AGENDA

Risk Oversight Committee
August 11, 2026
2:00 PM
Solar Conference Room, 116 S. Grant Street, 1st Floor

I. CALL TO ORDER

II. ROLL CALL

III. PUBLIC COMMENTS

IV. REQUESTS/PRESENTATIONS

1. Minutes of Prior Meeting

Summary: Staff recommends approval of the minutes of the December 8, 2025, Risk Oversight Committee Meeting.

2. Roseville Electric Risk Management Update

Summary: Report by Acting Electric Risk Supervisor, Glenn Hoffman, summarizing hedge compliance, credit exposure, and monthly risk metrics, for information.

3. Energy Market Update

Summary: Presentation by Electric Business Analyst, Patrick Zanardelli, on market conditions including weather, hydro, and natural gas storage, for information.

4. Roseville Electric Energy Policy Update

Summary: Presentation by Acting Electric Risk Supervisor, Glenn Hoffman, on proposed updates to the Energy Credit Risk Policy and Energy Trading Authority Policy, and reaffirmation of the Energy Risk Management Policy and Energy Hedge Policy, for recommendation.

5. Roseville Energy Contracts and Risk Controls

Summary: Presentation by Electric Business Analyst, Patrick Zanardelli, on energy contract portfolio and risk controls, for information.

6. Energy Imbalance Market vs Extended Day Ahead Market Overview

Summary: Presentation by Electric Business Analyst, Eric Rivera, and Electric Resources Planner, Weston Groves, on energy imbalance and extended day ahead markets, for information.

V. ADJOURNMENT

MINUTES

Risk Oversight Committee Meeting
December 8, 2025
9:00 AM
Solar Conference Room, 116 S Grant St, 1st Floor

I. CALL TO ORDER

Dennis Kauffman called the December 8, 2025, Risk Oversight Committee meeting to order at 9:00 a.m.

II. ROLL CALL

Present: Committee Members Roccucci, Webb, Bielski, Casey, Kauffman, DeVore, Sheidenberger, Beans
Absent: Committee Member Houdesheldt

III. PUBLIC COMMENTS

No public comment received.

IV. REQUESTS/PRESENTATIONS

1. Minutes of Prior Meeting

Summary: Staff recommends approval of the minutes of the April 21, 2025, Risk Oversight Committee meeting.

Motion by Committee Member Webb, seconded by Committee Member Roccucci, to approve the April 21, 2025, Risk Oversight Committee meeting minutes.

Roll call vote:
Ayes: Committee Members Roccucci, Webb, Bielski, Casey, Kauffman, DeVore, Sheidenberger, Beans
Noes: None
Absent: Committee Member Houdesheldt
Abstentions: Committee Member Bielski

The Motion passed.

No public comment received.

2. Roseville Electric Utility Risk Management Update

Summary: Report by Acting Electric Risk Supervisor, Glenn Hoffman, summarizing hedge compliance, credit exposure, and monthly risk metrics, for information.

No public comment received.

3. Energy Market Updates

Summary: Presentation by Electric Business Analyst, Patrick Zanardelli, on market conditions including weather, hydro, and natural gas storage, for information.

No public comment received.

4. Renewable Energy Portfolio Update

Summary: Presentation by Electric Resources Planner, Pooja Sharma, on Renewable Portfolio Standard (RPS) Compliance Period 5 progress and renewable procurement status, for information.

No public comment received.

5. Roseville Energy Park (REP) – Maintenance Outage

Summary: Presentation by Power Generation Superintendent, Nathan Ribordy, on the REP outage activities, findings, and return-to-service timeline, for information.

No public comment received.

6. Roseville Power Plant #2 Repower Project Update

Summary: Presentation by Principal Power Engineer, Ozro Corulli, on project progress, construction milestones, and schedule, for information.

No public comment received.

7. Qualified Independent Representative Attestation

Summary: Senior Deputy City Attorney, Joe Mandell, to provide an overview of the Dodd-Frank Act and the Qualified Independent Representative attestation requirements. This item requires a formal action to select a Qualified Independent Representative.

Motion by Committee Member Casey, seconded by Committee Member Webb, to formally select Glenn Hoffman, Acting Electric Risk Supervisor, as the City's Qualified Independent Representative for Roseville Electric Swap Transactions and for Roseville Natural Gas Financing Authority Swap Transactions; and further, to formally select Committee Member Kauffman, Assistant City Manager/Chief Financial Officer, as the Roseville Natural Gas Financing Authority’s second Qualified Independent Representative for Swap Transactions.

Roll call vote:
Ayes: Committee Members Roccucci, Webb, Bielski, Casey, Kauffman, DeVore, Sheidenberger, Beans
Noes: None
Absent: Committee Member Houdesheldt

The Motion passed.

No public comment received.

V. ADJOURNMENT

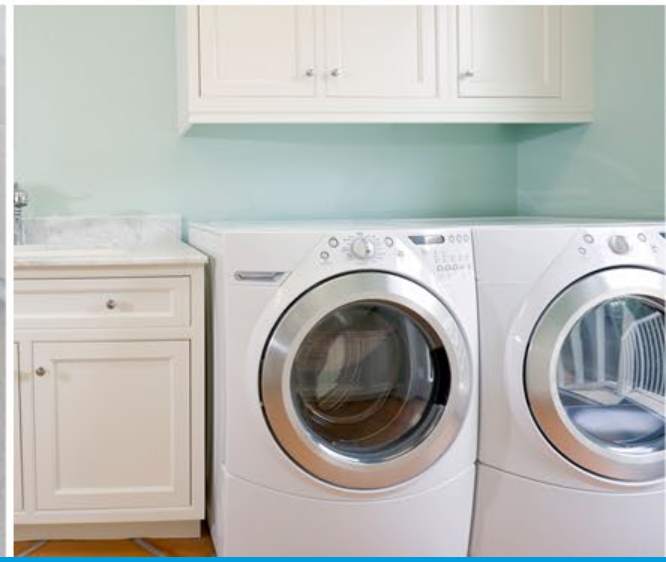
A motion to adjourn the December 8, 2025, Risk Oversight Committee meeting was made by Committee Member DeVore.

Roll Call vote:
Ayes: Committee Members Roccucci, Webb, Bielski, Casey, Kauffman, DeVore, Sheidenberger, Beans
Noes: None
Absent: Committee Member Houdesheldt

The Motion passed and the meeting was adjourned at 9:59 a.m.

_____
Dennis Kauffman
Meeting Facilitator

_____
Cara Faria
Recording Secretary



Risk Oversight Committee

August 11, 2026

CITY OF ROSEVILLE CALIFORNIA

Agenda

- Monthly Energy Risk Report
- Market Update
- Risk Policy Update
- Roseville Energy Contracts and Risk Controls
- Energy Imbalance Market vs Extended Day Ahead Market Overview

Monthly Energy Risk Report

Risk Oversight Committee
August 11, 2026

CITY OF ROSEVILLE CALIFORNIA

July 2026 portfolio update

Compliance status, key market drivers, hedge position, portfolio cost risk, and counterparty credit exposure.

July
Report month
latest ACES monthly report

3-yr
Forecast horizon
through Dec. 2029

No
Policy violations
compliance status

0
New hedges
this report

Primary message

The portfolio remains within policy. Monthly changes are driven by market prices, generation assumptions, load, and other operating conditions — not new hedge activity.

Risk Snapshot

The July report is both a control check and a portfolio risk update.

WHERE WE STAND

✓ **Policy compliance**

Energy Hedge, Trading Authority, and Credit Risk policies are in compliance.

0 **No new hedge activity**

No new power or natural gas hedging transactions were added this month.

$ **Modeled cost exposure**

$8.2M modeled exposure over the next 12 months, based on expected and 97th percentile costs.

WHAT THE REPORT ANSWERS

1 **Are we within policy?**

Reviews hedge, trading authority, and credit risk policy compliance over the planning horizon.

2 **What changed this month?**

Compares market prices, generation forecasts, hydro assumptions, and load conditions to the prior report.

3 **What is the risk range?**

Uses forecast and sensitivity analysis to show expected costs, downside risk, and cost exposure.

What changed in July?

Temperatures briefly reached 104°F, load peaked at 321 MW, hydro storage remained above average at 71%, and market price changes were modest.

Policy Compliance Dashboard

July report status summary.

✓	**Energy Hedge Policy**	No violations	Fixed-price hedge position remains within annual, monthly, and quarterly requirements.
✓	**Trading Authority Policy**	No violations	No Trading Authority Policy violations in the past 12 months.
✓	**Energy Credit Risk Policy**	No violations	Counterparty exposure and credit limits are being monitored within policy.

Key message

Compliance is a control check. Market risk and forecasted costs can still move month to month and are monitored through the monthly risk process.

Market and Operational Drivers

Notable items behind this month's model update.

+$0.08
Forward power price change
avg. $/MWh, balance of 2026

-$0.23
PG&E Citygate gas change
avg. $/MMBtu, balance of 2026

321 MW
July peak load
23 MW higher than prior month

104°F
Peak temperatures
July 14–15

71%
Reservoir storage
vs. 67% historical average

INTERPRETATION

- Summer load pressure is beginning to appear in the results.
- Market price changes were modest compared with recent volatility.
- Hydro conditions are supportive, but resource forecasts and market heat rates continue to affect REP dispatch and portfolio costs.

Fixed-Price Energy Hedge Position

Annual, monthly, and quarterly hedge positions are within policy.

ANNUAL POLICY YEARS

98%
Jul 2026 – Jun 2027
policy range 90–110%

84%
Jul 2027 – Jun 2028
policy range 70–100%

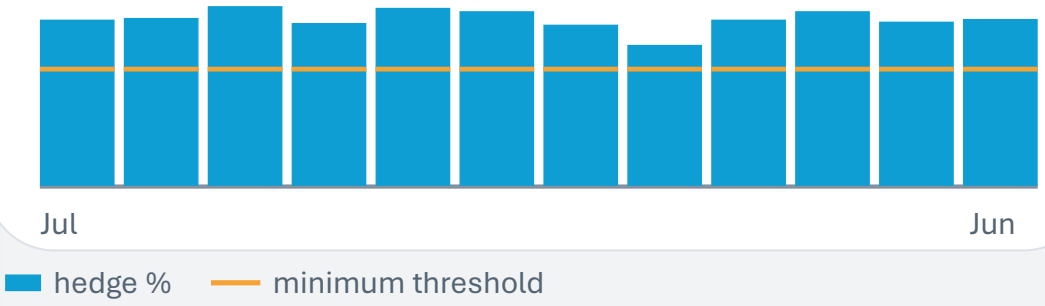
51%
Jul 2028 – Jun 2029
policy range 45–80%

Bottom line

The portfolio is meeting hedge requirements across the annual, monthly, and quarterly views.

NEXT 12 MONTHS

Monthly hedge % vs. 70% minimum



FORWARD QUARTERS

Quarterly hedge % vs. policy minimums

Policy status

Annual fixed-price positions are within policy ranges. Monthly and quarterly hedge positions also meet their required minimum levels.

Portfolio Cost and Risk Range

Modeled next 12-month cost exposure.

$101.9M

Expected total cost

next 12 months

$110.1M

97th percentile cost

higher-cost scenario

$8.2M

Modeled cost exposure

about 8%

Interpretation

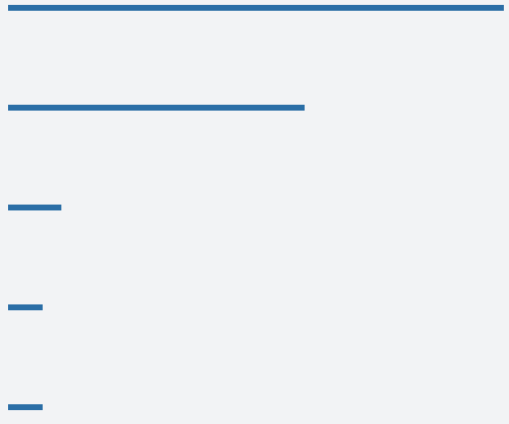
The risk report is not just a compliance check. It quantifies the modeled cost range so staff can monitor how market changes may affect the portfolio.

Counterparty Credit Exposure and Support

Exposure is monitored against approved limits; collateral is used when needed.

LARGEST EXPOSURES AS OF JULY 28, 2026

Natural Gas Counterparty	$5.54M
Gas Prepay Counterparty	$3.52M
Renewable Resource Counterparty	$0.53M
Public Agency Counterparty	$0.16M
Energy Marketing Counterparty	$0.05M



Note

Long-term base resource contract is excluded.

POSTED COLLATERAL IDENTIFIED

~$1.41M total posted collateral identified

LC **Letters of Credit**

~$1.20M, including $850k supporting REC delivery obligations.

$ **Cash / Margin**

$210k in direct credit support where required by transaction structure.

Why this matters

Credit support provides a backstop if a counterparty cannot perform and is monitored alongside exposure.

Key Watch Items

Areas Risk will continue to monitor.

1. **Summer load and temperatures**
   Peak loads can move forecast costs and hedge utilization.

2. **Forward power and gas prices**
   Monthly market curves drive model changes even without new trades.

3. **Hydro and REP generation**
   Resource forecasts influence market purchases and portfolio costs.

4. **Counterparty credit exposure**
   Exposure, collateral, and available credit will continue to be monitored.

Overall takeaway

The July report shows policy compliance and continued monitoring of market, portfolio, and credit risk drivers.

Questions?

Roseville Electric

July 2026 Portfolio Position Report

July 22, 2026

Market Prices: July 8, 2026

Model Run: July 2026 – December 2029

ACES
excellence in energy

TABLE OF CONTENTS

1. Executive Summary

This report provides a current forecast and sensitivity analysis of Roseville Electric's key portfolio components from July 2026 through December 2029. While Roseville Electric's resources and load obligations are relatively stable in the near future, energy markets change frequently. This report is updated monthly to reflect the impact of the latest market conditions on Roseville Electric's portfolio. This report compares the July 2026 model results to the June 2026 model results, where applicable.

1.1. Assumption and Model Updates

Monthly model updates provide current market and operational perspectives for this risk model. The following assumptions were updated for this month's report:

- Market prices are based on forward curves as of July 8, 2026, and are compared to prices from the previous report, which were as of June 10, 2026
- Roseville Energy Park (REP) forecasted generation increased 3% for 2026, 2% for 2027, and 2% for 2029
- Western Base Resource (BR) forecasted generation decreased 9% for 2026 and increased 11% for 2027
- Calaveras forecasted generation decreased 6% for 2026 and 29% for 2028

1.1.1. Power and Natural Gas Hedging Activity

No transactions were added.

2. Roseville Electric's Risk Management Policies

2.1. Policy Compliance Status Summary

Figure 1 shows the status of Roseville Electric's compliance with its risk management policies.

Figure 1.

Compliance Summary		
Policy	**Compliance Status**	**Notes**
Fixed Price Energy - Annual	In	
Fixed Price Energy - Monthly and Quarterly	In	
Trading	In	No violations in the last 12 months
Credit	In	

2.2. Energy Hedge Policy

Roseville Electric's Energy Hedge Policy is designed to reduce energy rate volatility and maintain rates within reasonable tolerances. The Energy Hedge Policy outlines specific guidelines and criteria for

procuring energy to meet projected needs. These criteria are defined for months and quarters, as appropriate, for the various components of the Energy Hedge Policy.

The Energy Hedge Policy defines compliance under various criteria, which are measured from model results outlined in this report, including the following:

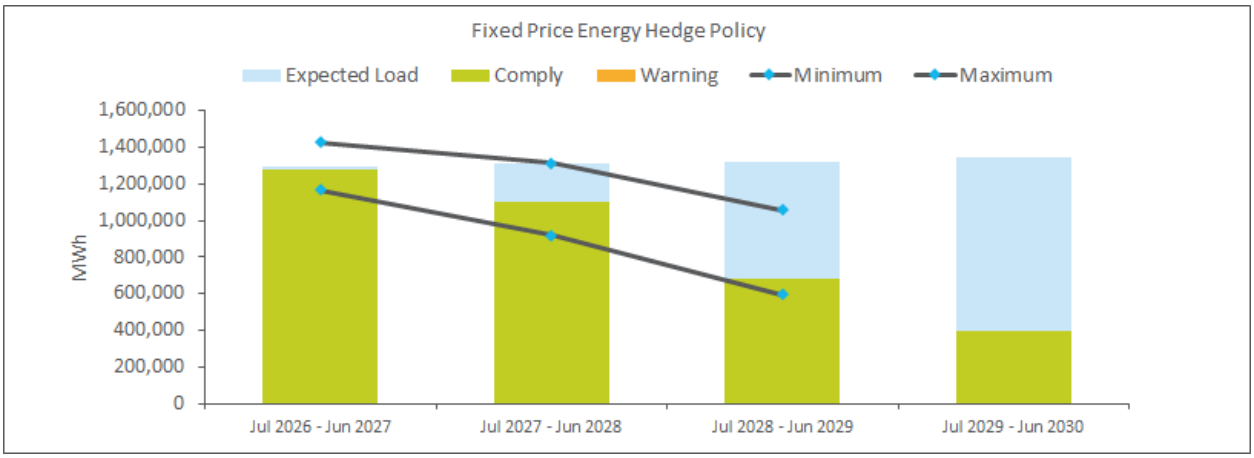
- Fixed-price energy
  - Rolling hedges
  - Hedge timing and volumetric minimums

2.2.1. Fixed-Price Energy

The fixed-price energy component of Roseville Electric's Energy Hedge Policy defines volumetric ranges for procured fixed-price energy in relation to expected energy needs. Energy needs are considered hedged or procured to the extent the projected need is met by authorized transactions covered under Roseville Electric's Trading Authority Policy.

Figure 2 shows Roseville Electric's fixed-price energy for the next 12 months, quarters 5 through 8 (July 2027 through June 2028), quarters 9 through 12 (July 2028 through June 2029), and quarters 13 through 16 (July 2029 through June 2030). Quarters 13 through 16 do not fall under the policy but are shown for reference as this policy rolls forward in future months and years. **Roseville Electric is in compliance with its Annual Fixed Price Energy Hedge Policy.**

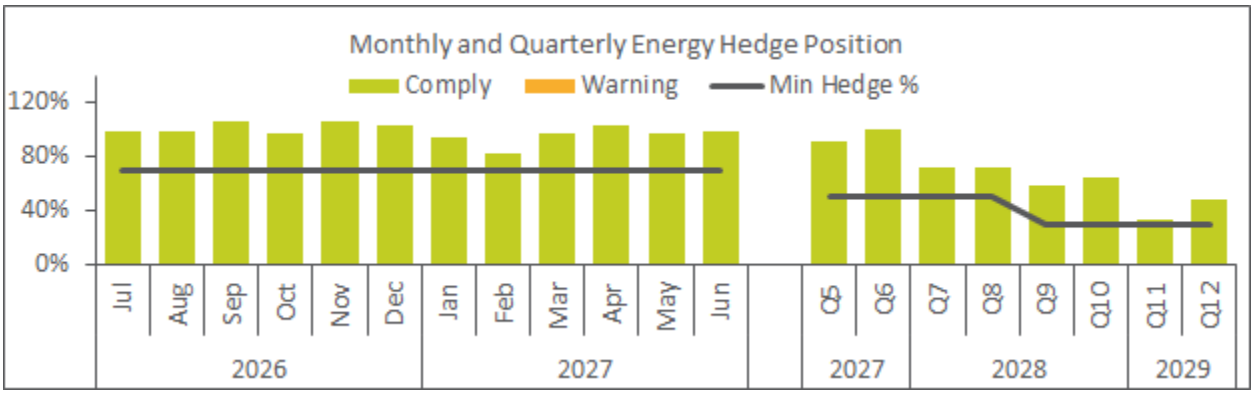
Figure 2.



