 6/1/2026	4hr: 2020 Renewable Energy & Storage RFO 8hr: Bilateral Negotiation
EDPR Scarlet II BESS LLC	12/11/2024	Bilateral negotiation
EDPR Scarlet II LLC	12/27/2024	Bilateral negotiation

Kola Energy Storage, LLC	8/1/2025	2022 Renewable Energy and Storage RFO
MRP Pacific Marketing LLC	8/20/2025	2022 Renewable Energy and Storage RFO
Alpaugh BESS, LLC	5/29/2026	2022 Renewable Energy and Storage RFO
Sun Pond, LLC	4/1/2026	2022 Renewable Energy and Storage RFO
Sunzia Wind North LLC	5/29/2026	2023 Joint CCA RFO. Bifurcated into separate North and South Agreements on 5/27/26
Sunzia Wind South LLC	5/29/2026	2023 Joint CCA RFO. Bifurcated into separate North and South Agreements on 5/27/26
IP Aramis, LLC	9/30/2026	Bilateral negotiation
EDPR Scarlet III LLC	12/31/2026	Bilateral negotiation
Imperial Sun Solar LLC	7/29/2027	2024 Joint CCA RFO
Sonrisa BESS LLC	6/30/2027	Bilateral negotiation
EDPR CA Solar Park VI LLC	6/30/2027	Bilateral negotiation
San Gabriel Project III LLC	6/1/2027	2024 Joint CCA RFO
MRP Pacific Marketing III LLC	6/30/2027	2024 Joint CCA RFO
Zeta Solar, LLC	7/26/2027	2023 Joint CCA RFO
Rosemary Solar, LLC	6/1/2028	2023 Joint CCA RFO
Corsac Generating Station 1 LLC	4/1/2030	Bilateral negotiation
*Tumbleweed was contracted as a 4-hour battery, originally operational on 7/16/2024. The facility was later expanded to an 8-hour battery to satisfy the long-duration energy storage (LDES) compliance requirement. The 8-hour battery expansion became operational on June 1, 2026.		

Ava entered into 23 long-term contracts that contribute to its D.21-06-035 and D.23-02-040 requirements and an additional six to meet the requirements of D.19-11-016; executed agreements are listed above.

1,000 MW of firm zero-emitting resource requirements

Table 18 Ava Mid-Term Reliability IRP Procurement – Firm Zero-Emitting Resources

Resource Name	Expected or Actual COD	Procurement Activity for Contracting	Notes
Corsac Generating Station 1 LLC	April 1, 2030	Bilateral negotiation	Amended agreement extending COD to accommodate transmission system upgrades

In February of 2022, Ava executed a long-term contract with Fervo Energy to meet its Firm Zero-Emitting Resource requirements under D.21-06-035. Ava's 40 MW Corsac Generating Station 1 project was expected to achieve COD in June 2026. Ava amended the contract in August 2024 extending the online date to accommodate required NV Energy transmission system upgrades. The revised commercial operation date is April 1, 2030.

1,000 MW of long-duration storage resource requirements

Table 19 Ava Mid-Term Reliability IRP Procurement - Long-Duration Energy Storage

Resource Name	Expected or Actual COD	Procurement Activity for Contracting
Tumbleweed Energy, LLC	4hr: 7/16/2024 8hr: 6/1/2026	4hr: 2020 Renewable Energy & Storage RFO 8hr: Bilateral Negotiation
MRP Pacific Marketing III LLC	6/30/2027 (expected)	2024 Joint CCA RFO

Ava has fulfilled the long-duration resource requirement with the Tumbleweed 8-hour BESS. Tumbleweed was originally contracted as a 50 MW 4-hour battery that came online on July 16, 2024. Ava worked with the development team to expand the battery duration at the site from a 4-hour battery to an 8-hour battery. The Tumbleweed 8-hour battery became fully operational on June 1, 2026. Additionally, Ava has contracted with MRP Pacific Marketing III LLC for a 13.33 MW 8-hour battery expected to reach commercial operation June 30, 2027. MRP Pacific Marketing III LLC will be reducing capacity from a thermal resource that shares the same interconnection capacity.