Fixed Price Energy Hedge Policy						
Period	Expected Load (MWh)	Fixed Price Resources (MWh)	Coverage	Minimum Threshold	Maximum Threshold	Compliance
Jul 2026 - Jun 2027	1,296,265	1,278,269	98%	90%	110%	In
Jul 2027 - Jun 2028	1,313,082	1,104,650	84%	70%	100%	In
Jul 2028 - Jun 2029	1,320,024	684,778	51%	45%	80%	In
Jul 2029 - Jun 2030	*1,346,970*	*394,853*	*29%*	*N/A*	*N/A*	*N/A*

Figure 3 shows the monthly (next 12 months) and quarterly (next 8 quarters beyond the next 12 months) fixed-price energy hedge position for Roseville Electric's portfolio. There are minimum hedge levels for each month (70%) and each quarter (50% for quarters 5 through 8; 30% for quarters 9 through 12). **Roseville Electric is in compliance with its Monthly Fixed Price Energy Hedge Policy and its Quarterly Fixed Price Energy Hedge Policy.**

Figure 3.



	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
	Jul 2026	Aug 2026	Sep 2026	Oct 2026	Nov 2026	Dec 2026	Jan 2027	Feb 2027	Mar 2027	Apr 2027	May 2027	Jun 2027
Min Hedge %	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Actual Hedge %	98%	99%	106%	96%	105%	103%	95%	83%	98%	103%	97%	98%
Compliance	In	In	In	In	In	In	In	In	In	In	In	In

	Quarter							
	5	6	7	8	9	10	11	12
Start Month	Jul 2027	Oct 2027	Jan 2028	Apr 2028	Jul 2028	Oct 2028	Jan 2029	Apr 2029
End Month	Sep 2027	Dec 2027	Mar 2028	Jun 2028	Sep 2028	Dec 2028	Mar 2029	Jun 2029
Min Hedge %	50%	50%	50%	50%	30%	30%	30%	30%
Actual Hedge %	92%	99%	71%	72%	59%	64%	34%	48%
Compliance	In	In	In	In	In	In	In	In

2.2.2. Hedged Natural Gas Position

Compared to the prior report, Roseville Electric's exposure to natural gas increases from 4,885,770 MMBtu to 5,024,264 MMBtu over the next 12 months. Roseville Electric has 5,472,500 MMBtu of natural gas hedges for the next 12 months, of which 4,840,873 MMBtu (88% utilization rate) are expected to be utilized by Roseville Electric's resources (primarily REP). Any unused natural gas hedges (631,627 MMBtu) are still considered to hedge Roseville Electric's energy exposure and are converted to electricity for hedge policy purposes. This conversion methodology includes NP15 7x24 power prices, PG&E Citygate natural gas prices, and CO_2 costs.

2.3. Energy Trading Authority Policy

Roseville Electric's Energy Trading Authority Policy addresses the process it uses to transact with counterparties. It defines many aspects of the delegation of authority, such as to whom authority is delegated, how much energy or dollar amounts they are authorized to transact at one time or over time, what types of products they can transact, and the processes for obtaining authority to transact. This policy

ensures that transactions are performed in a disciplined manner and that appropriate communication is maintained across the organization. **As of July 2026, there have been no Trading Authority Policy violations in the past 12 months.**

2.4. Energy Credit Risk Policy

Roseville Electric's Energy Credit Risk Policy relates to counterparty credit risk management. It evaluates prospective counterparty risk, then uses that assessment to establish an open line of credit. This policy defines how credit limits are set and who can set them. It also addresses regular monitoring of counterparty creditworthiness and the value of contracts currently active with counterparties to determine how much credit has been extended to a counterparty. This report will no longer show the credit policy as out of compliance if a counterparty exceeds its credit limit due to market changes (i.e., Powerex Corp). Roseville Electric increased the credit limit with the Roseville Natural Gas Financing Authority (RNGFA) to avoid showing any exposure under the deal's structure. Figure 4 shows Roseville Electric's current credit position with various counterparties. **Roseville Electric is in compliance with its Energy Credit Risk Policy.**

Figure 4.

Credit Position as of July 8, 2026 - in $ Millions								
Counterparty	Moody Rating	S&P Rating	Contract	Roseville Credit Limit	Mark-to-Market (-) Roseville Owes (+) Counterparty Owes	Counterparty Credit Limit	Counterparty Threshold	Collateral
Bonneville Power Administration	Aa1	AA-	PWR - Bilat	Unknown	-$0.1	$25.0	$0.0	$0.0
Calpine Energy Services	Baa1	BBB+	WSPP	Unknown	-$0.1	$2.0	$0.0	$0.0
Citigroup Energy	A2	A	ISDA w/PA & GA	$25.0	-$2.7	$10.0	$25.0	$0.0
City of Seattle - City Light Dep	NA	AA	WSPP	Unknown	-$0.3	$10.0	$0.0	$0.0
ConocoPhillips	A2	A-	ISDA w/PA & GA	$50.0	-$1.8	$19.0	$40.0	$0.0
Dynasty Power	NA	NA	WSPP	$25.0	-$2.7	$0.0	$0.0	$0.2
J Aron	A2	BBB+	ISDA w/PA & GA	$20.0	-$1.1	$5.0	$5.0	$0.0
Macquarie Energy	Baa1	BBB+	ISDA w/PA & GA	$20.0	-$9.4	$15.0	$5.0	$0.0
Morgan Stanley Cap Group	A1	A-	WSPP	$30.0	-$0.3	$10.0	$30.0	$0.0
NextEra Energy Marketing	Baa1	A-	WSPP	Unknown	-$4.2	$3.5	$0.0	$0.0
Northern California Power Agency	A1	A-	WSPP	Unknown	+$0.2	$2.0	$0.0	$0.0
Portland Gen Electric	A3	BBB+	WSPP	Unknown	-$0.1	$10.0	$0.0	$0.0
RNGFA	A1	A-	NG - Buy Only	Unknown	+$2.4	$10.0	$0.0	$0.0
Sacramento Municipal Utility Dis	Aa2	AA	WSPP	Unknown	-$0.1	$7.5	$0.0	$0.0
Shell Energy North America	A2	A	WSPP	$35.0	+$5.2	$10.0	$35.0	$0.0
Shell Trading Risk Management	A2	A	ISDA	$25.0	-$0.9	$10.0	$25.0	$0.0
TEA	NA	NA	WSPP	Unknown	-$0.4	$1.0	$0.0	$0.0
WAPA Sierra Nevada	Aaa	0	PWR - Buy Only	Unknown	+$68.4	$10.0	$0.0	$0.0

3. Portfolio Update

3.1. Power Market Update

3.1.1. Price Trends

Figure 5 shows average power prices from June 16, 2026, through July 15, 2026.

Figure 5.

Average Power Prices from June 16, 2026, through July 15, 2026 ($/MWh)			
Period	ICE	Locational Marginal Price (LMP)	
	Mid-C	NP15	SMDA
Heavy-Load Hour (HLH)	$23.99	$22.53	$23.08
Light-Load Hour (LLH)	$20.99	$32.26	$33.77

Figure 6 shows the historical monthly day-ahead (DA) 7x24 prices for NP15, as well as the forward curve. Compared to the prior month, forward power prices increased $0.08/MWh, on average, for the balance of 2026.

Figure 6.

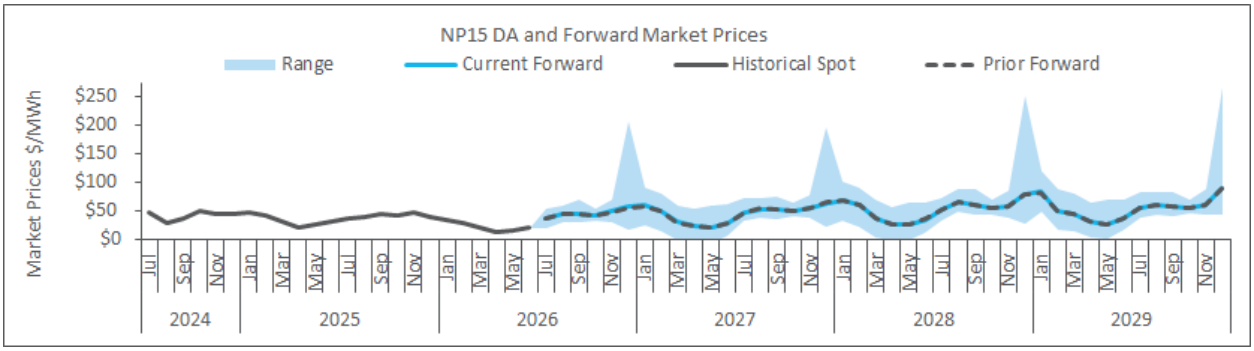


Figure 7 compares NP15 and California-Oregon Border (COB) forward curve prices without carbon costs.

Figure 7.

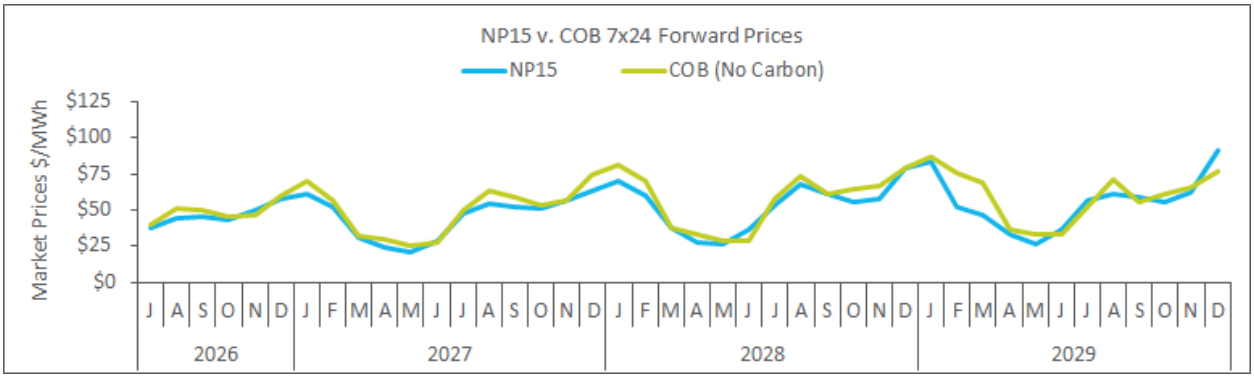
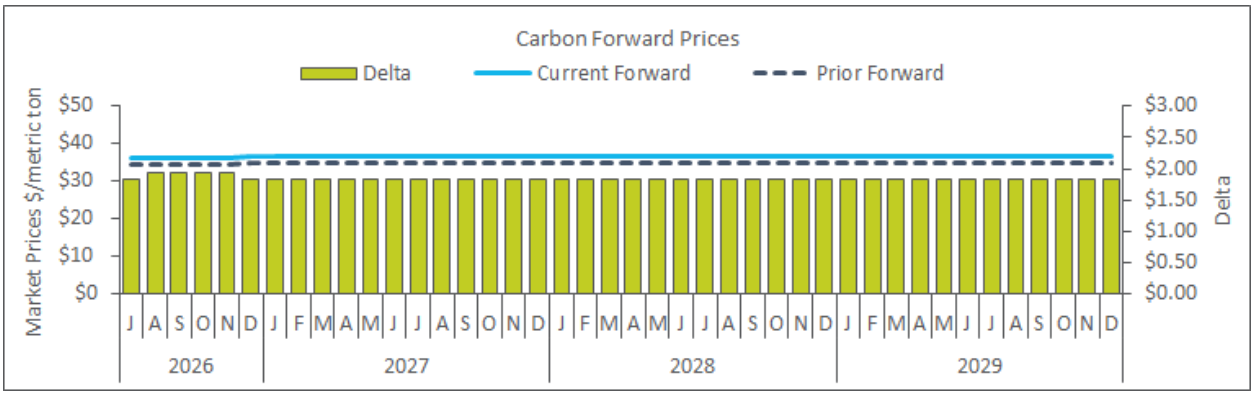


Figure 8 shows the forward carbon prices as of July 8, 2026, compared with those from the prior report.

Figure 8.



3.1.2. System Conditions

The Pacific Northwest operated with excess supply from late June through early July, which was pushed south into California, as has occurred over the last few months. California had abundant solar. The increase in load has been the determining factor in the price increase. Prices are expected to average near $25/MWh at Mid-C for July. Temperatures briefly increased to 104°F on July 14 and July 15, and load peaked at 321 MW, 23 MW higher than the previous month.

3.1.3. Outlook

August has a similar forecast to July. Temperatures are not forecast to reach the same peaks but will be consistently in the mid-90°F. Prices are expected to be consistently high overall, with a higher average. Seasonal hydro and wind in the Pacific Northwest have increased, resulting in consistently elevated prices most days. Demand and prices similar to July are forecast for August, as load and temperatures are expected to be similar.

3.2. Natural Gas and Market Heat Rates

Figure 9 shows historical spot PG&E Citygate natural gas prices and the forward curve. Compared to the prior month, PG&E Citygate natural gas prices decreased $0.23/MMBtu, on average, for the balance of 2026.

Figure 9.

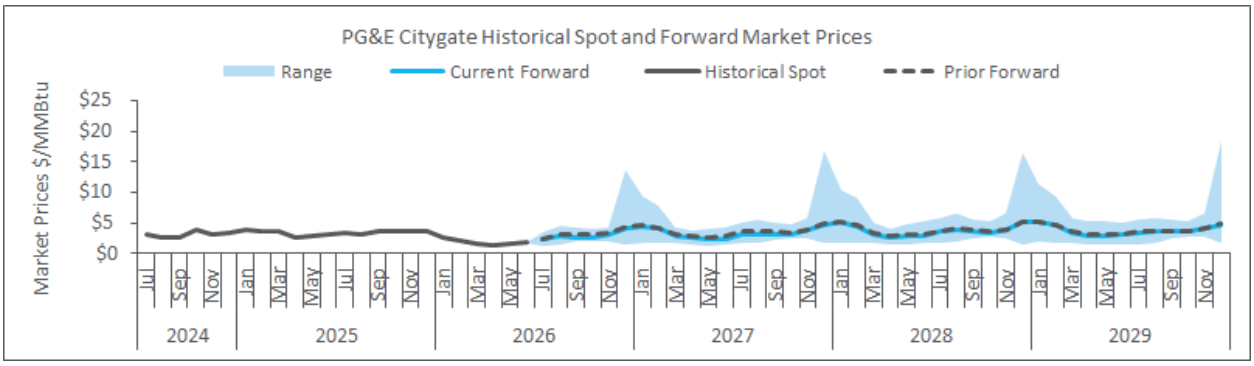
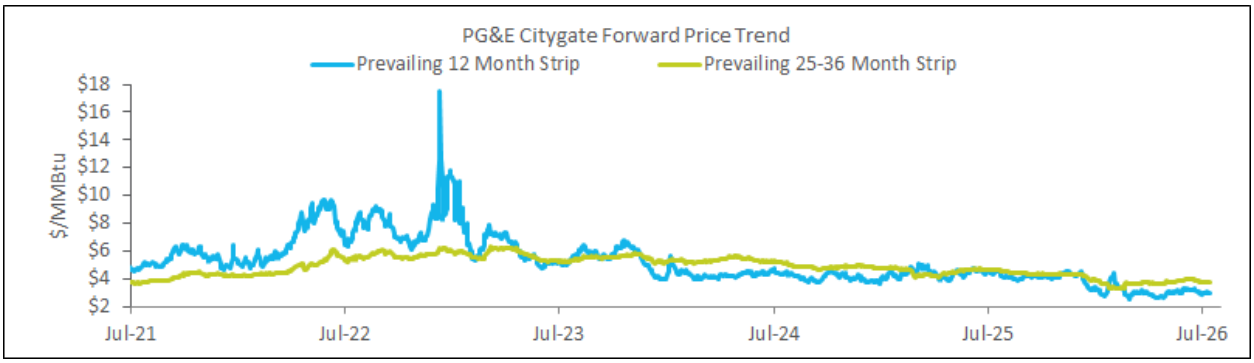


Figure 10 shows the prevailing 12-month and 25- through 36-month PG&E Citygate forward prices for the past five years.

Figure 10.



3.3. Hydro

As of July 20, 2026, the average storage level across 14 reservoirs in California was at 71% of capacity, which is more than the historical average of approximately 67% for this time of year. The historical average is a moving 30-year average and is updated every five years. It currently includes 1996 to 2025.[1] Average storage levels at this time last year were at 74% of capacity. The Northern Sierra region has received approximately 97% of the normal season-to-date precipitation thus far compared to 105% last year.

4. Model Results

4.1. Market Prices and Generation

Figure 11 summarizes the annual changes in market prices, REP generation, hydro generation, and load.

[1] From an e-mail response from California Data Exchange Center (CDEC), May 20, 2024, answering a question regarding what is included in the historical average.

Figure 11.

Annual Market Prices and Generation												
	Current				Prior				Change			
	2026	2027	2028	2029	2026	2027	2028	2029	2026	2027	2028	2029
NP 15 7x24 ($/MWh)	$46.31	$45.34	$52.60	$55.37	$46.23	$45.39	$52.84	$54.81	$0.08	($0.05)	($0.24)	$0.57
NP 15 HLH ($/MWh)	$46.22	$44.26	$51.88	$53.63	$45.92	$43.89	$52.34	$53.56	$0.30	$0.38	($0.47)	$0.07
NP 15 LLH ($/MWh)	$46.42	$46.80	$53.54	$57.70	$46.61	$47.40	$53.51	$56.51	($0.19)	($0.60)	$0.02	$1.20
PGE CG ($/MMBtu)	$2.99	$3.33	$3.75	$3.77	$3.22	$3.62	$3.91	$3.92	($0.23)	($0.29)	($0.17)	($0.15)
Market Implied Heat Rates	15.49	13.63	14.03	14.69	14.36	12.55	13.50	13.99	1.13	1.08	0.53	0.70
REP Generation (GWh)	337	599	653	686	328	586	652	675	9	13	1	11
Western BR (GWh)	67	138	125	125	74	124	125	125	(7)	14	0	0
Calaveras (GWh)	15	46	46	65	16	46	65	65	(1)	0	(19)	0
South Feather (GWh)	24	44	49	50	24	45	49	50	0	0	0	0
Load (GWh)	693	1,307	1,317	1,335	693	1,307	1,317	1,335	0	0	0	0

4.1.1. REP Generation

REP's expected generation fluctuates with changes in forward market-implied heat rates, which are calculated as forward power prices divided by natural gas prices. In general, lower market-implied heat rates decrease REP's generation as market power becomes relatively cheaper than REP's cost to generate, while higher market-implied heat rates increase REP's generation as market power becomes relatively more expensive than REP's generation cost. Hydro forecasts and price changes impact REP generation (shown in Figure 12) by influencing market-implied heat rates (shown in Figure 13). The outage schedule for REP is reflected in Figure 12 and Figure 13.

Figure 12.