2,500 MW of zero-emissions generation, generation paired with storage, or demand response resource requirements

Table 20 Zero Emission, Co-located, and DR Procurement Activities

Resource Name	Expected or Actual COD	Procurement Activity for Contracting
Sun Streams 2, LLC	6/1/2023	Bilateral negotiation
Daggett Solar Power 3 LLC	9/5/2023	2020 Renewable Energy and Storage RFO
IP Oberon II, LLC	1/1/2024	2020 Renewable Energy and Storage RFO
EDPR Scarlet I LLC	5/3/2024	Amended & Restated PPA executed 3/21/2022
Tumbleweed Energy, LLC	4hr: 7/16/2024 8hr: 6/1/2026	4hr: 2020 Renewable Energy & Storage RFO 8hr: Bilateral Negotiation
EDPR Scarlet II BESS LLC	12/11/2024	Bilateral negotiation
EDPR Scarlet II LLC	12/27/2024	Bilateral negotiation
Kola Energy Storage, LLC	8/1/2025	2022 Renewable Energy and Storage RFO
MRP Pacific Marketing LLC	8/20/2025	2022 Renewable Energy and Storage RFO
Alpaugh BESS, LLC	5/29/2026	2022 Renewable Energy and Storage RFO
Sun Pond, LLC	4/1/2026	2022 Renewable Energy and Storage RFO
Sunzia Wind North LLC	5/29/2026	2023 Joint CCA RFO
Sunzia Wind South LLC	5/29/2026	2023 Joint CCA RFO

IP Aramis, LLC	9/30/2026	Bilateral negotiation
EDPR Scarlet III LLC	12/31/2026	Bilateral negotiation
Imperial Sun Solar LLC	7/29/2027	2024 Joint CCA RFO
EDPR CA Solar Park VI LLC	6/30/2027	Bilateral negotiation
San Gabriel Project III LLC	6/1/2027	2024 Joint CCA RFO
Zeta Solar, LLC	7/26/2027	2024 Joint CCA RFO
Rosemary Solar, LLC	6/1/2028	2024 Joint CCA RFO

Ava has contracted enough resources to satisfy all D.21-06-035 and D.23-02-040 requirements. If all remaining contracts reach commercial operation as expected, Ava will have excess capacity to count towards the D.26-02-057 procurement order.

Ava has used excess capacity to support other LSEs in fulfilling their compliance obligations. Ava executed a swap with Clean Power San Francisco for 70 MW of capacity from Ava's portfolio of resources through November 2025 to December 2026. Additionally, Ava executed a sale of 5 MW of long-duration storage with Sonoma Clean Power from June 2028 to May 2038. Ava will continue to assess portfolio needs and support grid reliability.

All other procurement requirements

Ava is currently evaluating portfolio needs to satisfy the new D.26-02-057 procurement order. As mentioned, if all current contracts come online Ava will have excess capacity from the D.21-06-035 and D.23-02-040 orders to count towards the new order. Ava will continue to assess our portfolio and identify opportunities to support grid reliability.

ii. Plans for resources that are currently non-candidate in CPUC's IRPs not described above

None at this time.

iii. Other renewable and/or zero carbon resources not described above

None at this time.

iv. Other energy storage not described above

None at this time.

v. Other demand response not described above

None at this time.

vi. Other energy efficiency not described above

Ava administered a CPUC-approved energy efficiency program from 2023 through 2026 focused on reducing energy use in large, nonresidential buildings. The program emphasized low- and no-cost operational improvements delivered through Strategic Energy Management (SEM) and Normalized Metered Energy Consumption (NMEC) approaches, as well as targeted incentives for commercial heat pump water heaters. Ava expects to achieve approximately 12 GWh of annual energy savings across all participating sites in this program. Looking ahead, Ava will continue to evaluate opportunities for energy efficiency investments that support beneficial electrification, improve load flexibility, and bring value to customers.

vii. Other distributed generation not described above

a. Resilient Home

Ava launched the Resilient Home program in 2020 to provide backup power to single and multi-family residential homeowners facing rolling blackouts or Public Safety Power Shutoff (PSPS) events, while generating Resource Adequacy (RA) benefits for Ava. Currently, the program aggregates over 990 enrolled residential battery storage systems paired with PV in Ava's service territory, dispatching stored energy (from solar) during the 5–9 PM net peak window on weekdays to provide load modification benefits. This program is contracted to run for 10 years and is currently in its fourth year.

b. SmartHome Battery

Ava has developed a residential battery storage program called SmartHome Battery to lower the initial cost of installing a new solar and battery system or adding a home battery to an existing solar system for residential customers, while adding reliable batteries to Ava's community Virtual Power Plant (VPP). This program allows market-rate customers to receive an upfront incentive of $90/kWh for the installation of new batteries, or $500/kWh for income-qualified customers enrolled in CARE or FERA, with incentives varying by battery size and the capacity nominated by the customer. Additionally, customers can earn $3/kWh/month in ongoing participation payments by connecting to Ava's VPP and sharing

their battery capacity. Ava will also contract with residential storage aggregators to participate in our VPP and who can deliver load modification or event dispatch.

c. Critical Municipal Facilities

Ava is currently developing projects that will provide energy resilience by powering essential municipal facilities with solar and battery systems that keep critical services running during power outages. This includes 8 sites across 4 cities, including fire stations, community centers, food banks, equipment yards, and City Council buildings. These projects will consist of 490 kW of solar panels and 1.34 MWh of battery storage, which will generate 778,000 kWh of clean energy in their first year of operations alone. Ava has executed 25-year Power Purchase Agreements with each City for these projects.

d. Ava Resilient Hub Initiative

Ava's Community Resilient Hub Initiative is designed to support the development of community-serving facilities that can provide critical services and resources before, during, and after power outages and emergencies. The initiative includes both technical assistance services and financial incentives to help eligible organizations assess, design, and implement solar + battery storage systems that support critical facility operations and improve community resilience. Over time, Ava will continue to evaluate opportunities to integrate these batteries into our virtual power plant.

viii. Transportation electrification, including any investments that correspond to different levels than what is included in Integrated Energy Policy Report (IEPR)

Ava has multiple transportation electrification efforts underway. What follows is a high-level summary of these activities.

a. DCFC Hubs

Ava is investing in deployment of the densest regional network of public DCFC infrastructure to deliver charging throughout our service area. Ava is prioritizing development of this network to ensure all Ava customers are served and establish Ava's Joint Power Authority member communities as leaders in affordable and accessible EV fast charging. Ava's goal

is to facilitate regional adoption of EVs in excess of the regional share of the California goal of 5 million zero-emission vehicles on the road by 2030. To support this goal, Ava plans to build and operate public fast charging hubs, each with a minimum of 10 DCFCs. Ava is focused on siting its hubs in areas with a dense population of renters.

Ava's first such project is on the border of West Oakland and Downtown Oakland, in a municipal parking garage. The location is within the Bay Area Air Quality Management District AB617 boundary for West Oakland. This DCFC hub is currently the largest in Oakland and the second largest in Alameda County. More importantly, within two square miles of the DCFC hub are approximately 1,000 multi-family properties with over five units at each premises including over 100 in West Oakland specifically. This project enables 60 minutes of free garage access for community members while charging, and all DCFCs are powered by Ava's Renewable 100 electricity product.

Ava is working to develop additional projects throughout its service area including but not limited to the Cities of Berkeley, Hayward, Livermore, Pleasanton, and Fremont.

b. SmartHome Charging

Ava SmartHome Charging is an electric vehicle (EV) and plug-in hybrid electric (PHEV) managed charging program that shifts charging to times when energy is cheaper and emissions are lower. The program integrates these devices into Ava's VPP utilizing third party providers, like Optiwatt, to reduce energy grid strain caused by at-home charging. The program optimizes participants' at-home charging to ensure vehicle charging automatically occurs during lower-cost, renewable energy times – saving money for both Ava and our customers while ensuring their desired read-by-time and state of charge requirements are met.

ix. Building electrification, including any investments that correspond to different levels than what is included in Integrated Energy Policy Report (IEPR)

None at this time.