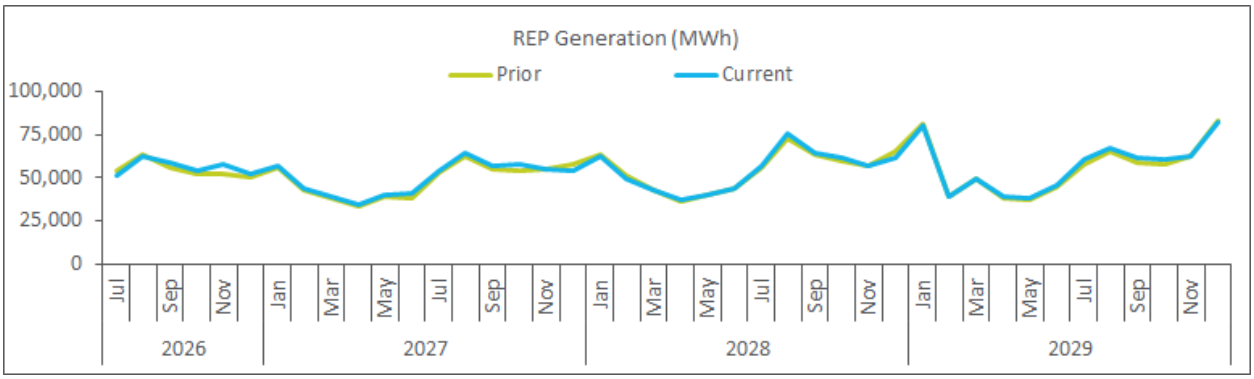
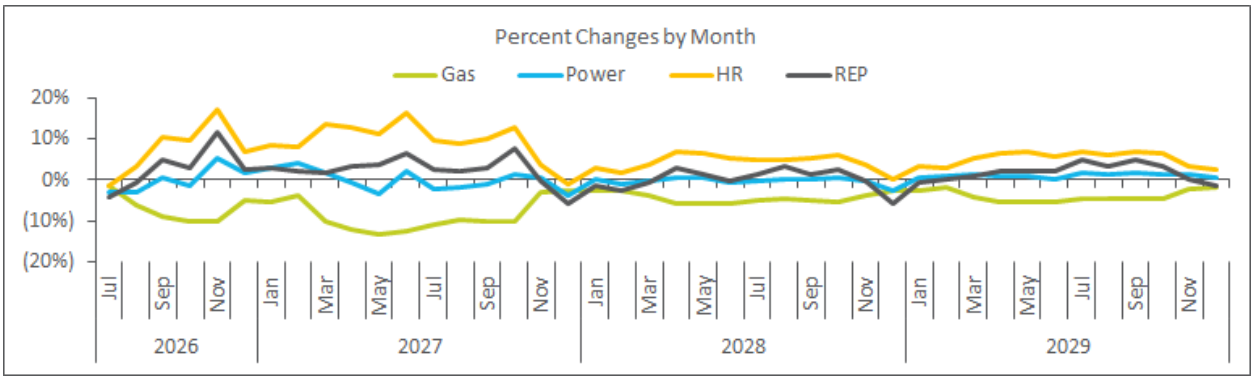


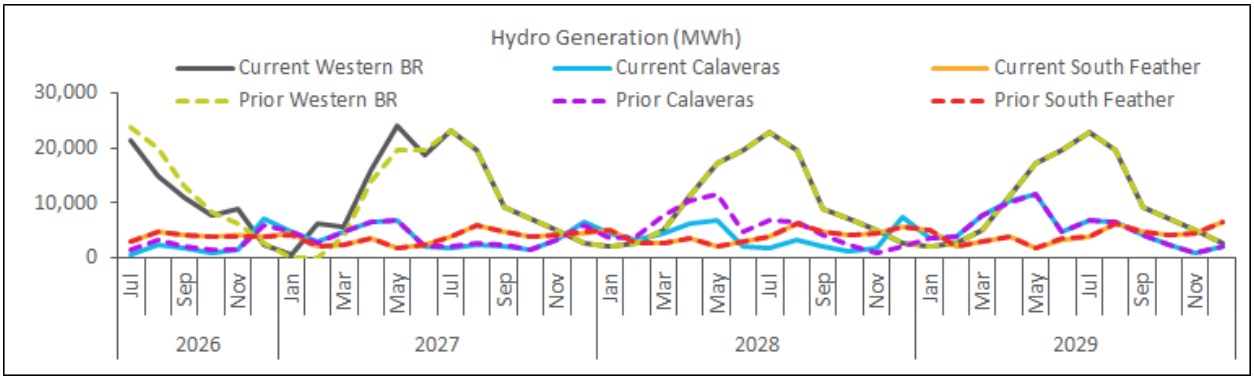
Figure 13.



4.1.2. Hydro Generation

Figure 14 shows the outlook for hydro generation from Roseville Electric's Western BR, Calaveras, and South Feather hydro projects and includes the prior and current outlooks.

Figure 14.



4.2. Portfolio Costs

Roseville Electric's portfolio costs increased $0.3 million (0.46%) for 2026, decreased $0.7 million (0.66%) for 2027, increased $0.7 million (0.74%) for 2028, and decreased $0.9 million (0.96%) for 2029.

Higher market-implied heat rates led to higher forecasted generation for REP in all modeled years. As a result, load costs increased more than resource margins for 2026 and 2028, increasing total portfolio costs, while resource margins increased more than load costs for 2027 and 2029, decreasing total portfolio costs.

Expected total costs for the next 12 months are $101.9 million, with a 97th percentile total cost of $110.1 million and cost exposure of $8.2 million (8%). The average variable cost (AVC) to serve load is $38.84/MWh for the same period, with a 97th percentile AVC of $45.16/MWh ($6.32/MWh risk). Roseville Electric is assumed to hold sufficient CO_2 credits; therefore, CO_2 costs were excluded from the cost accounting but were included in the dispatch and commit decision of thermal resources to cover any potential opportunity costs.

Figure 15 shows the annual mean, 3rd percentile, 97th percentile, and exposure for Roseville Electric's total portfolio costs. Exposure is measured as the difference between the 97th percentile and the mean.

Figure 15.

Power Supply Annual Risk				
Period	Mean	3%	97%	Exposure
Jul 2026 - Jun 2027	$101,875,886.10	$86,375,628.42	$110,071,417.67	8.0%
Jul 2027 - Jun 2028	$99,672,208.91	$91,531,045.90	$103,518,062.79	3.9%
Jul 2028 - Jun 2029	$95,615,244.33	$88,060,982.64	$100,402,502.61	5.0%

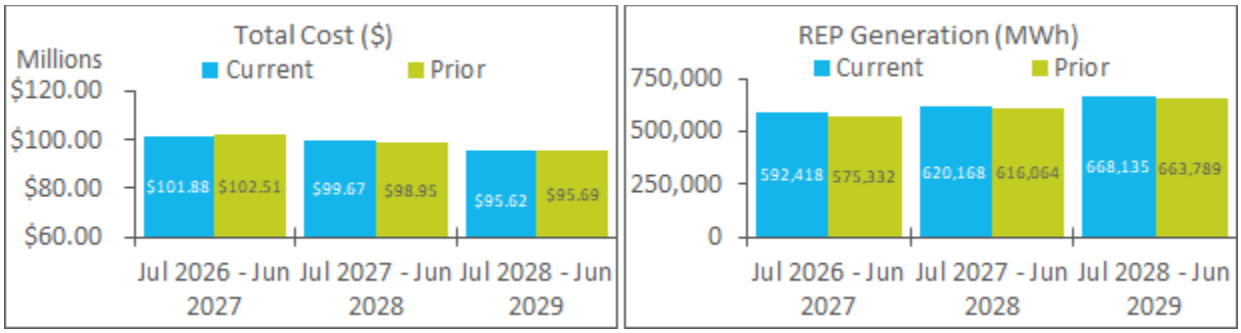
Figure 16 shows the annual mean, 3rd percentile, and 97th percentile AVC for Roseville Electric's portfolio.

Figure 16.

Power Supply Average Variable Cost			
Period	Mean	3%	97%
Jul 2026 - Jun 2027	$38.84	$26.88	$45.16
Jul 2027 - Jun 2028	$36.95	$30.75	$39.88
Jul 2028 - Jun 2029	$34.08	$28.36	$37.71

Figure 17 shows the relative change in total costs and expected REP generation for the next 12-month period compared to last month's report. Total portfolio costs decreased $0.64 million for July 2026 through June 2027, increased $0.72 million for July 2027 through June 2028, and decreased $0.07 million for July 2028 through June 2029.

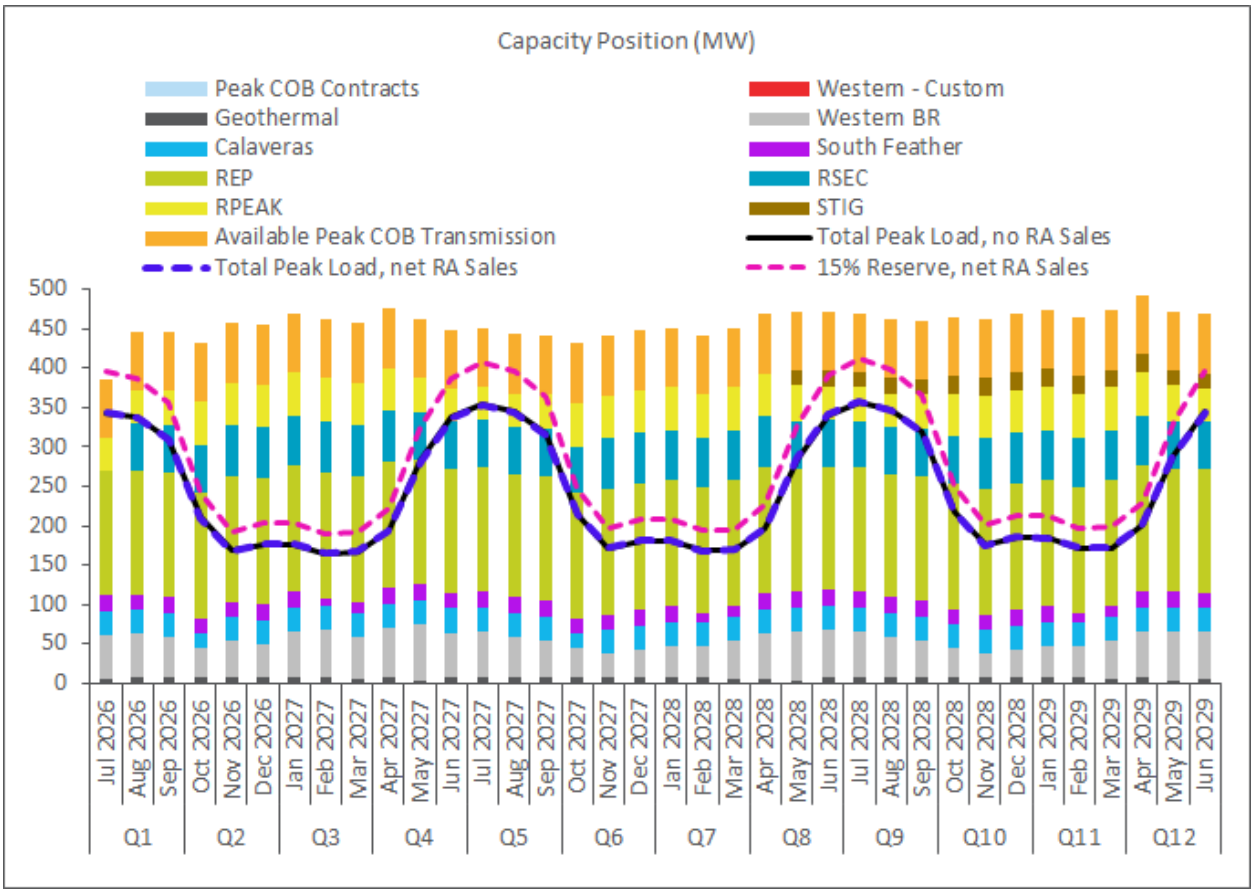
Figure 17.



4.3. Capacity Position

The capacity position shows what resources are available to ensure safe and reliable delivery of power to serve Roseville Electric's load throughout the year. Roseville Electric has no CAISO Resource Adequacy (RA) obligations. Thermal capacity will fluctuate primarily due to the placement of planned outages and ambient derates. Peak COB contracts include 7x24 or HLH contracts. Available COB transmission is included in the calculation in Figure 18 and Figure 19 and is equal to Roseville Electric's available contract transmission capacity. Figure 18 and Figure 19 show Roseville Electric's capacity position by resource type and load.

Figure 18.


Capacity Position (MW)
Peak COB Contracts
Geothermal
Calaveras
REP
RPEAK
Available Peak COB Transmission
Total Peak Load, net RA Sales
Western - Custom
Western BR
South Feather
RSEC
STIG
Total Peak Load, no RA Sales
15% Reserve, net RA Sales
500
450
400
350
300
250
200
150
100
50
0
Jul 2026
Aug 2026
Sep 2026
Oct 2026
Nov 2026
Dec 2026
Jan 2027
Feb 2027
Mar 2027
Apr 2027
May 2027
Jun 2027
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Jan 2029
Feb 2029
Mar 2029
Apr 2029
May 2029
Jun 2029
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
Q9
Q10
Q11
Q12

Figure 19.

Capacity Position													
Year	Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2026	Peak COB Contracts							0	0	0	0	0	0
	Western - Custom							0	0	0	0	0	0
	Geothermal							6	7	7	7	7	7
	Western BR							55	56	52	39	47	43
	Calaveras							30	30	30	18	30	30
	South Feather							20	20	20	18	18	20
	REP							157	157	157	160	160	160
	RSEC							0	60	60	60	64	64
	RPEAK							42	42	45	55	55	55
	STIG							0	0	0	0	0	0
	Available Peak COB Transmission							75	75	75	75	75	75
	RA Purchases/(Sales)							0	0	0	0	0	0
	Total Peak Load, no RA Sales							344	337	310	210	168	177
	Total Peak Load, net RA Sales							344	337	310	210	168	177
	15% Reserve, net RA Sales							395	387	357	241	193	203
	Total Roseville Resource Capacity							386	447	447	432	457	455
	Net Capacity to Peak Load							**43**	**110**	**137**	**222**	**289**	**278**
	Net Capacity to Reserve Margin							**(9)**	**59**	**90**	**191**	**264**	**251**

Year	Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2027	Peak COB Contracts	0	0	0	0	0	0	0	0	0	0	0	0
	Western - Custom	0	0	0	0	0	0	0	0	0	0	0	0
	Geothermal	7	7	5	7	4	7	7	7	7	7	7	7
	Western BR	59	61	53	64	72	57	59	52	48	38	31	36
	Calaveras	30	30	30	30	30	30	30	30	30	18	30	30
	South Feather	20	10	14	20	20	20	20	20	20	18	18	20
	REP	160	160	160	160	157	157	157	157	157	160	160	160
	RSEC	64	64	64	64	60	60	60	60	60	60	64	64
	RPEAK	55	55	55	55	45	42	42	42	45	55	55	55
	STIG	0	0	0	0	0	0	0	0	0	0	0	0
	Available Peak COB Transmission	75	75	75	75	75	75	75	75	75	75	75	75
	RA Purchases/(Sales)	0	0	0	0	0	0	0	0	0	0	0	0
	Total Peak Load, no RA Sales	177	165	167	194	281	337	354	344	316	215	172	181
	Total Peak Load, net RA Sales	177	165	167	194	281	337	354	344	316	215	172	181
	15% Reserve, net RA Sales	203	189	192	223	324	387	407	395	363	247	198	209
	Total Roseville Resource Capacity	470	462	457	475	463	449	450	443	442	431	441	447
	Net Capacity to Peak Load	**293**	**298**	**290**	**281**	**182**	**112**	**97**	**99**	**126**	**216**	**269**	**266**
	Net Capacity to Reserve Margin	**267**	**273**	**265**	**252**	**139**	**61**	**44**	**47**	**78**	**183**	**243**	**239**

Year	Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2028	Peak COB Contracts	0	0	0	0	0	0	0	0	0	0	0	0
	Western - Custom	0	0	0	0	0	0	0	0	0	0	0	0
	Geothermal	7	7	5	5	4	8	7	7	7	7	7	7
	Western BR	40	41	48	59	62	60	59	52	48	38	31	36
	Calaveras	30	30	30	30	30	30	30	30	30	30	30	30
	South Feather	20	10	14	20	20	20	20	20	20	18	18	20
	REP	160	160	160	160	157	157	157	157	157	160	160	160
	RSEC	64	64	64	64	60	60	60	60	60	60	64	64
	RPEAK	55	55	55	55	45	42	42	42	45	55	55	55
	STIG	0	0	0	0	19	19	19	19	19	22	22	22
	Available Peak COB Transmission	75	75	75	75	75	75	75	75	75	75	75	75
	RA Purchases/(Sales)	0	0	0	0	0	0	0	0	0	0	0	0
	Total Peak Load, no RA Sales	181	168	169	197	285	341	358	346	319	218	175	185
	Total Peak Load, net RA Sales	181	168	169	197	285	341	358	346	319	218	175	185
	15% Reserve, net RA Sales	208	193	195	227	328	392	411	398	367	250	202	213
	Total Roseville Resource Capacity	451	442	451	468	472	471	469	462	461	465	462	469
	Net Capacity to Peak Load	**270**	**274**	**282**	**271**	**187**	**131**	**112**	**115**	**142**	**247**	**287**	**284**
	Net Capacity to Reserve Margin	**243**	**249**	**256**	**241**	**144**	**80**	**58**	**63**	**94**	**215**	**261**	**256**

Year	Resource	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2029	Peak COB Contracts	0	0	0	0	0	0	0	0	0	0	0	0
	Western - Custom	0	0	0	0	0	0	0	0	0	0	0	0
	Geothermal	7	7	5	7	4	5	7	7	7	7	7	7
	Western BR	40	41	48	59	62	60	59	52	48	38	31	36
	Calaveras	30	30	30	30	30	30	30	30	30	30	30	30
	South Feather	20	10	14	20	20	20	20	20	20	18	18	20
	REP	160	160	160	160	157	157	157	157	157	160	160	160
	RSEC	64	64	64	64	60	60	60	60	60	60	64	64
	RPEAK	55	55	55	55	45	42	42	42	45	55	55	55
	STIG	22	22	22	22	19	19	19	19	19	22	22	22
	Available Peak COB Transmission	75	75	75	75	75	75	75	75	75	75	75	75
	RA Purchases/(Sales)	0	0	0	0	0	0	0	0	0	0	0	0
	Total Peak Load, no RA Sales	184	171	172	200	289	345	362	349	324	223	181	191
	Total Peak Load, net RA Sales	184	171	172	200	289	345	362	349	324	223	181	191
	15% Reserve, net RA Sales	212	197	198	230	332	397	417	402	372	257	208	220
	Total Roseville Resource Capacity	473	464	473	492	472	468	469	462	461	465	462	469
	Net Capacity to Peak Load	**289**	**293**	**301**	**292**	**184**	**124**	**107**	**112**	**137**	**242**	**281**	**278**
	Net Capacity to Reserve Margin	**261**	**267**	**275**	**262**	**140**	**72**	**53**	**60**	**89**	**208**	**254**	**250**