x. Potential Centralized Procurement, pursuant to AB-1373

Ava did not rely on AB 1373 DWR procurement in developing its Preferred Conforming Portfolio nor its Alternate Conforming Portfolio.[27]

xi. Other

Ava has worked with several of its member cities to develop and achieve Climate Action Plans, where cities transition their default energy service to Ava's Renewable 100. Ava's Renewable 100 service is sourced from California wind and solar facilities, including a new wind farm in Livermore. As Ava's service area grows and more member cities adopt their own Climate Action Plans, Ava will continue to maintain a portfolio that achieves 100 percent clean energy for customers in this service.

b. Disadvantaged Communities

Ava demonstrates its commitment to deploying equitable policies and programs for its constituents in Alameda County and San Joaquin County. Equity is a through-line in Ava's approach and demonstrated through the community-focused programs described below.

i. Ava Rate Programs

Ava currently participates in the CPUC- and state-funded bill assistance programs: CARE, FERA, Arrearage Management Plan (AMP), Percentage of Income Payment Plan (PIPP), and DAC-GT. Through these programs, Ava aims to remove economic barriers for ratepayers in our service area. The CARE and FERA programs provide income-qualifying customers with a monthly discount on their electric bill. The PIPP pilot program caps participating customers' monthly energy bills at a fixed amount based on their income level. AMP is a debt forgiveness program that offers customer assistance with overdue bills. DAC-GT provides 100% renewable energy and a 20% electric bill discount to income-qualifying customers residing in a DAC.

[27] AB 1373 Resource Allocation Methodology for 2024–2026 IRP Cycle Filing Requirements (March 19th, 2026); Characterizing AB 1373 Allocations in LSE Preferred Conforming Portfolios for 2024-2026 IRP Cycle Filing Requirements (March 19, 2026).

ii. Self-Generation Electrification Programs

a. Resilient Home program

Ava's Resilient Home program, in partnership with Sunrun, provides backup power to more than 990 single- and multi-family homeowners. Enrollment in the Sunrun Resilient Home program focuses on equitable access in areas affected by rolling blackouts, with a target percentage of delivered capacity sourced from disadvantaged communities, CARE/FERA, and Medical Baseline customers.

SmartHome Battery

This program allows customers to receive an upfront incentive of $90/kWh for the installation of new batteries, with income-qualified customers enrolled in CARE or FERA eligible for a higher upfront incentive of $500/kWh. Customers can earn $3/kWh each month by participating in Ava's VPP.

iii. Transportation Electrification Programs

In addition to Ava's DCFC Hubs and SmartHome Charging transportation electrification programs described above,[28] Ava below highlights its acclaimed and successful Ava Bike Electric program.

a. Ava Bike Electric

Ava Bike Electric aims to increase access to e-bikes, reduce carbon emissions, and support local businesses. At $10 Million, this is the largest e-bike program in the U.S. along with the City of Portland. Ava has partnered with Alameda County Transportation Commission to extend this program to more residents and assess transportation mode shift by new e-bike users with $4 Million of the budget coming from their grant.

The program provides point-of-sale incentives while also integrating education on biking, e-bikes, and safety; screening local bike shops and qualified products; and connection to local community groups to improve the participant experience of purchasing and using an e-bike. At least 40% of the incentive funds are dedicated to income qualified participants,

[28] *Supra*, p. 51 et seq.

which is verified automatically by enrollment in CARE, FERA, or EAP (through Alameda Municipal Power) electricity rate reduction programs. Income qualified participants receive a higher e-bike rebate amount and a safety equipment rebate for locks, lights, and helmets.

iv. Grants

a. Community Investment Grants

The Community Investment Grants initiative will invest $7M of Ava's Local Development budget into the community (2024–2030), for projects designed to aid in the energy transition, by engaging hard to reach communities and delivering energy-related social and environmental benefits to Ava residents.

This initiative, beginning in 2023, is designed to allocate funding dollars towards less restrictive, multi-year grant opportunities to non-profit and community-based organizations (CBOs).

Grant funded projects are designed incorporating Ava's Grantmaking Strategy that encompasses organizational strategic priorities for Ava's grantmaking portfolio; guided by Ava's ethos, mission, and organizational objectives.

The first two programs deploy robust marketing, education, and outreach strategies to meet our low-income, multi-family customers. Ava integrates thorough data analytics to best meet the needs of our disadvantaged communities. Ava intends to ensure that those who have been historically excluded in the clean energy movement have access to these programs to propel a just, all-electric transition.