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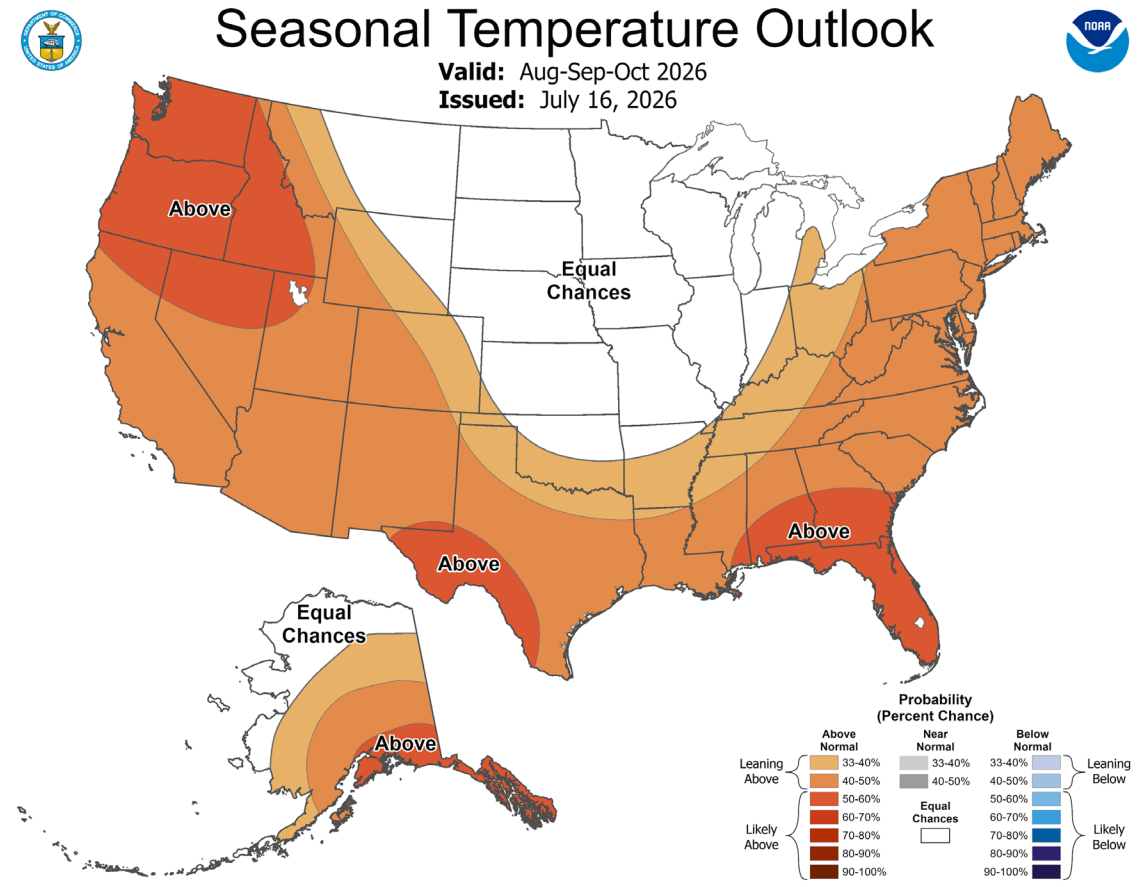
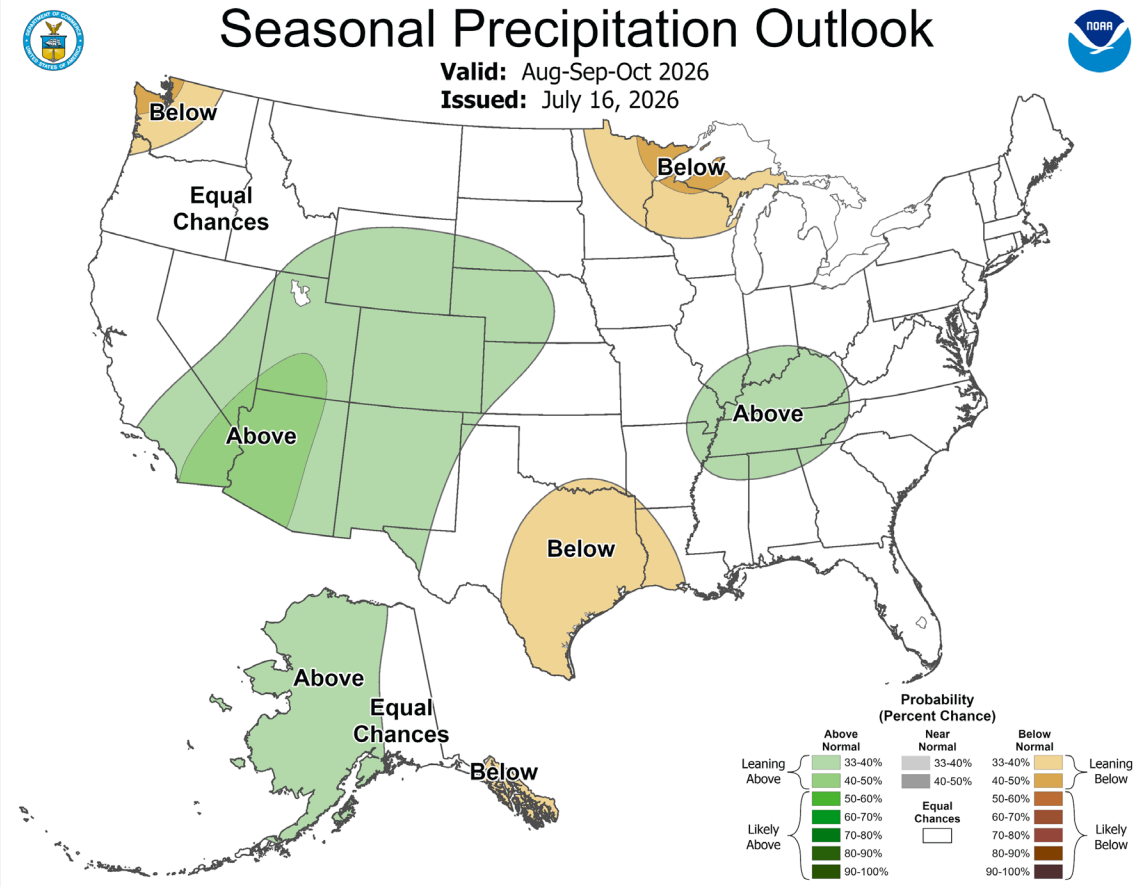
Energy Market Update

Patrick Zanardelli, Electric Business Analyst

CITY OF ROSEVILLE CALIFORNIA

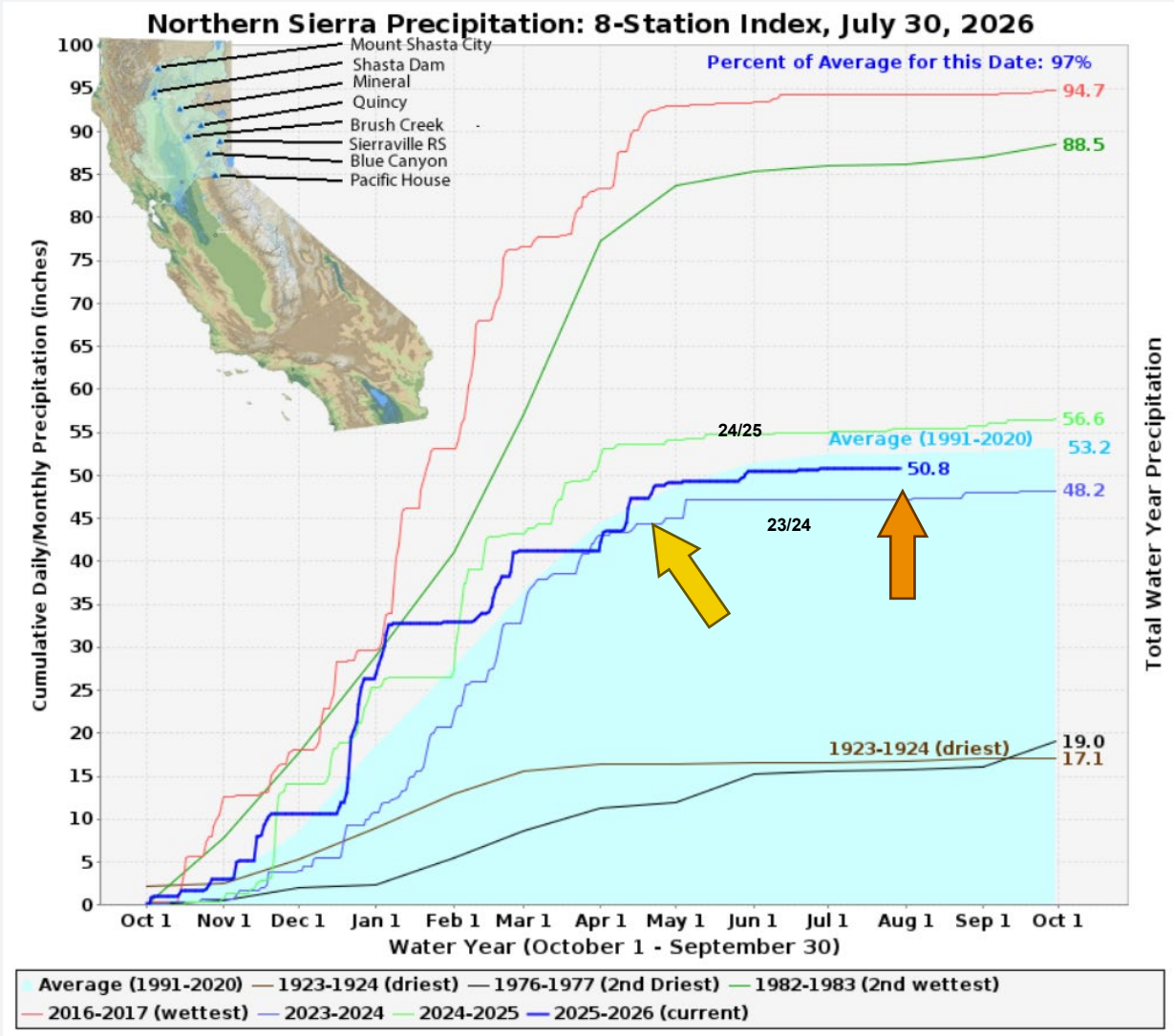
Future Weather Outlook





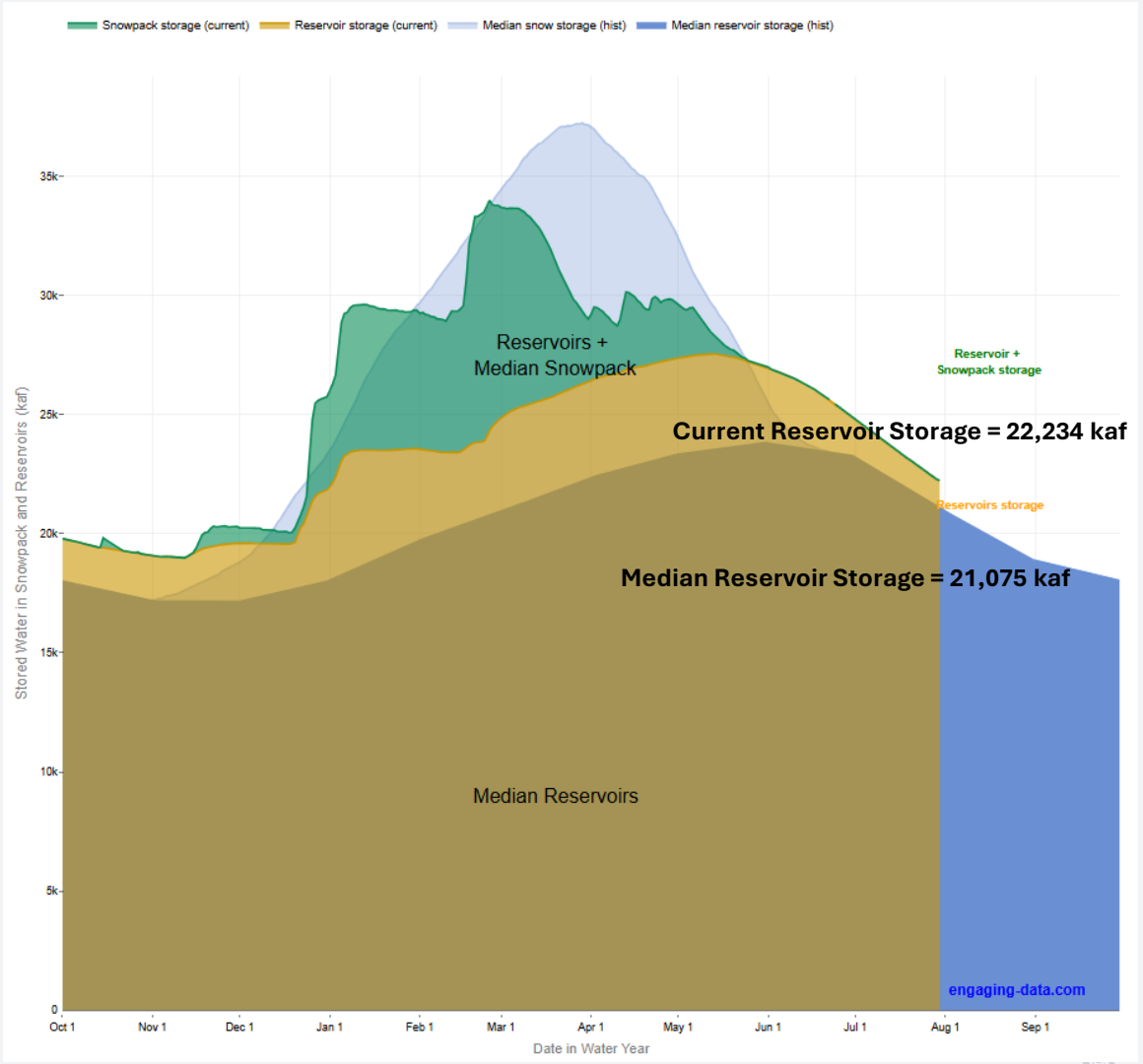
Precipitation

- Northern Sierra precipitation ending near average at 97%
- Water-year total reached 50.8 inches
- Total was above 2023–2024, but below 2024–2025

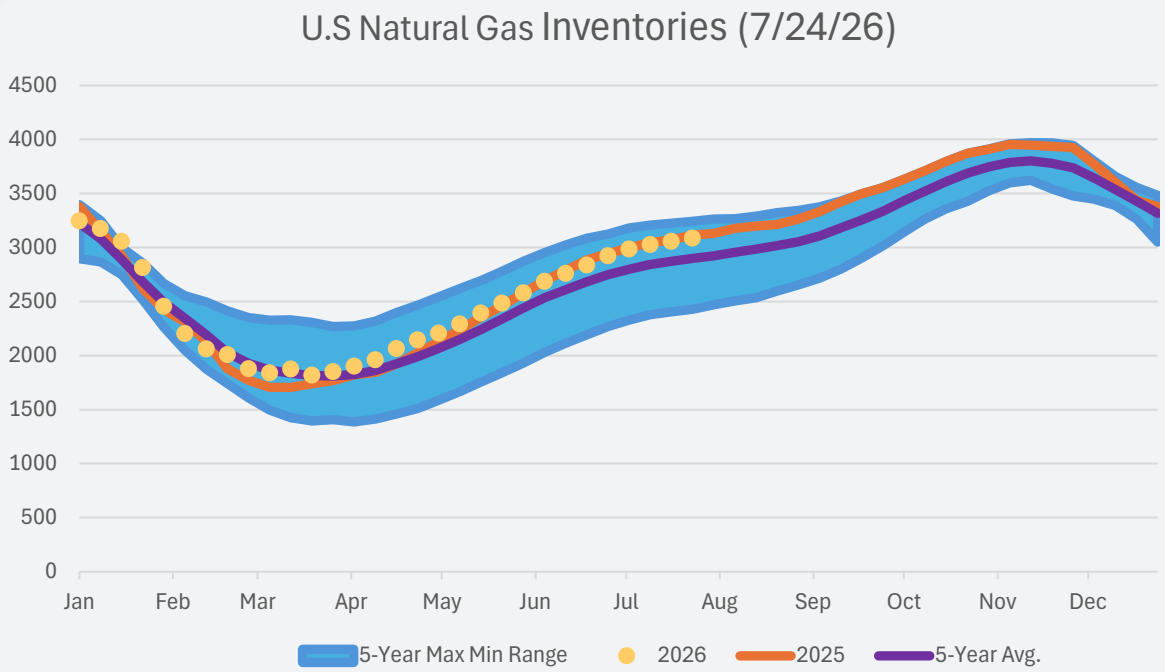


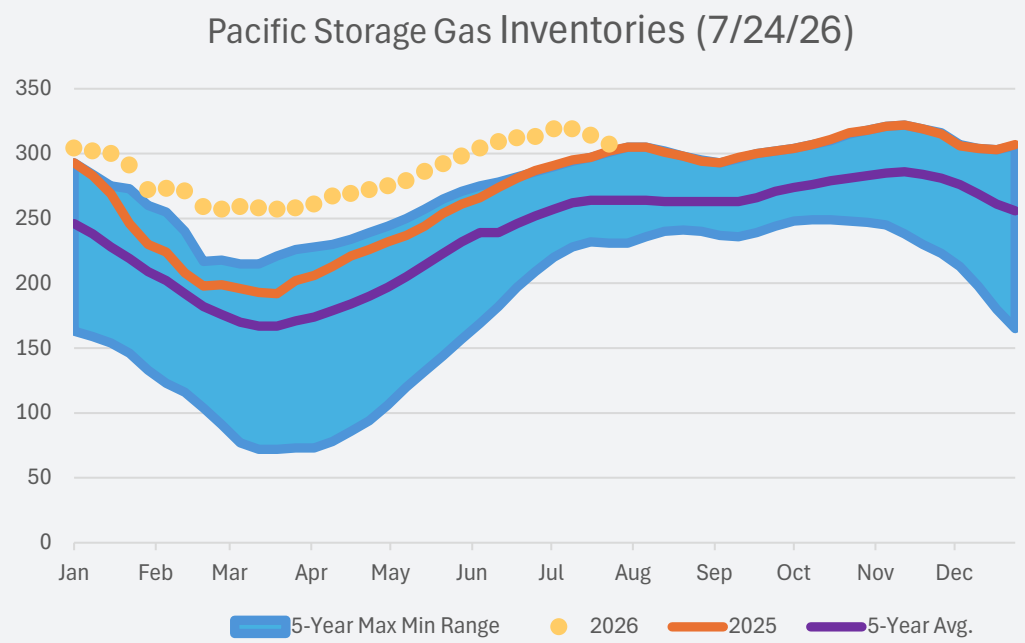
Hydro Storage

- Reservoir storage remains strong at 22,234 kaf
- Current storage is 105.5% of the historical median
- Above-median storage provides a summer buffer