Furthermore, Ava's governance structure allows community input through the Community Advisory Committee (CAC), which consists of twelve members, plus five alternatives. Formed in 2016, Ava's CAC advises the Board on all subjects related to our operations. The committee acts as a liaison between key stakeholders and our Board, holding public committee meetings on a regulator basis. Having diverse community members is important to Ava, including geographic diversity. Community members also have the opportunity to directly provide public comment on Ava Board decisions and frequently do so.

c. LSE's Tribal Customers

There are no federally recognized tribal lands in Ava's service area.

d. Procurement Products

Ava anticipates utilizing the following procurement products for its Preferred and Alternative Conforming Portfolios. The specific products, contract structures, and transaction durations may vary based on market conditions, portfolio needs, regulatory requirements, and the availability and cost-effectiveness of resources.

Table 21: Procurement Products used in Ava's Portfolios

Product	Description of Product
Long-term bundled power purchase agreements	Long-term (generally at least ten years) contracts for the purchase of energy and capacity.
Short- and medium-term bundled power purchase agreements	Contracts for bundled energy, capacity, and associated environmental attributes over shorter durations. These products may be used to address near- and medium-term portfolio needs, manage forecast uncertainty, and maintain flexibility as load and market conditions evolve.
Energy-only agreements	Contracts for energy without an associated transfer of Resource Adequacy capacity.
Capacity-only agreements	Contracts for Resource Adequacy or other capacity attributes without a corresponding purchase of energy.
Financial (hedge) agreements	Financial hedges serve as protection against CAISO market price spikes during periods of high demand or price volatility. Financial hedges will continue to be employed to protect Ava customers from market volatility, consistent with Ava Risk Management Regulations.
Wholesale market purchases and sales	Short-term transactions conducted through organized markets to balance differences between forecast and actual load, generation, and contractual deliveries.
Cost allocation mechanism capacity allocations	Capacity allocated to Ava through the CPUC's Cost Allocation Mechanism or related regulatory allocation processes. Although these allocations are not directly procured by Ava, they may contribute toward Ava's RA or REC positions and are therefore reflected in portfolio planning.

e. Commission Direction of Actions

Ava encourages the Commission to consider the following items.

The IRP is an imprecise forecast of LSE portfolio needs using assumptions about the future state of resource costs, timely interconnection with available deliverability, and load forecasts. The conclusions of an LSE's IRP analysis provide more or less useful directional

guidance about how their portfolio needs may change and what steps they may need to take in the future.

Ava anticipates that its portfolio needs in the future will differ from its Preferred Conforming Portfolio. The Commission should not expect nor insist that LSEs precisely follow the procurement plans reflected in their IRP portfolios.

V. Lessons Learned

As Ava has matured, we are looking further ahead to determine the best resource portfolio that will achieve our organizational goals while contributing to system reliability and emission reduction goals for the State. To succeed, we need to manage our portfolio effectively, adding clean energy resources with the appropriate attributes to meet our portfolio needs over time. Striving to achieve Ava's Board-established a goal of providing 100% clean energy on a net-annual basis by 2030, Ava purposefully sought to expand and improve the capability of our long-term portfolio planning both in preparation for the 2022 IRP LSE Plan submittal as well as to improve our own long-term portfolio management. We have adopted markedly different tools and methodologies we used for this year's IRP plan from previous cycles.[29] We did this to establish an enhanced baseline of long-term analytical capability that can be adapted and repeated more frequently than the current CPUC IRP cycle requires. Ava's expanded long-term planning will be a critical tool in guiding our procurement strategy to manage portfolio needs over time.

As Ava's long-term portfolio analysis continues to improve, we have identified several areas that warrant improvement.

i. Commission Should Recognize the Needs of Public Agency LSEs to Develop IRP Plans

For this IRP cycle, the Commission initially established a filing timeline that provided approximately 6 months from the release of final filing requirements and the filing deadline.[30] As filing requirements continued to be refined several months after that ruling, the Commission extended the filing deadline to August, approximately 5 months after final filing materials were released.

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[29] *See supra* at p. 8.

[30] See January 2026 ALJ Ruling.