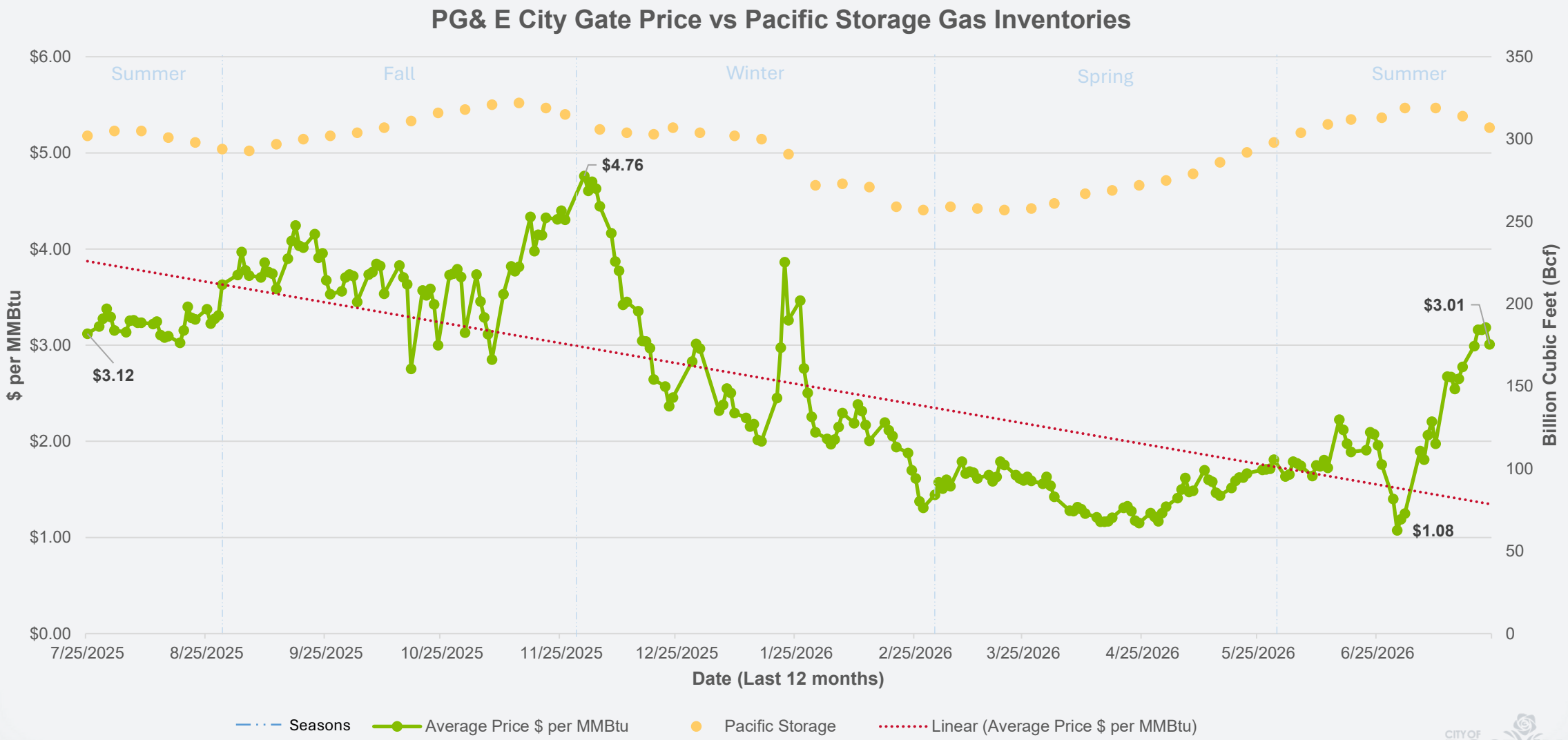
Natural Gas Storage





- Total U.S. storage: 3,084 Bcf - 6% above the five-year average
- Pacific storage: 307 Bcf - 16% above the five-year average
- Pacific storage is 5 Bcf above 2025 and 2% above the prior five-year maximum

Gas Prices


PG& E City Gate Price vs Pacific Storage Gas Inventories
$6.00
$5.00
$4.00
$3.00
$2.00
$1.00
$0.00
$ per MMBtu
350
300
250
200
150
100
50
0
Billion Cubic Feet (Bcf)
Summer
Fall
Winter
Spring
Summer
$4.76
$3.12
$3.01
$1.08
7/25/2025
8/25/2025
9/25/2025
10/25/2025
11/25/2025
12/25/2025
1/25/2026
2/25/2026
3/25/2026
4/25/2026
5/25/2026
6/25/2026
Date (Last 12 months)
Seasons
Average Price $ per MMBtu
Pacific Storage
Linear (Average Price $ per MMBtu)

Current Outlook & Key Risks

Current Outlook

We're entering late summer with strong natural gas and reservoir storage, providing a solid supply cushion heading into the remainder of the season.

Key Risks

- **Faster storage drawdown:** Prolonged heat could increase gas-fired generation and reduce the current storage cushion.

- **Declining hydro flexibility:** Reservoirs remain healthy, but the normal summer drawdown may limit hydro availability later in the season.

- **Short-term price volatility:** The recent rebound from $1.08 to $3.01 shows that prices can still move quickly despite strong storage.

Roseville Electric Energy Policy Update

Renewable Energy Certificate Transactions

Glenn Hoffman, Acting Risk Manager

Why We're Updating This

Reason for update

- REC deals are becoming more common
- Existing credit policy already applies
- Update clarifies how REC credit risk is reviewed
- Goal: consistency, not new authority

Renewable Energy Credit (REC)

Represents the renewable attribute of one MWh of eligible renewable generation.

Clarifies existing policy. Does not expand authority.

What Risk Looks At

REC review is based on the full transaction profile, not just payment timing.

1 Counterparty strength

Financial review and creditworthiness.

2 Contract tenor

Length of forward obligation.

3 Pricing structure

Fixed, index-based, index-plus, or variable.

4 Settlement terms

Delivery/payment timing and protections.

5 Expected exposure

Unpaid, uninvoiced, MTM, and replacement exposure.

6 Replacement-cost risk

Market liquidity and cost to replace if seller fails.

Paying after delivery helps reduce payment risk — it does not eliminate future performance or replacement-cost risk.

What Is Changing

Adds REC-specific credit language	Makes the REC review framework explicit.
Adds pricing structure as a review factor	Recognizes fixed, index, index-plus, and variable pricing.
Allows $0 unsecured limit when financials are unavailable	Allows secured or protected structures without granting open credit.
Documents credit decisions	Supports clear and consistent credit files.

Policy effect: clearer review, better documentation, no added risk.

What Is Not Changing

NO new trading authority

NO change to approval limits

NO bypass of credit review

NO automatic collateral requirement

No increase in risk

The update clarifies how existing credit tools apply to REC deals.

How It Works in Practice

Shorter-term / lower exposure

- Approved working limits
- Standard contract protections
- Monitoring and restrictions

Longer-term / higher exposure

- Additional credit review
- Collateral, guaranty, LC, or prepay
- Other commercially reasonable support

Collateral is not automatic — it depends on the transaction and exposure.

Key Takeaway

The update does not expand authority or increase risk.

It clarifies how existing credit controls apply to REC transactions.

Consistent decisions

Same core factors considered across REC deals

Preserves flexibility

No one-size-fits-all collateral rule

Better documentation

Clear record of credit determinations

Questions?

Roseville Electric Energy Policy Update: REC Transactions

CITY OF ROSEVILLE CALIFORNIA

Energy Credit Risk Policy

~~5~~XX/~~21~~XX/~~2025~~2026

Table of Contents

ENERGY CREDIT RISK POLICY

~~5~~XX/~~21~~XX/~~2025~~2026

1. Policy Overview

Managing credit exposure is an important component in overall risk management. Credit risk is defined as the potential loss the City of Roseville ("City") could incur as a result of non-payment or non-performance by a counterparty. The amount of credit risk in a trading portfolio can be measured, monitored and mitigated in order to maintain the level of credit risk authorized by the City. Forms of credit risk are:

- ***Payment Risk*** which is the cost exposure to the value of accounts receivable and accrued receivables (delivered but not invoiced).

- ***Performance (mark to market) Risk*** which is the cost exposure of replacing the contractual obligations of open contracts in the relevant marketplace.

As part of risk management, credit risk management is a control and oversight activity. It must remain independent from the trading activity but work closely with the business to ensure that credit policies are implemented and maintained.

The objective of credit risk management is to preserve the capital and liquidity of the City by establishing procedures that define the determinants for granting open lines of credit and managing counterparty credit exposure. The intent of this policy is to reduce counterparty default risk to its lowest acceptable level.

2. Extension of Credit to Counterparties

The credit analysis of each counterparty is to be performed by the Credit Department of the Power Management Services Agent ("Agent") and submitted with recommendations regarding credit limits to the Electric Utility Financial Administrator or designee for approval. The point of contact for the City is the Electric Utility Financial Administrator or designee.

The City will manage its counterparty credit risk primarily through diversification, execution with qualified counterparties, the use of standardized trading contracts (EEI, WSPP, NAESB, ISDA), credit and collateral agreements and strict adherence to credit limits. The City will attempt to diversify its portfolio by entering into transactions with numerous counterparties. The Agent will maintain an approved counterparty list.

In negotiating agreements and ongoing contractual terms with counterparties, the Agent as well as the City shall strive to include prudent industry practice credit provisions.

These shall include, but are not limited to, explicit netting agreements and provisions granting the Agent the right to call for and receive collateral in the event the counterparty exceeds its approved collateral threshold or suffers a material adverse credit event.

The creditworthiness of each counterparty must be determined through a fundamental analysis of the counterparty's financial and operational condition.

The credit analysis incorporates two basic components, a business profile (qualitative analysis) and a financial profile (quantitative analysis). A credit limit and a term limit are established as a result of this due diligence process.

3. Credit Analysis – Determination of the Unsecured Credit Limit

Counterparties may qualify for the extension of an unsecured credit limit from the City by providing audited financial statements that indicate sufficient financial strength to allow for the extension of an unsecured credit limit and at least one of the following:

i. An issuer rating or a long term unsecured debt rating of at least BB- from Standard & Poor's or Ba3 from Moody's for transactions up to one week forward.

ii. An issuer rating or a long term unsecured debt rating of at least BBB- from Standard & Poor's or Baa3 from Moody's for transactions beyond one week forward.

iii. In the event that the counterparty does not have a debt rating, the Agent may use their Proprietary Credit Scoring Model to determine an internal rating. An internal rating of at least BB- is required for transactions up to one week forward. An internal rating of at least BBB- is required for transactions beyond one week forward.

iv. At any time, and regardless of credit ratings, the City Council may authorize transactions with counterparties determined to be beneficial to the City.

Trade and banking references that indicate the company has sufficient history and adequate credit facilities to allow for the issuance of an unsecured credit limit.

The Agent will use the unsecured ratings of Standard & Poor's or Moody's when available. For unrated counterparties two internal credit scoring models should be utilized.

- One credit scoring model is designed for public counterparties. This includes generation and transmission cooperatives, distribution cooperatives, municipalities, government agencies, public power agencies, and other not-for-profit counterparties.

- The second credit scoring model is used for assigning a rating to non-public counterparties or for-profit counterparties.

The purpose of two separate credit scoring models is to provide recognition of two distinct

business models and the drivers that meaningfully distinguish and measure the financial and credit risks of each.

Once a counterparty has been determined to be creditworthy, an unsecured credit limit may be recommended by the Agent's credit risk management department up to 5% of tangible net worth, or, in the case of governmental agencies or non-profit wholesale power suppliers, up to 10% of their average free cash flow for the prior two years. In order to help the City make its unsecured credit limit decision, the Agent will provide both the unsecured credit limit recommendation, and an Unconstrained Estimate of Creditworthiness (UEW) (5% of tangible net worth or, if requested by the City, 10% of average free cash flow) when the recommendation is made.

4. Approval Authority

The City has the discretion to set a counterparty's unsecured credit limit based on the following guidelines. The maximum unsecured credit limit is limited by two factors:

- The lesser of the counterparties S&P and Moody's ratings, or if unrated, their score under the Agent's proprietary credit scoring model, used to define a fixed maximum unsecured credit limit.

- This same criterion is used to define a percentage of their UEW:

The table below defines how the unsecured credit limit may be set.

Credit Strength			**Maximum Unsecured Credit Limit**	
Rated Lesser of Both Ratings		**Unrated**	(Lesser of the Two Limits, Minimum of $0)	
S&P	*Moodys*	*Agent Internal Rating*	*Fixed Value*	*% of UEW*
>= A-	>= A3	>= A-	$25,000,000	65%
BBB+	Baa1	BBB+	$15,000,000	50%
BBB	Baa2	BBB	$10,000,000	50%
BBB-	Baa3	BBB-	$2,500,000	35%
<BBB-	<Baa3	<BBB-	$0	35%

Levels of authorization at City's discretion:

i. **City's** Electric Utility Financial Administrator or designee**:** Up to $10,000,000.
ii. **City's Electric Utility Director:** Approve up to the amount in the above table.
iii. **City Council:** Amounts exceeding the above table.

The City Council may approve collateral threshold tables within master agreements in excess of the amounts in the above table. This action establishes a maximum unsecured credit limit for the counterparty based on their credit rating.

Once an unsecured credit limit has been established by either the City's Electric Utility Director or the City Council, the City's Electric Utility Financial Administrator or designee may issue a working credit limit at any level up to the amount established.

5. Credit Trading Restriction Approval Authority

The City's Assistant Electric Utility Director of Finance and Customer Care will have the authority to approve Credit Trading Restrictions. The City's approvals will take into consideration Credit Trading Restriction recommendations provided by the Agent's Credit Department. The Electric Utility Director designee or Assistant Electric Utility Director of Finance and Customer Care will have the authority to make such approved changes to the counterparty Credit Trading Restrictions via the Agent's Credit Portal. The Agent's recommended trading restrictions will be distributed and posted to the Credit Portal.

6. ~~6.~~ Credit Enhancements

Counterparties that do not qualify for an extension of an unsecured credit limit must post at least one of the following types of security prior to the execution of a transaction:

6.1 **Corporate Guarantee:** Counterparties may provide a guarantee from a third party that meets the creditworthiness requirements noted above. If a counterparty provides such a guarantee, the amount of any unsecured credit limit will be determined through an analysis of the financial statements of the guarantor. All guarantees must be in a format that is acceptable to the City.

6.2 **Letter of Credit:** Counterparties may provide an irrevocable letter of credit for an amount sufficient to cover the related transactions. Letters of credit must be issued by a U.S. bank or a financial institution or a U.S. branch of a foreign bank with a rating of at least an A from Standard & Poor's or A2 from Moody's.

6.3 **Prepayment (margin):** Counterparties may provide a prepayment or cash margin deposit that is sufficient to cover the related transactions.

~~7.~~

7. Counterparty Credit

Establishing limits and monitoring credit information should be done separately from energy transaction activities to ensure appropriate segregation of duties within the City.

7.1 Credit Limit: Defined as the sum of:

i. The approved amount of the unsecured credit limit.
ii. The value of any approved guarantees held, providing additional security or assurance beyond the unsecured limit.
iii. The value of any letter of credit or cash collateral held.
iv. The approved value of any other type of collateral.

7.2 Available Credit: The dollar amount remaining open on the working credit limit approved for a counterparty.

~~7.2~~7.3 Exposure: The total amount of a counterparty's credit exposure defined as the sum of:

i. The dollar value of all amounts invoiced and unpaid.
ii. The dollar amount of all deliveries that have not yet been invoiced.
iii. The marked to market value of all forward trades.
iv. Less all offsetting amounts that are supported by legally binding netting agreements or Edison Electric Institute (EEI) agreements.

7.4 Renewable Energy Certificate (REC) Transactions

This section clarifies how the existing credit risk framework applies to Renewable Energy Credit ("REC") transactions. REC transactions shall be evaluated based on counterparty creditworthiness, contract tenor, pricing structure, settlement structure, and resulting credit exposure. Credit exposure may include invoiced and unpaid amounts, uninvoiced deliveries, and mark-to-market or replacement-cost exposure associated with forward obligations, net of enforceable netting rights.

REC transactions may only be executed with counterparties that have satisfied applicable credit review, counterparty approval, credit limit, and, if applicable, credit support requirements under this Policy. Credit exposure shall be managed through approved credit limits, credit restrictions, contractual protections, settlement/payment terms, collateral or other credit enhancements where appropriate, and ongoing monitoring.

If sufficient financial information is not available to support an unsecured credit determination, the counterparty may be assigned a zero-dollar unsecured credit limit. REC transactions with such counterparties may proceed only if supported by acceptable credit enhancements, delivery-before-payment terms, secured structures, or other contractual protections

approved under this Policy, including City Council approval where required. Any such determination shall be documented in the applicable credit file.

Shorter-term REC transactions may generally be managed through approved working credit limits and standard contractual protections when expected exposure is limited and adequately supported. Longer-term REC transactions, or transactions with greater forward or replacement-cost exposure, may require additional credit review, collateral, guarantees, letters of credit, prepayment, or other commercially reasonable credit support based on tenor, exposure, pricing structure, market conditions, liquidity, and counterparty creditworthiness.

Any transaction-specific credit determinations, including interim working limits, secured structures, credit enhancement alternatives, or exceptions to standard requirements, shall be documented in accordance with the Credit File Documentation, Credit Controls, and Trading Restrictions requirements of this Policy.

8. Counterparty Credit Reviews

New counterparties are to be evaluated for creditworthiness by the Agent's credit risk management department prior to any transactions. Unsecured credit limits up to $10,000,000 may be recommended by the Executive Director of Credit (or similar position title) of the Agent.

Existing counterparties are to be formally reviewed and documented by the Agent's credit risk management department on a yearly basis at a minimum. More frequent reviews may be necessary, at the discretion of the Agent's credit risk management department or at the request of the City.

Counterparties sharing a common parent or affiliation will be assigned to a group. A credit limit will be assigned to the group with individual credit limits being assigned to each counterparty within the group. The aggregate credit limit of these counterparties will not exceed the established group limit.

9. Credit File Documentation and Retention

Credit analysis, approvals and denials must be documented in writing and all counterparty information shall be contained in formal credit files that are maintained at the offices of the Agent. These credit files are expected to contain audited financial statements and a credit review analysis report with a credit limit recommendation signed by the Executive Director of Credit (or similar position title) of the Agent. These files should also contain as much of the following as possible:

- At least the two most recent years of audited financial statement information, if the counterparty does not have publicly available financial information. (i.e. counterparties that do not file with the SEC).

- Rating information as published by Standard & Poor's or Moody's.

- General industry information, if applicable.

10. Credit Controls and Trading Restrictions

An approved list of trading counterparties noting working credit limits, available credit, and tenor restrictions is distributed each business day to all traders either via e-mail or through the Agent's website. Under no circumstances should a trade be executed with a counterparty that does not appear on the approved list of trading counterparties. No credit sleeving transactions shall be executed.

The Executive Director of Credit (or similar position title) of the Agent is to provide general oversight over the credit function, reporting any credit issues to the Electric Utility Financial Administrator or designee who will ensure dissemination to the Risk Management Committee and the Risk Oversight Committee of the City.

Entering unsecured transactions with a counterparty that will cause the total credit exposure to that counterparty to exceed the available credit will be allowed only if new working credit limits are set in writing. No new transactions are to be entered into with counterparties that have exceeded their working credit limits except as they may mitigate (offset) existing exposure, contingent upon a netting agreement. Any new unsecured, unauthorized transactions entered into with a counterparty that has credit exposure in excess of its assigned working credit limit will subject the trader to disciplinary action.

All violations of this policy will be reported to the Risk Management Committee of the Agent. The Agent will also report such violations to the City Attorney and the City's Electric Utility Financial Administrator or designee, who will be responsible for dissemination to the City's Risk Management Committee in a timely manner. If warranted, the City's Risk Management Committee could escalate the issue to the City's Risk Oversight Committee to develop remediation procedures and/or initiate disciplinary action.

11. Receivables/Payables Management

Unless otherwise instructed by the City, the Agent will consider all receivables/payables to be settled on the payment due date of the executed transaction.