The CPUC's development of the IRP filing requirements and materials on the one hand, and Ava's (like other public agencies') required internal governance process on the other can. Namely, while the filing deadline to submit an IRP LSE Plan is established by the Commission (e.g., for this year it is August 10, 2026), Ava must obtain filing authority from its Board well in advance of the CPUC's filing date (e.g., for this year Ava sought approval from its Board on July 15, 2026). As a public agency, Ava must comply with public meeting notice requirements such as the duty to publish Board meeting materials in advance of regularly scheduled meetings. While Ava is governed by a Board comprised of elected officials from every municipality within our service territory, our Board is advised by a Community Advisory Committee in addition to Ava Staff. Ava must comply with public meeting notice requirements for our advisory committee as well. To ensure that our Community Advisory Committee *and* our Board have a meaningful opportunity to review and approve our IRP LSE plan, Ava must complete its IRP analysis and plan development approximately one month prior to the CPUC's filing deadline.

Ava, like other public agencies participating in the IRP proceeding, therefore has less time to develop and prepare our IRP analysis than might be perceived by the filing due date that the Commission sets. Ava asks that the Commission consider the process to which public agencies must adhere when setting IRP cycle milestones, fixing the closed system of planning parameters, and establishing IRP LSE Plan filing deadlines.

ii. Transmission Congestion and Interconnection Deliverability Slow Incremental Resource Development

Ava anticipates that the challenges of bringing incremental generating resources online will continue in light of congested transmission capacity across the CAISO system and scarce interconnection deliverability for new resources connecting to the grid. This is also true for resources for which capacity and energy might be imported to serve California loads—however, a critical limiting factor is the lack of available MIC to support such development.[31] The Commission should consider what steps it may take to support efforts by CAISO and others to alleviate transmission congestion and deliverability scarcity for generation interconnection projects serving California load.

[31] See also discussion in Section III.k, *supra* at p. 46.

Ava's analysis and translation of study results into the CSP made clear the important role of clean, firm power in meeting emission targets for a 8MMT portfolio. As described in Section III.j, discussing Clean Firm Power Planning, Ava shares the perspective of other members of CC Power, that additional transmission build out is necessary to support in-state geothermal resource exploration and development.

iii. IRP-Directed Procurement Risks Displacing LSE Portfolio Management and Procurement Goals

Ava continues to be concerned that the CPUC's IRP process may have the effect of displacing Ava's own portfolio management autonomy. Recognizing that the Commission is eager to encourage additional procurement beyond LSE need,[32] given Ava's relatively small size within the broader LSE landscape, the Commission's procurement direction risks overwhelming Ava's ability to procure resources that reflect our mission and guidance from our Board.

Ava is cognizant of its place within the broader LSE landscape. Ava fully appreciates our obligation to serve load with a resource portfolio that complies with Ava Board guidance as well as State reliability and emission requirements. However, Ava notes that the Commission's conclusions based on its analysis of individual LSE-submitted resource portfolios has often resulted in significant additional procurement requirements for Ava, and other LSEs generally. Ava has a responsibility to manage its resource portfolio in accordance with the direction set by Ava's member city and municipal representatives. Yet Ava's IRP analysis, and the resulting preferred conforming portfolio, are based on assumptions regarding Ava's load change over time, availability of transmission capacity over the planning horizon, relative market energy prices, and costs associated with procurement of then-existing or new resources across the Western Interconnection. In other words, Ava's IRP portfolio is highly dependent on these assumptions and projections. Whether a particular resource or technology best suits Ava's future portfolio needs within the IRP planning context should guide but not constrain Ava's portfolio management decision-making or strategy.

Where Ava receives a directive from the Commission to procure capacity or energy from specific resource technologies, this 'forced portfolio adjustment' risks displacing other procurement Ava might have undertaken.

[32] *See* 9/8 ALJ Ruling at p. 8.