As is generally accepted accounting practice, if necessary, a reserve will be established to allow for potential bad debts. This reserve will be determined jointly by the Executive Director of Credit (or similar position title) at Agent and the Finance Director of the City.

12. Collateral Management

The Agent is authorized to give credit information on the City to counterparties to establish credit approvals. The Agent will coordinate with the Finance Department of the City regarding the issuance or receipt of collateral to support a transaction. Any collateral that is received by the Agent for the City will be held by the City.

13. Related Policies

i. Supporting policies and procedures are required as outlined below:

Energy Risk Management Policy
Energy Trading Authority Policy
Energy Hedge Policy
Resolution 17-368 retaining APM for power management services
Resolution 16-161 declaring APM as agent for the purposes of risk policies

14. ~~14.~~ Amendments to the Credit Risk Policy of the City

From time to time, it may be necessary to make changes to the Electric Energy Credit Risk Policy of the City. Amendments to this policy will be made by City Council action.

15. ~~15.~~ Version History

Version	Date	Change Tracking
0	11/06/2024	Initial version
1	05/21/2025	Updates – Resolution No. 25-149
1.1	XX/XX/2026	Added REC language

CITY OF ROSEVILLE CALIFORNIA Electric Utility

Energy Hedge Policy

5/21/2025

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ENERGY HEDGE POLICY

5/21/2025

1. Policy Overview

The City of Roseville ("City") Hedge Policy outlines the energy hedging policy (natural gas and electricity) that will guide disciplined hedging of forward energy resources. The hedge policy is designed to reduce volumetric energy rate volatility and to maintain rates within reasonable tolerances. The primary purpose of this policy is to identify specific guidelines and criteria for procuring projected energy needs. These procurement criteria are defined for months, quarters, and calendar years as appropriate in the different parts of the policy.

The policy largely employs a price averaging strategy of declining percentage of energy supply positions held over forward time periods. This strategy protects the City from potential adverse impacts that could result from either significant energy price increases or decreases. The strategy also maintains some elements of procurement to remain flexible. For example, during times of extremely attractive market conditions presenting favorable opportunities for procurement, this policy allows for increasing the amount of forward energy hedged above the stated ranges with the concurrence of the City's Risk Oversight Committee (ROC). A key component of the policy is a monthly report for the Risk Management Committee and a quarterly report to the City Council and ROC, which is outlined herein.

2. Hedging Policy Criteria

2.1 Rolling Monthly Hedge Ranges

One criterion of this policy is to have energy procured within defined volumetric ranges during the following rolling monthly and quarterly timeframes. These ranges identify the percentage of City's projected total energy needs that will be procured with fixed price energy over a given period and tenure. For use within this policy, energy needs are considered hedged or procured to the extent that the projected need is met by:

i. Authorized Transactions, as defined in the Roseville Energy Trading Authority Policy

or

Other transactions as Authorized by the City Council, using the process outlined in the Energy Trading Authority Policy. Options with out of the money strike prices may be used to hedge forward volumes, provided they do not account for more than 15% of the projected energy needs in any given month, and they are not more than 50% out of the money at the time of the transaction.

2.2 The City will hedge projected energy needs based on the following criteria:

Lead Time	**Months 1 to 12**	**Quarters 5 to 8**	**Quarters 9 to 12**
Hedging Frequency	Monthly	Quarterly	Quarterly
Range (%)	90-110%	70-100%	45-80%

i. *Lead Time:* This is the amount of time from the current period (including the current period). It may be defined in months or quarters.

ii. *Hedging Frequency*: This is the frequency that the hedging period changes. This is to prevent a situation where Month 36 (the last month of Quarter 12) would have to be hedged at a time when monthly purchases are very illiquid. It also defines the purchases of hedges, indicating that a one-month hedge could be purchased for each month between Month 1 and Month 12, whereas a whole quarter hedge would be purchased for a period starting Quarter 5. In case of a conflict, monthly frequency has precedence over quarterly.

iii. *Range:* This is the lower and upper bounds of overall energy needs that will be required to be covered with fixed price energy, and/or up to 15% with call options. If the percentage of overall energy compared to the forecasted 1 in 2 load by the Finance Division for the total lead time is within the bounds, then Roseville is in compliance.

iv. *Remediation Period*: If non-compliant, the City has 45 days from the date of the violation notice to get back in compliance with the hedging policy.

Deviations that exceed the range will require approval of the ROC and/or City Council, and will be part of the regular reporting to the City Council.

Because the models being used to determine official compliance with this policy are being run by an external entity, the City's first warning of being out of compliance with this policy may occur when a report is delivered showing it is out of compliance. As such, the City will have 45 days to remedy the out of compliance situation before it is deemed a violation.

2.3 Hedge Timing and Volumetric Minimums

In meeting the overall volumetric criteria, the City will have the following minimum percentages of energy hedged no later than the lead time as identified below:

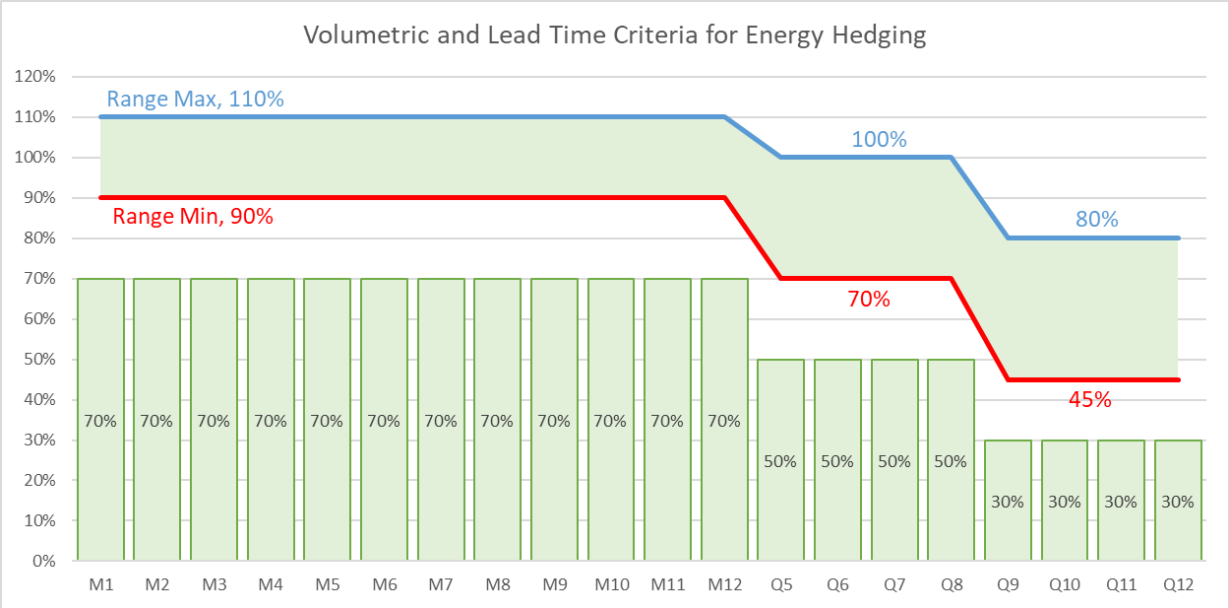
Time Frame	Months	Quarters	
Lead time	1-12	5-8	9-12
Minimum (%)	70%	50%	30%

For example, on January 1, 2025, the City will have a minimum of 70% of its projected energy needs for each of the following 12 months, January 2025 through December 2025 procured. For Quarter 5, including January, February, and March 2026, a minimum of 50% of the total projected energy shall be procured, whereas minimum thresholds for individual months are not required. This minimum amount can be hedged well before that date based on the ranges in the prior section. As with the Volumetric Lead Time Criteria, a time frame in months takes precedence over a time in quarters.

The City will maintain hedges at the minimum volumetric level for the specified lead times. Any deviation from the monthly minimum volume for the specified lead time will

require ROC and/or City Council approval and will be reported to the City Council. It would still be considered compliant if one month in Month 1 through Month 12 was between 70% and 90%, on condition that the average of Month 1 through Month 12 was between 90% and 110%.

The following chart illustrates the volumetric and lead time criteria for energy hedging.



3. Natural Gas Hedging

Natural gas hedging will be a complementary hedging activity for the City's natural gas fired generation (owned or contracted) or if it enters a transaction that uses a natural gas index price to derive its electricity cost, such as a heat rate product. Such gas related generation or purchase transactions would not be considered energy hedges until the projected gas volumes are procured. The monthly hedge criteria are measured based on total energy exposure for native load (total projected electricity needed for native load minus energy already hedged). This is the criteria required to be considered fixed price energy. There are five mechanisms for hedging gas price risk:

i. Call options.
ii. Bilateral financial hedging using ISDA Master Agreements.
iii. Fixed price physical gas procurement using ISDA Agreements.
iv. Futures contracts based on fixed prices (i.e. NYMEX or ICE).
v. Pre-pay gas contracts that act as a daily hedge.

To allow flexibility in overall energy hedging decisions (e.g. economically hedging additional needs via gas contracts versus power purchases), specific sub-targets for natural gas hedging are not set within this policy.

4. Risk Measurement and Compliance Reporting

Risk measurement and policy compliance within the volumetric and lead time criteria will be demonstrated on a regular basis in the Power Management Service Agent's ("Agent's") monthly portfolio model risk report. This report will generally cover three years of projections with seven-year runs performed at least once per year or when market conditions indicate the potential to cost-effectively hedge beyond three years out.

5. Responsibility

It shall be the responsibility of the City Council, ROC, City Manager, and Risk Management Committee to assure compliance with this policy. Implementation of this policy shall be in accordance with the Related Polices, as referenced below.

6. Related Policies

i. Supporting policies and procedures are required as outlined below:

Energy Credit Risk Policy
Energy Risk Management Policy
Energy Trading Authority Policy
Resolution 17-368 retaining APM for power management services
Resolution 16-161 declaring APM as agent for the purposes of risk policies

7. Version History

Version	Date	Change Tracking
0	11/06/2024	Initial version
1	05/21/2025	Updates – Resolution No. 25-149

CITY OF ROSEVILLE CALIFORNIA
Electric Utility

Energy Risk Management Policy

5/21/2025

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ENERGY RISK MANAGEMENT POLICY

5/21/2025

1. Policy Overview

The purpose of this document is to formalize the policies of the City of Roseville (City) regarding managing the risks inherent to operating its electric utility. Accordingly, this policy will set forth the City's:

- Risk management objectives,
- Risk governance structure and responsibilities,
- Scope of business activities governed by this policy,
- and the list of associated energy risk management policy guidelines and policy documents.

The City intends that Risk Management will support the advancement of its strategic business plan and will properly manage its business and financial risks through:

- Prudent oversight,
- Appropriate mitigation of risks consistent with the City's risk tolerance, and
- Suitable internal controls and procedures.

Managing the energy risks of the City's business entails the coordination of resources and activities among multiple business units within the City.

2. Risk Management Objectives

The City is committed to providing competitively priced reliable power to its customers. Managing the City's risk is consistent with that mission, and serves the following objectives:

- Maintain risk within desired tolerances for a defined period in the future,
- Participate in the energy markets primarily for hedging purposes, while still allowing the City to take advantage of market opportunities within strict policy limits,
- Mitigate the effect of price volatility to its customers,
- Maintain stable cash flows,
- Enhance the value of the City's assets/resources,
- Leverage opportunities to increase the value of the City to its customers, and
- Effectively communicate the City's activities to manage risk on behalf of its customers and to develop a risk management culture.

3. Risk Governance Structure and Responsibilities

Risk governance will follow a top-down approach whereby the City Council identifies the City's risk management objectives with oversight carried out by the Risk Oversight Committee (ROC). Supporting controls, policies, and procedures will be implemented and aligned throughout the risk governance structure, with distinct roles and responsibilities that result in an enhanced risk control environment. Governance and controls include the organizational structure, policies, and procedures that support the City's business models, risk tolerances, electric utility objectives, and segregate responsibilities appropriately.

Energy Risk Management Policy		
• Umbrella policy that sets Energy Risk Management objectives and culture • Creates expectations of disciplined and controlled processes		
Energy Credit Risk Policy	**Energy Trading Authority Policy**	**Energy Hedge Policy**
• Mitigate/avoid credit losses • Standards for granting credit • Credit controls	• Governing body required approvals • Delegation of trading authority • Authorized trading instruments • Required controls	• Energy hedge ranges and timeframes • Hedging parameters for other power related activities: capacity, environmental, congestion, etc.

3.1 City Council – Risk Management Responsibilities and Duties

- Have a basic understanding of utility risk management.
- Through approving the City's energy risk management policies, establish the City's objectives with regard to risk management. Those objectives should be consistent with the Council's risk tolerance, time horizon, and benchmarking goals.
- Approve no less than every two years a resolution affirming or amending the City's utility risk management policies. Amendments should be reflective of changes in the City's electric utility operating environment or changes in Council's goals and objectives for risk management.
- Through the Energy Trading Authority Policy, establish the City Manager's authority limits to conduct market transactions.
- Through the Energy Trading Authority Policy, may authorize an agent to manage portfolio risks in real time, for up to two months, according to the City's risk management objectives.
- Through the Energy Trading Authority Policy, approve participation in specific commodity markets and derivative instruments.
- Through the Energy Credit Risk Policy, establish the process by which counterparty credit limits are set, and how those limits are monitored.
- Through approval of Master Agreements with counterparties, establish credit limits and terms with individual counterparties.
- Through the Energy Hedge Policy, establish requirements for hedging utility risk, and the financial boundaries within which the risk management program must operate.
- Receive regular reports from the Risk Oversight Committee as to the compliance status of the City's risk management policies, and any suggestions for

improvement in policies or procedures.
- From time to time, direct staff to engage an independent audit (internal and/or external) of risk control processes and procedures.
- Approves any activity not otherwise delegated in this or related policy documents (Part 5).

3.2 Risk Oversight Committee (ROC) – Responsibilities and Duties

The ROC is established by the City Council as a forum for discussion of the City's risk and financial health prior to City Council discussions or approvals. The ROC functions as an additional oversight in the City risk governance, allowing the review and recommendation of items for City Council approval. The ROC is chaired by the City's Chief Financial Officer and membership includes nine voting members:

i. Two City Council Members
ii. Two Roseville Public Utilities Commission Members
iii. The City Manager
iv. The Assistant City Manager
v. The Chief Financial Officer
vi. The City Attorney
vii. The Electric Utility Director

Other non-voting attendees may attend the ROC.

3.2.1 The responsibilities and duties of the ROC include:

- Oversee the City's energy risk management activities on behalf of the City Council.
- Establish scope and frequency for management reporting to the Council.
- Regularly review reports detailing risk exposure and compliance with risk management policies and procedures from the City's internal risk management group and the Power Management Services Agent (energy management company acting on Roseville's behalf).
- Discuss the City's major financial risk exposures and the steps leadership has taken to monitor and control such exposures.
- Recommend to the Council energy risk management policy changes.
- Review and recommend any new commodity products, locations, or markets.
- Approve management staff to serve as members of an internal Risk Management Committee (RMC).
- Review Risk Management Policy violations referred to it by the RMC or the City Attorney to develop remediation procedures and/or initiate disciplinary action.
- Review compliance violations with NERC, WECC, and other regulatory agencies on a regular basis.

ROC meetings are covered by the Brown Act, and subject to the Brown Act rules.

3.3 *City Manager – Risk Management Responsibilities and Duties:*

- Recommend management staff to serve as members of an internal Risk Management Committee.

- Has authority to transact within the limits set by the City Council in the City of Roseville Energy Trading Authority Policy.
- Approve proper organization, separation, or consolidation of functional activities.
- Approve the level at which authority to conduct market transactions reside (from City Manager down to transaction execution personnel).
- Assure prudent administrative procedures are established for:
    - trade, transactions, and executions,
    - contract controls,
    - credit controls,
    - trading controls,
    - portfolio risk measurement,
    - settlement controls,
    - regulatory and environmental compliance, and
    - other risk management activities.

3.4 Internal Risk Management Committee (RMC) – Responsibilities and Duties

The RMC is established by the City Manager as a forum for discussion of the City's risk at the staff level; this includes implementation and monitoring of compliance with the City's risk policies. The RMC executes its risk management responsibilities through a "watch dog" mechanism. While the RMC generally has no authority to act within its structure, it is required to inform appropriate functional authorities (e.g. Electric Utility Director, and/or City Manager) regarding policy and procedure exceptions. Membership shall be comprised of the following individuals:

i. One delegate from the Finance Department
ii. One delegate from the City Attorney's office
iii. The Electric Utility Director
iv. The Electric Utility Chief Operating Officer
v. Two Assistant Electric Utility Directors

The Electric Utility Financial Administrator or designee shall participate as a non-voting member of the meetings and serve as RMC Chairperson. Non-voting participants with various segregated risk management responsibilities shall participate in the meetings as determined by the committee members.

3.4.1 The responsibilities of the RMC include:

- Monitor risk management objectives, risk tolerances guidelines, and authority limits employed throughout the electric utility.
- Review reports by the internal risk management function and independent risk management function on the City's compliance with its energy risk management policies.
- Recommend to the City Manager the proper organizational structure, separation or consolidation of functional risk management activities.
- Review proposed risk management strategies for strategic fit, risk exposure monitoring, and reporting and control requirements. The RMC monitors approved strategies for consistency with the City's approved business interests,

risk management objectives, approved risk tolerance guidelines, and compliance with the energy risk management policies.

- Periodically review the City's risk management program (a detailed review at least once every two years) considering changes in business practices, improved processes, the City's philosophy and strategy, or market changes; and recommend changes to ensure continued compliance with its established guidelines.
- Hold formal RMC meetings at least quarterly. Standing agenda items should include, but not be limited to, current market strategy, review of current price exposure position (per the Portfolio Model), review current exposure to transactions, control requirements enhancements, review of counterparty credit exposure, and trading authority violations.
- As necessary, escalate policy violations to the ROC for further review.
- Review the infrastructure supporting risk management and ensure that it meets the requirements for risk oversight and compliance.

3.5 Internal Electric Utility Financial Administrator or designee – *Responsibilities and Duties*

The Electric Utility Financial Administrator or designee, is organizationally independent of functions whose activities initiate or directly participate in the commercial wholesale energy trading. Functional independence will be achieved by utilizing Agent and City staff deliverables through the RMC, specifically, the deal capture system, independent scheduling and dispatch, and the monthly portfolio plan.

Business units or support functions will be required to provide this function with reports or information required for risk assessment and analysis on a regular or periodic basis. The Electric Utility Financial Administrator or designee may delegate responsibilities below when these delegations maintain organizational independence. The Electric Utility Financial Administrator or designee oversees the Roseville internal risk management functions. The responsibilities of the Electric Utility Financial Administrator or designee include:

- Organize and conduct the RMC and ROC meetings.
- Ensure appropriate individuals are engaged in risk management discussions.
- Review the administration of risk management processes and procedures.
- Review, at least annually, the City's Risk Policies to ensure strategies, trading activity, risk tolerances and proposed changes are aligned.
- Engage the RMC and/or ROC in discussions regarding events or developments that could expose the City to potential losses.
- Develop, recommend, and administer risk management processes and procedures.
- Provide input on tools to assist in risk management.
- Review risk management activities, risk controls, and recommend modifications of controls to meet changing business needs.
- Review adequacy and accuracy of reports and report any deficiencies to the RMC. Recommend actions to address deficiencies.
- Assess risks to the City in aggregate, by business unit, and by material business activities.

- Perform periodic internal audits of risk control processes and procedures to ensure that the City complies with its energy risk management policies.
- Report any violation of the City's risk policies.
- Review and approve changes to the risk management procedures, as appropriate, except those that require higher authority (Ex. City Manager) approval.
- Report to the RMC, at a minimum, but not limited to:
    - Portfolio Model risk measures
    - Policy and procedural violations
    - Credit and contract risk exposures
    - Other key performance indicators that support effective energy risk management.
- Report to the RMC and ROC on the City's compliance with its energy risk management policies and risk management in accordance with the risk policies.
- Review and evaluate proposed activities and transactions to be executed by the City and ensure adequate analysis (risk-reward) has been performed with proper assessment and management of any such risk consistent with risk management objectives and Council approved risk tolerance guidelines, and compliance with risk management policies, including the financial, legal, credit, and operational impact.
- Maintain the City Risk Policies, ensuring the Risk Policies are current to the business and recommend needed changes to the RMC and ROC.

3.6 Power Management Services Agent (Agent) – Roles and Responsibilities

The City may select an Agent to obtain selected energy risk management and transaction execution services (Otherwise these services devolve to the City). The Power Management Services Agent Middle Office reports to the Electric Utility Financial Administrator or designee. In accordance with the agreements between The City and its Agent, its Agent is authorized to and shall:

- Periodically provide the City with a controls audit report from an independent auditor.
- Perform short term load forecasting, dispatch optimization and execute energy transactions on behalf of the City in accordance with established delegations of authority and compliance requirements set forth by the Energy Trading Authority Policy. The Agent's staff responsible for submitting CAISO market transactions have been properly trained in alignment with their delegated authority and responsibilities.
- Administer counterparty contracts and manage credit in compliance with the City of Roseville Energy Credit Risk Policy.
- Provide the City with daily reports on individual transaction details, commodity positions, and counterparty credit positions for transactions executed by the Agent.
- Provide the City with periodic risk profile reports addressing the City's energy risk and compliance with its Energy Hedge Policy. Recommend hedging strategies within time horizons specified by the City for assessment.
- Capture the City's transactions in its risk management systems.
- Monitor compliance of transactions with the City of Roseville Energy Trading

Authority policy.

- Confirm transactions with the City's counterparties.
- Mark to Market forward trades for credit exposure purposes.
- Provide information to the City for the purpose of billing settlements and development of mid to long term hedging strategies.
- Prepare a monthly report to the City's Electric Utility Financial Administrator or designee detailing compliance with the City's Risk Policies, suitable for delivery to the RMC and ROC.
- Prepare a monthly policy violations report for the City's Electric Utility Financial Administrator or designee and City Attorney.

4. Scope of Business Activities Governed by this Policy

This policy is designed to be broad enough in scope to cover all risks inherent in operating a City owned electric utility. Much of the focus is on power supply cost and retail revenue risk; however, that focus is not to the exclusion of other risks that may materially affect City operations and its ability to provide competitively priced reliable power to its customers.

Roseville is subjected to risk inherent in the business environment in which it operates. Exposure to risks inherent in the energy markets could result in a multitude of diverse positive or negative consequences for Roseville as noted in section 4.1 below.

4.1 Energy Risk Categories and Mitigations:

i. *Commodity Price Risk*: Roseville is exposed to risks from volatile natural gas, power market, and environmental prices. These risks are mitigated by owned assets and utilizing, fixed price energy and natural gas procurement requirements in the Energy Hedge Policy, future resource acquisition, and the trading controls put in place by the Trading Authority Policy.

ii. *Volumetric Risk*: This is the risk of mismatch between load (demand) and resources (supply). This risk is especially important for load serving entities, like Roseville, and can result in either insufficient supply or exposure to volatile spot market prices. The price risk is mitigated by the Energy Hedge Policy which does not allow the City to be greatly over - or undersupplied. The risk of insufficient supply is also mitigated by capacity procurement practices which build in a reserve margin for extreme conditions.

iii. *Operational Risk*: This is the risk of loss from inadequate or failed internal processes, equipment, people, and systems. These risks are mitigated through the development of risk management policies and procedures, prudent oversight, separation of duties, and sufficient internal controls and procedures.

iv. *Counterparty Risk*: Counterparties sometimes fail to perform as contracts state due to defaults and bankruptcies. This risk is mitigated by credit management practices in the Credit Risk Policy.

v. *Regulatory and Environmental Risk*: Changes in regulatory or legislative mandates may require the City to take actions that increase costs. Examples include the Renewable Portfolio Standard (RPS) and Greenhouse Gas (GHG) programs. RPS and GHG risks are addressed by Roseville's GHG Cap and Trade

Program, and the RPS Procurement Plan and Enforcement Plan. Other regulatory risks are addressed in a similar fashion as they arise.

vi. *Delivery Risk:* The potential for disruptions or failures in the physical delivery of energy resources, such as electricity, natural gas, or oil, to the intended destination.

5. Related Policies

i. Supporting policies and procedures are required as outlined below:

Energy Credit Risk Policy
Energy Trading Authority Policy
Energy Hedge Policy
Resolution 17-368 retaining APM for power management services
Resolution 16-161 declaring APM as agent for the purposes of risk policies

6. Version History

Version	Date	Change Tracking
0	11/06/2024	Initial version
1	05/21/2025	Updates – Resolution No. 25-149

Energy Trading Authority Policy

~~5~~XX/~~21~~XX/~~2025~~
2026

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ENERGY TRADING AUTHORITY POLICY

~~5~~XX/~~21~~XX/~~2025~~2026

1. Policy Overview

The Energy Trading Authority Policy ("Policy") is the framework containing the governing rules and requirements associated with the City's energy related transactions. The Policy also specifies the list of authorities or powers granted by the City Council of the City of Roseville ("City") to the City Manager and key personnel that can execute energy related transaction1s.

1.1 The Energy Trading Authority Policy includes directives that address the following:

i. The City's intention regarding hedging and speculating.
ii. Who has authority to execute transactions.
iii. The commodities and products that can be transacted.
iv. The authorized lead-time and term for each transaction.
v. Counterparty contract and credit requirements.
vi. Other relevant factors associated with due diligence in authorizing transactions to be executed.

2. Execution Authority

The City Council granted the City Manager the ability to delegate his/her authority to the Electric Utility Director and Power Management Services Agent ("Agent") at his/her discretion. The City Manager may also choose to amend the extent of authority granted to the Electric Utility Director and Agent at their discretion if it does not surpass the limit of their authority.

The Transaction Authority Matrix outlines the Execution Authority Limits and defines the trading limits applicable to purchases and sales for each authority level in sections 7.1, 7.2, and 7.3.

All transactions must be executed via a recorded communication method. Recorded communications must be maintained and controlled by personnel who are independent of the trading function. Any request by the City for the Agent to execute on its behalf a transaction beyond the Agent's authority must be documented in accordance with this Policy.

3. Requirements

3.1 Credit Requirements

i. Roseville Electric Utility shall not intentionally exceed the credit limit associated with each counterparty. Entering unsecured transactions with a counterparty that has total credit exposure greater than or equal to its open line of credit, and the total of any security currently provided will be managed according to the City of Roseville's Energy Credit Risk Policy.

a. Since credit exposure is a function of not only the positions traded, but also a function of market pricing and volatility, credit exposure to

a counterparty may unintentionally exceed a credit limit purely due to changes in the forward market.

~~a.~~ All Renewable Energy Credit ("REC") transactions, including multi-year REC agreements, remain subject to the City of Roseville's Energy Credit Risk Policy, including requirements related to approved counterparty status, credit limits, pricing structure, forward exposure, mark-to-market or replacement-cost exposure, and the use of credit enhancements when unsecured credit is unavailable or additional credit support is required.

3.2 Contract Requirements

i. Transactions with counterparties shall only be permitted if the City has an active, valid, and executed agreement enabling such trading activity with that counterparty.

ii. Long form confirmations may be used as a valid agreement in lieu of a permanent agreement, when necessary, if approved by the Roseville City Council.

4. Non-Permissible Transactions

4.1 Sleeving

i. No sleeving transactions for credit or contract purposes shall be executed. Note: Credit Sleeving is an arrangement where a more financially reputable entity acts as middleman for a smaller, undercapitalized entity in the purchase or sale of power. Contract sleeving is an arrangement where an entity acts as a middleman between two entities to bridge a contract gap that exists between the two entities.

4.2 Speculative

i. The primary purpose of trading activities shall be for hedging and portfolio optimization (including participation in arbitrage opportunities). However, the Energy Hedge Policy does allow the City to take advantage of market opportunities through transactions that could in the strictest sense be labeled speculation if those transactions expose the City to additional risk. The Energy Hedge Policy defines what is permissible in this regard.

5. Standard Transactions

Types of transactions that are executed by Roseville or its Agent must be consistent with City Council resolutions, all applicable laws, and rules and regulations. These may include, but not limited to the following:

5.1 Enabling and Master Agreements

5.2 Purchase and Sales of Energy Products such as:

5.2.1 Electric Power, Capacity, including Transmission (Financial and Physical Contracts)

i. Purchase energy or capacity to serve load above what is expected to be generated or purchased from existing resources, or if energy or capacity purchases are more economical than existing resources.
ii. Sell existing capacity or energy that is expected to be in excess of the City's requirements.

iii. Execute financial transactions, including CAISO virtual transactions, to fix the price of variable commodity purchases or sales.

iv. Purchase from the CAISO markets to meet the City's load requirements or sell into the CAISO markets energy in excess of the City's load requirements.

v. Purchase call options to limit price exposure on short power positions.

vi. Sell call options or tolling agreements on capacity that is expected to be in excess of the City's resource requirements.

vii. Purchase a "floor" to limit price exposure on long power positions.

viii. Sell a "floor" to offset a portion of the price of the purchase of a call.

ix. Execute physical spread transactions at authorized locations.

x. Transmission purchases are to be as firm as possible to reasonably assure the delivery of the commodity at the firmness transacted.

Notes:

- Physical Contracts are contracts that require sellers to produce and deliver the commodity to the buyers. Financial Contracts do not involve a direct physical delivery of a commodity; instead, they use cash settlements, the buyer either gains or loses credit against the seller based on the difference between the agreed "entry" price and the "final" settlement price.

5.2.2 Natural Gas including Transportation (Financial and Physical Contracts)

i. Purchase natural gas and transportation that is expected to be needed to fuel the Roseville facilities. Enter into imbalance and storage agreements if deemed beneficial to fuel Roseville facilities.

ii. Sell surplus gas, or release transportation capacity, if more economic energy is available for purchase.

iii. Purchase call options to limit price exposure on short natural gas positions.

iv. Sell call options or tolling agreements on capacity that is expected to be in excess of the City's resource requirements.

v. Purchase a "floor" to limit price exposure on long natural positions.

vi. Sell a "floor" to offset a portion of the price of the purchase of call options listed in item (5) above.

vii. Transportation purchases are to be as firm as possible to reasonably assure the delivery of the commodity at the firmness transacted.

5.2.3 Environmental Compliance Instruments

i. Purchase environmental compliance instruments, including but not limited to Low Carbon Fuel Standard (LCFS) credits, Greenhouse Gas (GHG) allowances, GHG offsets, and Federal Sulfur Dioxide (SO2) and Nitrogen Oxide (NOx) emission allowances expected to be necessary to optimize the operation of the City's resource portfolio.

ii. Sell environmental compliance instruments, including but not limited to Carbon Free Attributes, LCFS credits, GHG allowances, GHG offsets, and Federal SO2 and NOx Emission Allowances deemed unnecessary for efficient operation of the City's resource portfolio.

5.2.4 Renewable Energy Credits (RECs)

i. Purchase or sell RECs as required to meet compliance requirements.

5.2.5 Congestion Revenue Rights

i. Execute Congestion Revenue Rights (CRR) to manage congestion price risk.

5.2.6 Ancillary Services

i. Purchase bilateral ancillary services to meet the City's load requirements or sell bilateral ancillary services in excess of the City's load requirements.

ii. Purchase CAISO ancillary services (spinning reserves, non-spinning reserves, regulation up, and regulation down) to meet the City's load requirements or sell CAISO ancillary services in excess of the City's load requirements.

5.2.7 Movement of Energy To and From

i. CAISO (NP15 and SP15), BANC (Balancing Area of Northern California), Mid-Columbia, John Day, Big Eddy and COB.

   a. Execute physical spread transactions at authorized locations.
   b. For financial electricity transactions, authorized locations include CAISO NP15 EZ Gen Hub, CAISO SP15 EZ Gen Hub, BANC, Mid-

Columbia, John Day, Big Eddy, and COB. These same locations are authorized for physical electricity transactions to the extent delivery can be reasonably expected.

c. Additional physical and financial locations include owned-generation locations within the CAISO, and CAISO interties for import and export transactions.

5.2.8 Movement of Natural Gas To and From

i. PG&E CityGate, Malin, Topock, Henry Hub, and the SoCal Border.

a. Execute physical spread transactions at authorized locations.
b. For physical and financial natural gas transactions, authorized locations include PG&E CityGate, Malin, Topock and the SoCal Border.
c. Henry Hub is authorized for financial natural gas hedging, as well as Henry Hub to the PG&E CityGate Basis.

5.2.9 Energy Exchange:

An energy exchange transaction is defined as any transaction in which similar quantities of energy are exchanged across locations or commodities to lower cost, reduce risk, or to increase reliability.

6. Non-Standard Transactions

City staff may enter non-standard transactions with City Council's approval. Non-standard transactions fall outside the scope of the defined "standard" transactions; these may include new opportunities that involve the following:

i. New commodities
ii. Locations outside of defined trading boundaries
iii. Pilot programs

6.1 The approval process for non-standard transactions are defined by the following:

i. Transaction Proposal:

The proposal is the responsibility of the person or business group proposing the transaction. The proposal should address the business need, risks, trading controls, valuation methodology, accounting methodology, operations workflow/methodology, and assessment of legal and regulatory issues.

ii. City Council Review:

The Risk Oversight Committee ("ROC") will perform a review on behalf of, and make a recommendation to, the City Council on the benefits and risks of the proposed transaction. The City Council will assess the proposed transaction and decide whether to add the proposed transaction to the approved list.

7. Aggregated Dollar Authority Limits

The aggregated dollar authority limit specifies the corresponding maximum dollars each authority level is allowed to authorize for forward transactions for electric power, transmission, natural gas, natural gas transportation, environmental compliance instruments, RECs and Energy Attributes, congested revenue rights, ancillary services, and energy exchanges. See Authority Matrix for details.

7.1 Authority Matrix:

Title	Source of Authority	Products							Term	Delivery Lead Time	Termination Limits	Aggregate Dollar Authority Limit	
		Power & Transmission	Nat. Gas & Transpor-tation	Environmental Compliance Instruments (e.g., LCFS, GHG Credits)	RECs and Energy Attributes	Congestion Revenue Rights	Ancillary Services	Energy Exchanges				Net	Gross
City Council	*State Law, City Charter*	*X*	*X*	*X*	*X*	*X*	*X*	*X*	*No Limit*	*No Limit*	*No Limit*	*No Limit*	*No Limit*
City Manager	*City Council*	*X*	*X*	*X*	*X*	*X*	*X*	*X*	*≤ 6 Years*	*≤ 6 Years*	*≤ 6 Years*	*$500,000,000*	*$700,000,000*
Utility Director	*City Council*			*X*				*X*	*≤ 3 Month*	*≤6 Months*	*≤ 1 Year*	*$5,000,000*	*$7,000,000*
Agent's CEO	*City Council*	*X*	*X*			*X*	*X*	*X*	*≤ 1 Month*	*≤ 6 Weeks*	*≤ 2 Months*	*$23,000,000*	*$31,000,000*

i. Authority Matrix Explanations:

- The gross aggregate limits represent the maximum allowable total dollars based on the absolute values of all forward purchases and sales.
- The net aggregate limits represent the maximum allowable total dollars between all forward purchases and sales.
- Delivery Lead Time represents the time period from the date a trade is executed to the start of the trade.
- Unless otherwise stated, the dollar limits are based upon electric power only and do not include transmission, however, the Term, Lead Time, and Quantity limits do apply to transmission.
- Termination Limit refers to the last day of the term from the execution day of the contract.
- Power and Natural Gas products typically include transmission and transportation respectively.

7.2 Authority Matrix for Agent's Short-Term Traders:

Product	Source of Authority	Per Transaction Limits					Per Trading Day Limits (Up to)		Aggregated Limits (Up to)		
		Term	Delivery Lead Time	Termination Limits	Volume Size	Total Cost ($)	Volume Size	Total Cost ($)	Total Volume	Net Total ($)	Gross Total ($)
Power and Transmission	*City Council (Can be Modified by City Manager)*	*> 1 Week ≤ 1 Month*	*≤ 6 Weeks*	*≤ 2 Months*	*8,400 MWh per Week*	*$1,050,000 per Week*	*111,600 MWh*	*$14,000,000*	*446,400 MWh*	*$17,000,000*	*$21,000,000*
		> 1 Day ≤ 1 Week			*2,400 MWh per Day*	*$600,000 per Day*	*33,600 MWh*	*$8,400,000*			
		≤ 1 Day			*4,800 MWh per Day*	*No Max. (Keep Lights On)*	*No Max. (Keep Lights On)*	*No Max. (Keep Lights On)*			
Natural Gas and Transportation		*≤ 1 Month*	*≤ 6 Weeks*	*≤ 2 Months*	*12,000 MMBTU/D*	*X*	*775,000 MMBTU*	*$6,200,000*	*775,000 MMBTU*	*$6,200,000*	*$9,300,000*
		> 1 Day ≤ 1 Week			*40,000 MMBTU/D*	*X*	*280,000 MMBTU*	*$4,200,000*	*400,000 MMBTU*	*$4,000,000*	*$6,000,000*
		≤ 1 Day	*≤ 1 Week*	*≤ 2 Weeks*	*50,000 MMBTU/D*	*X*	*150,000 MMBTU*	*$3,000,000*	*150,000 MMBTU*	*$2,000,000*	*$4,000,000*

i. ***Authority Matrix for Agent's Short-Term Traders*** **Matrix Explanations:**

a. Power and Transmission Transactions:

- Transaction Limits represent the MWh volume per period labeled in the table and total dollars per period (as labeled above) for each transaction executed.
- Per Trading Day Limits represent the total MWH volume and dollars for all transactions executed in a trading day.
- The transaction term limit for the Agent of ≤ 1 Day covers individual daily transactions as well as executed transactions for more than one day to accommodate weekends or holidays, which could have terms up to 3 days for a normal weekend and up to 5 days for a holiday weekend.
- The gross aggregate limits represent the maximum allowable total dollars based on the absolute values of all forward purchases and sales.
- The net aggregate limits represent the maximum allowable total dollars between all forward purchases and sales.
- Delivery Lead Time represents the time period from the date execution to the first day of the term of the trade.
- Unless otherwise stated, the dollar limits are based upon electric power only and do not include transmission, however, the Term, Lead Time, and Quantity limits do apply to transmission.
- Termination Limit refers to the time period between the date of execution and the last day of the term of the trade.

b. Natural Gas and Transportation Transactions:

- Transaction Limits represent the daily MMBtu volume for each transaction executed.
- Per Trading Day Limits represent the total MMBtu volume and dollars for all transactions executed in a trading day.
- The transaction term limit for the Agent of ≤ 1 Day covers individual daily transactions as well as executed transactions for more than one day to accommodate weekends or holidays, which could have terms up to 3 days for a normal weekend and up to 5 days for a holiday weekend.
- The gross aggregate limits represent the maximum allowable total dollars based on the absolute values of all forward purchases and sales.
- The net aggregate limits represent the maximum allowable total dollars between all forward purchases and sales.
- Lead time represents the time period from the date a trade is executed to the start of the trade.
- One monthly NYMEX contract contains 10,000 MMBtu.
- The dollar limits are based upon commodity gas only and do not include transportation, however, the Term, Lead Time, and Quantity limits do apply to transportation.
- Termination limit refers to the last day of the term from the execution day of the contract.