Glossary of Terms

Alternative Portfolio: *LSEs are permitted to submit "Alternative Portfolios" developed from scenarios using different assumptions from those used in the Preferred System Plan with updates. Any deviations from the "Conforming Portfolio" must be explained and justified.*

Approve (Plan)*: the CPUC's obligation to approve an LSE's integrated resource plan derives from Public Utilities Code Section 454.52(b)(2) and the procurement planning process described in Public Utilities Code Section 454.5, in addition to the CPUC obligation to ensure safe and reliable service at just and reasonable rates under Public Utilities Code Section 451.*

Balancing Authority Area (CAISO): *the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.*

Baseline resources: *Those resources assumed to be fixed as a capacity expansion model input, as opposed to Candidate resources, which are selected by the model and are incremental to the Baseline. Baseline resources are existing (already online) or owned or contracted to come online within the planning horizon. Existing resources with announced retirements are excluded from the Baseline for the applicable years. Being "contracted" refers to a resource holding signed contract/s with an LSE/s for much of its energy and capacity, as applicable, for a significant portion of its useful life. The contracts refer to those approved by the CPUC and/or the LSE's governing board, as applicable. These criteria indicate the resource is relatively certain to come online. Baseline resources that are not online at the time of modeling may have a failure rate applied to their nameplate capacity to allow for the risk of them failing to come online.*

Candidate resource: *those resources, such as renewables, energy storage, natural gas generation, and demand response, available for selection in IRP capacity expansion modeling, incremental to the Baseline resources.*

Capacity Expansion Model: *a capacity expansion model is a computer model that simulates generation and transmission investment to meet forecast electric load over many years, usually with the objective of minimizing the total cost of owning and operating the electrical system. Capacity expansion models can also be configured to only allow solutions that meet specific requirements, such as providing a minimum amount of capacity to ensure the reliability of the system or maintaining greenhouse gas emissions below an established level.*

Certify (a Community Choice Aggregator Plan)*: Public Utilities Code 454.52(b)(3) requires the CPUC to certify the integrated resource plans of CCAs. "Certify" requires a formal act of the Commission to determine that the CCA's Plan complies with the requirements of the statute and the process established via Public Utilities Code 454.51(a). In addition, the Commission must review the CCA Plans to determine any potential impacts on public utility bundled customers under Public Utilities Code Sections 451 and 454, among others.*

Clean System Power (CSP) methodology*: the methodology used to estimate GHG and criteria pollutant emissions associated with an LSE's Portfolio based on how the LSE will expect to rely on system power on an hourly basis.*

***Community Choice Aggregator**: a governmental entity formed by a city or county to procure electricity for its residents, businesses, and municipal facilities.*

***Conforming Portfolio**: the LSE portfolio that conforms to IRP Planning Standards, the 2030 LSE-specific GHG Emissions Benchmark, use of the LSE's assigned load forecast, use of inputs and assumptions matching those used in developing the Reference System Portfolio, as well as other IRP requirements including the filing of a complete Narrative Template, a Resource Data Template and Clean System Power Calculator.*

***Effective Load Carrying Capacity**: a percentage that expresses how well a resource is able avoid loss-of-load events (considering availability and use limitations). The percentage is relative to a reference resource, for example a resource that is always available with no use limitations. It is calculated via probabilistic reliability modeling and yields a single percentage value for a given resource or grouping of resources.*

***Effective Megawatts (MW):** perfect capacity equivalent MW, such as the MW calculated by applying an ELCC % multiplier to nameplate MW.*

***Electric Service Provider**: an entity that offers electric service to a retail or end-use customer, but which does not fall within the definition of an electrical corporation under Public Utilities Code Section 218.*

***Filing Entity**: an entity required by statute to file an integrated resource plan with CPUC.*

***Future**: a set of assumptions about future conditions, such as load or gas prices.*

***GHG Benchmark (or LSE-specific 2030 GHG Benchmark)**: the mass-based GHG emission planning targets calculated by staff for each LSE based on the methodology established by the California Air Resources Board and required for use in LSE Portfolio development in IRP.*

***GHG Planning Price:** the systemwide marginal GHG abatement cost associated with achieving a specific electric sector 2030 GHG planning target.*

***Integrated Resources Planning Standards (Planning Standards)**: the set of CPUC IRP rules, guidelines, formulas and metrics that LSEs must include in their LSE Plans.*

***Integrated Resource Planning (IRP) process**: integrated resource planning process; the repeating cycle through which integrated resource plans are prepared, submitted, and reviewed by the CPUC*

***Long term**: more than 5 years unless otherwise specified.*

***Load Serving Entity**: an electrical corporation, electric service provider, community choice aggregator, or electric cooperative.*

***Load Serving Entity (LSE) Plan**: an LSE's integrated resource plan; the full set of documents and information submitted by an LSE to the CPUC as part of the IRP process.*

***Load Serving Entity (LSE) Portfolio**: a set of supply- and/or demand-side resources with certain attributes that together serve the LSE's assigned load over the IRP planning horizon.*

***Loss of Load Expectation (LOLE):** a metric that quantifies the expected frequency of loss-of-load events per year. Loss-of-load is any instance where available generating capacity is insufficient to*

serve electric demand. If one or more instances of loss-of-load occurring within the same day regardless of duration are counted as one loss-of-load event, then the LOLE metric can be compared to a reference point such as the industry probabilistic reliability standard of "one expected day in 10 years," i.e. an LOLE of 0.1.

Maximum Import Capability: a California ISO metric that represents a quantity in MWs of imports determined by the CAISO to be simultaneously deliverable to the aggregate of load in the ISO's Balancing Authority (BAA) Area and thus eligible for use in the Resource Adequacy process. The California ISO assesses a MIC MW value for each intertie into the ISO's BAA and allocated yearly to the LSEs. A LSE's RA import showings are limited to its share of the MIC at each intertie.

Net Qualifying Capacity (NQC): *Qualifying Capacity reduced, as applicable, based on: (1) testing and verification; (2) application of performance criteria; and (3) deliverability restrictions. The Net Qualifying Capacity determination shall be made by the California ISO pursuant to the provisions of this California ISO Tariff and the applicable Business Practice Manual.*

Non-modeled costs*: embedded fixed costs in today's energy system (e.g., existing distribution revenue requirement, existing transmission revenue requirement, and energy efficiency program cost).*

Nonstandard LSE Plan*: type of integrated resource plan that an LSE may be eligible to file if it serves load outside the CAISO balancing authority area.*

Optimization*: an exercise undertaken in the CPUC's Integrated Resource Planning (IRP) process using a capacity expansion model to identify a least-cost portfolio of electricity resources for meeting specific policy constraints, such as GHG reduction or RPS targets, while maintaining reliability given a set of assumptions about the future. Optimization in IRP considers resources assumed to be online over the planning horizon (baseline resources), some of which the model may choose not to retain, and additional resources (candidate resources) that the model is able to select to meet future grid needs.*

Planned resource: *any resource included in an LSE portfolio, whether already online or not, that is yet to be procured. Relating this to capacity expansion modeling terms, planned resources can be baseline resources (needing contract renewal, or currently owned/contracted by another LSE), candidate resources, or possibly resources that were not considered by the modeling, e.g., due to the passage of time between the modeling taking place and LSEs developing their plans. Planned resources can be specific (e.g., with a CAISO ID) or generic, with only the type, size and some geographic information identified.*

Qualifying capacity*: the maximum amount of Resource Adequacy Benefits a generating facility could provide before an assessment of its net qualifying capacity.*

Preferred Conforming Portfolio*: the conforming portfolio preferred by an LSE as the most suitable to its own needs; submitted to CPUC for review as one element of the LSE's overall IRP plan.*

Preferred System Plan: *the Commission's integrated resource plan composed of both the aggregation of LSE portfolios (i.e., Preferred System Portfolio) and the set of actions necessary to implement that portfolio (i.e., Preferred System Action Plan).*

Preferred System Portfolio: *the combined portfolios of individual LSEs within the CAISO, aggregated, reviewed and possibly modified by Commission staff as a proposal to the Commission, and adopted by the Commission as most responsive to statutory requirements per Pub. Util. Code 454.51; part of the Preferred System Plan.*

Short term*: 1 to 3 years (unless otherwise specified).*

Staff*: CPUC Energy Division staff (unless otherwise specified).*

Standard LSE Plan*: type of integrated resource plan that an LSE is required to file if it serves load within the CAISO balancing authority area (unless the LSE demonstrates exemption from the IRP process).*

Transmission Planning Process (TPP)*: annual process conducted by the California Independent System Operator (CAISO) to identify potential transmission system limitations and areas that need reinforcements over a 10-year horizon.*