7.3 CAISO Trading Authority Matrix for Agent's Short-Term Traders:

<table>
<tr><th>Products</th><th>Delivery Lead Time</th><th>Term</th><th>MW Size</th><th>$/MWh</th></tr>
<tr><td>Generation Awards</td><td>As Required by CAISO</td><td>1 Operating Day</td><td>230</td><td>CAISO Price Cap</td></tr>
<tr><td>Demand Awards</td><td colspan="4">None</td></tr>
<tr><td>Inter SC Transactions (IST)</td><td colspan="4">See Matrix Explanation</td></tr>
<tr><td>CAISO Imports</td><td rowspan="3">As Required by CAISO</td><td rowspan="3">1 Operating Day</td><td>230</td><td rowspan="3">CAISO Price Cap</td></tr>
<tr><td>CAISO Exports</td><td>375</td></tr>
<tr><td>Ancillary Services</td><td>200</td></tr>
<tr><td>Congestion Revenue Rights</td><td colspan="4">None</td></tr>
</table>

i. *CAISO Trading Authority Matrix for Agent's Short-Term Traders* Matrix *Explanations:*

- Generation Award Limits are per generating unit within the CAISO.
- Demand Award Limits are per each load location.
- An Inter SC Trade is an energy quantity traded from one SC to another SC for a specific hour and location, therefore Inter SC Trades may be submitted to the ISO but are not monitored as they are a direct result of the bilateral trade executed between the SC's. Only the bilateral transaction will be monitored in accordance with the appropriate authority matrix.
- CAISO Imports and Exports are by location and are each monitored separately.
- Limits for Ancillary Service Awards apply to the Regulation and Operating (Spinning and Non- Spinning) Reserve Market. Limits for ancillary services transacted bilaterally are addressed in the power authority matrix.
- Only Congestion Revenue Rights that are bought and sold via the long-term, annual and monthly auctions or in the secondary market are monitored per the limits above. This excludes congestion revenue rights allocated in the Annual Allocation.
- Term applies to either the calendar year or planning year.

8. Acknowledgements

8.1 Violations and Sanctions –

i. Violations of this Policy must not occur. Should it be deemed that a violation did occur due to the actions of City employees, the Agent will notify the City's Electric Utility Financial Administrator or designee and the City Attorney of such violations. Those individuals will have the responsibility to bring the violations to the Risk Management Committee for discussion. If warranted, the Risk Management Committee may escalate the issue to the Risk Oversight Committee to develop remediation procedures.

8.2 Policy Effective –

ii. This Policy is in effect upon the City Council's approval and shall remain in effect until a replacement policy has been approved by the City Council superseding this Policy.

9. Responsibility

It shall be the responsibility of the City Council, through the duly appointed Risk Oversight Committee, Risk Management Committee and the City Manager to assure compliance with this policy.

10. Related Policies

i. Supporting policies and procedures are required as outlined below:

Energy Credit Risk Policy
Electric Utility Risk Management Policy
Energy Hedge Policy
Resolution 17-368 retaining APM for power management services
Resolution 16-161 declaring APM as agent for the purposes of risk policies

11. Version History

Version	Date	Change Tracking
0	11/06/2024	Initial version
1	05/21/2025	Updates – Resolution No. 25-149
1.1	XX/XX/2026	Added REC cross reference to section 3.1

Roseville Energy Contracts & Risk Controls

Patrick Zanardelli, Electric Business Analyst

CITY OF ROSEVILLE CALIFORNIA

Purpose and Roadmap

Today's roadmap

1. **Contract portfolio**
   What agreements Roseville uses and why they matter

2. **Market access**
   Why multiple agreement types and counterparties are needed

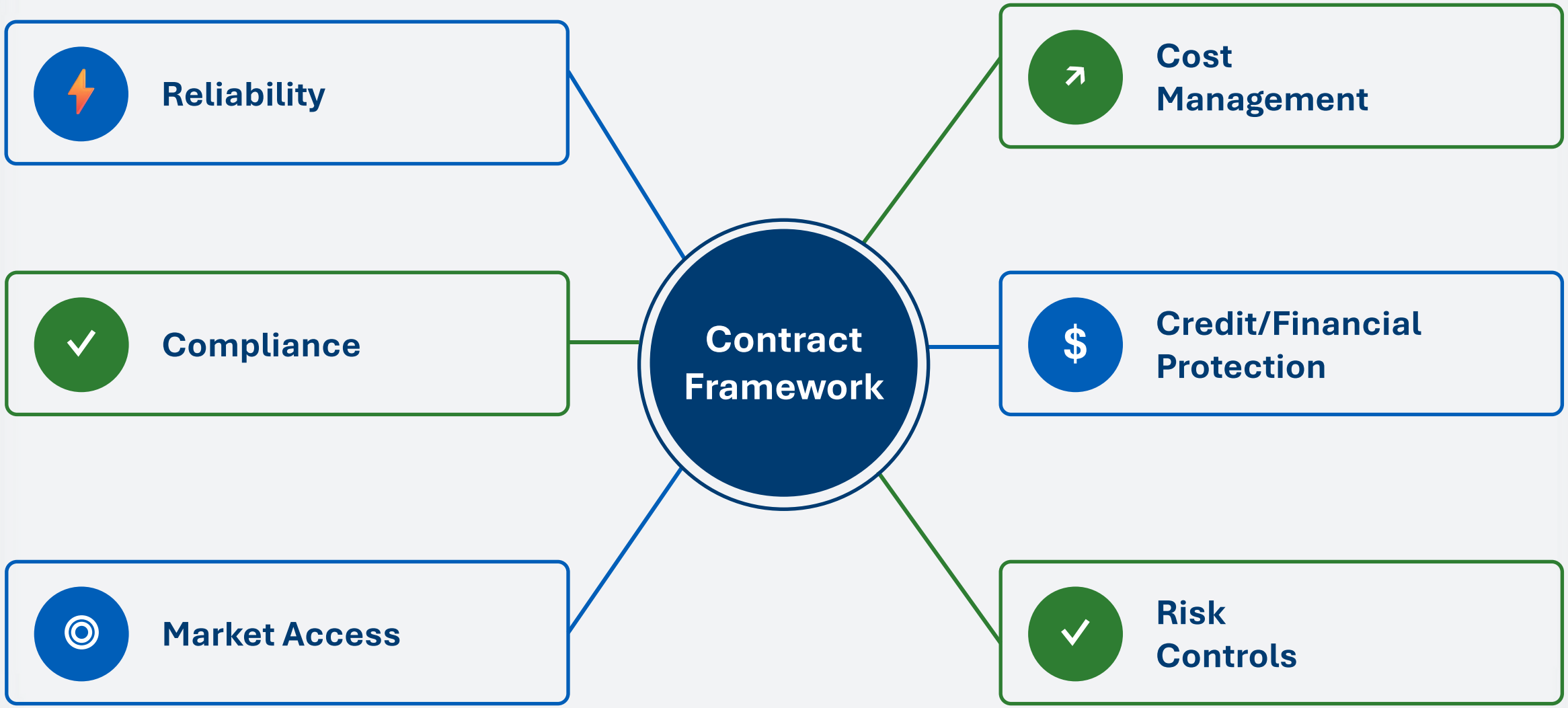
3. **Lifecycle controls**
   How review, approval, execution, and monitoring fit together

4. **Risk oversight**
   How contracts support policy compliance and ongoing safeguards

Key Takeaway

Energy contracts are part of Roseville's risk control framework, helping connect contract requirements, credit protections, trading limits, and ongoing oversight.

Why Energy Contracts Matter



Agreement Types Match the Product and Risk

Physical delivery, hedging, compliance, and resource agreements enable market activity; credit support provides protection across them.

Physical Delivery

Operational supply

WSPP
Standard physical power

EEI
Bilateral power products

NAESB
Natural gas supply

Financial Hedging

Price-risk management

ISDA
Financial power and gas hedges

Compliance

Renewable attributes

REC Agreements
Renewable attributes and compliance products

Long-Term Resources

Strategic supply

PPAs
Long-term power supply or resource-specific purchases

Credit Support Documents **Collateral • Guarantees • Letters of Credit • Netting • Default protections**

Supporting control layer helps protect Roseville when exposure exists under the underlying agreements.

Key takeaway: Agreement type changes with the market function; credit support provides financial protection across the portfolio.

What Is an Enabling Agreement?

A master agreement creates the framework; the transaction creates the specific obligation.

ENABLING AGREEMENT ≠ INDIVIDUAL TRANSACTION

Enabling Agreement

Master framework

Establishes the rules before any transaction occurs.

- **Legal terms**
- **Credit & collateral**
- **Payment / settlement**
- **Products & controls**

Creates the framework not a purchase or sale

Enables future transactions

Individual Transaction

Specific deal / confirmation

Sets the actual commitment.

- **Product**
- **Quantity**
- **Price**
- **Term**

Creates the specific purchase, sale, hedge, or REC obligation

Key distinction: having the agreement in place does not authorize unlimited trading.

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Multiple Agreements Create Controlled Pathways

Not more contracts.

More controlled options.

A broader enabled portfolio gives staff flexibility while preserving legal, credit, and trading controls.

1 Product Fit

Power, gas, hedges, RECs, and PPAs need different forms.

2 Market Access

Enabled counterparties create approved pathways to transact.

3 Price Discovery

More counterparties improve comparison of prices and terms.

4 Credit Flexibility

Limits, collateral, thresholds, and guarantees vary by counterparty.

Controlled flexibility with reduced reliance on any single counterparty or agreement type.

Contract Lifecycle: From Need to Oversight

A contract moves through control gates before signature and remains subject to monitoring after signature.

Before Signature | **Execution** | **After Signature**

Control gates before signature

Need • Credit • Agreement type • Legal terms • Approval

Framework

Signed agreement, not unlimited trading

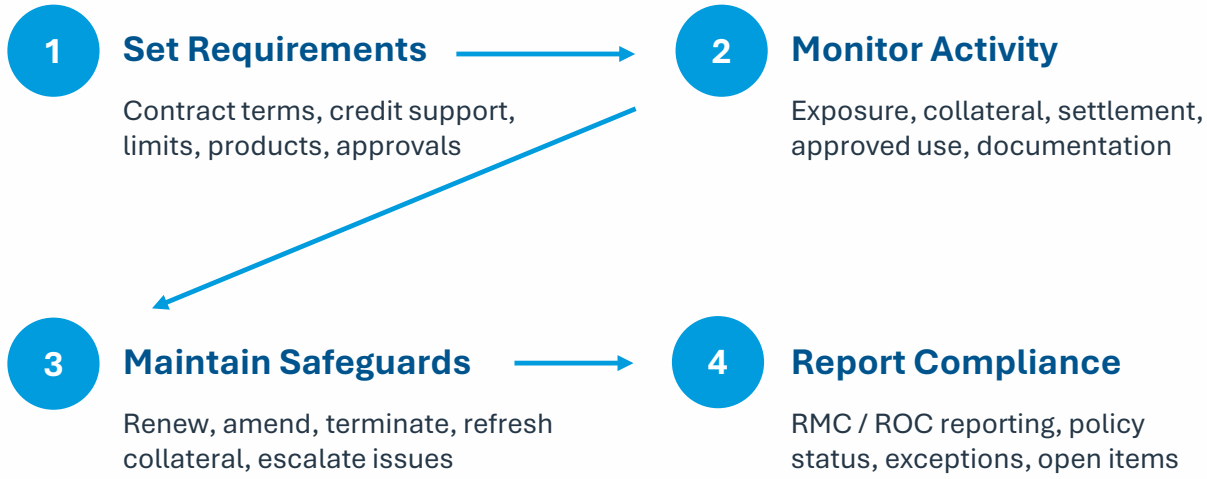
Controls after signature

Collateral/LOC received • Limits entered • Products enabled • Exposure monitored • Renewals and amendments managed

The lifecycle connects contract review, credit controls, trading authority, and ongoing oversight.

Risk Oversight

A recurring cycle: set the rules, monitor use, report status, and update safeguards.



What oversight confirms

- Use stays within policy
- Credit protections remain current
- Required approvals are in place
- Issues are visible and escalated

Contracts support oversight by creating clear requirements that can be monitored, reported, and maintained.

Contract Portfolio Snapshot

Agreement counts and annual settlement activity show the scale and breadth of Roseville's enabled market access.

Active Enabling Agreements
84

Active Counterparties
66

Average Annual Settlement Activity
$149M/year

Agreement Counts by Contract Type

EEI
4
Bilateral power, RECs, Renewables

ISDA
19
Financial gas and power hedging

NAESB
10
Natural gas

PPAs
4
Long-term supply

WSPP
47
Physical power

Portfolio Context

Enabled agreements support supply, hedging, compliance, and resource needs.

Active counterparties support market access and pricing flexibility.

Annual settlement activity reflects the scale of ongoing portfolio activity.

These agreements provide the scale, access, and product coverage needed to support utility operations under controlled conditions.

Key Takeaways & Next Steps

Roseville's contract portfolio provides controlled market access with legal, credit, and operational safeguards.

Roseville's contract portfolio is part of the risk control framework, not just an administrative inventory.

1 Contracts create controlled market access

Procure, hedge, transact, and administer activity within defined safeguards.

2 Agreement type matters

Different products and market functions require different forms and protections.

3 Execution is not the end

Agreements remain subject to credit and control setup, authority checks, monitoring, renewals, and amendments.

4 The portfolio supports utility objectives

Reliability, cost management, compliance, market access, and financial protection.

Next Steps

Develop counterparty engagement metrics

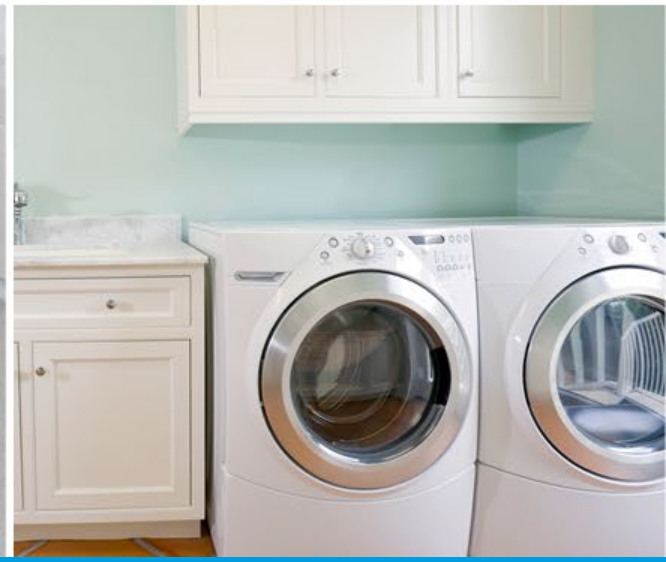
Improve visibility into market access and activity.

Complete structured contract review

Review active agreements and supporting documentation.

Strengthen contract lifecycle tracking

Track renewals, amendments, collateral, and supporting documentation.



Energy Imbalance Market vs Extended Day Ahead Market Overview

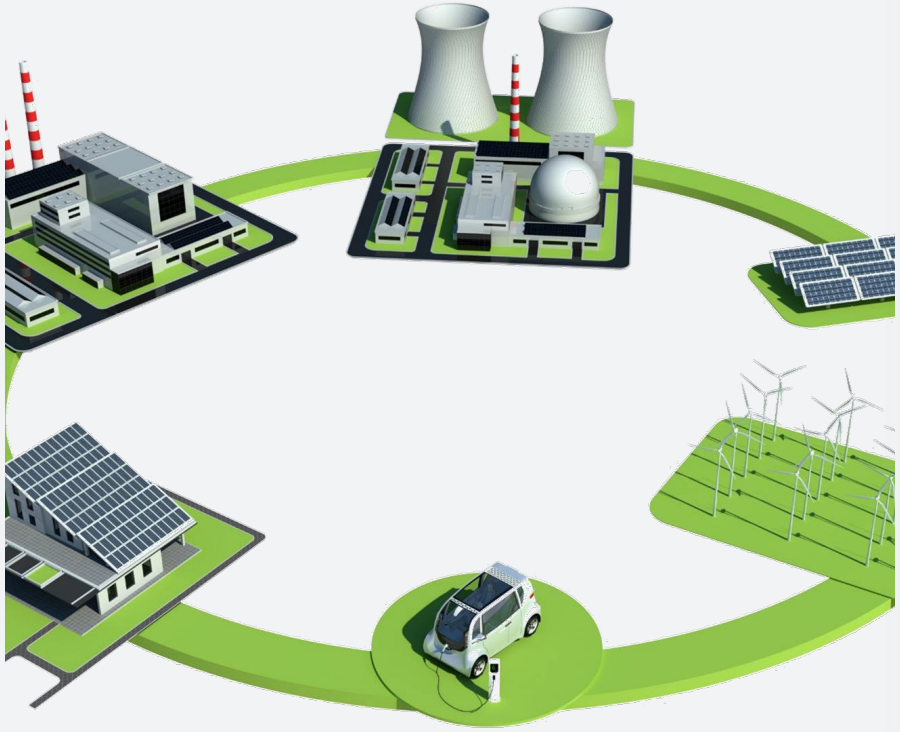
Eric Rivera and Weston Groves

CITY OF ROSEVILLE CALIFORNIA

Introduction to Western Energy Markets

Market Evolution and Challenges

Western energy markets evolved due to increased renewable energy and fragmented bilateral trading causing coordination challenges.



Energy Imbalance Market (EIM)

EIM provides real-time balancing every five to fifteen minutes, improving operational efficiency and reducing renewable curtailments.

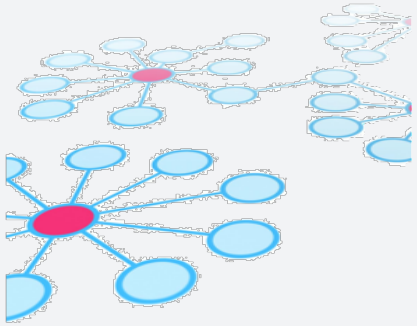
Extended Day-Ahead Market (EDAM)

EDAM integrates utilities for day-ahead market optimization, improving planning, reducing price volatility, and enhancing reliability.

Transformation to Integrated Market

Shift from reactive balancing to proactive, market-driven coordination creates a cost-effective and sustainable regional grid.

Core Differences EIM vs EDAM



Energy Imbalance Market (EIM)

EIM Operates in real time to balance deviations from forecasted and actual system conditions every five to fifteen minutes

Extended Day Ahead Market (EDAM)

EDAM allows day-ahead market optimization, enabling utilities to submit bids and forecasts for better commitment decisions.

Market Integration Benefits

Integration of EDAM and EIM reduces operational uncertainty and improves resource adequacy planning across the region.

Operational and Market Impacts to Utilities

Shift to Day-Ahead Scheduling

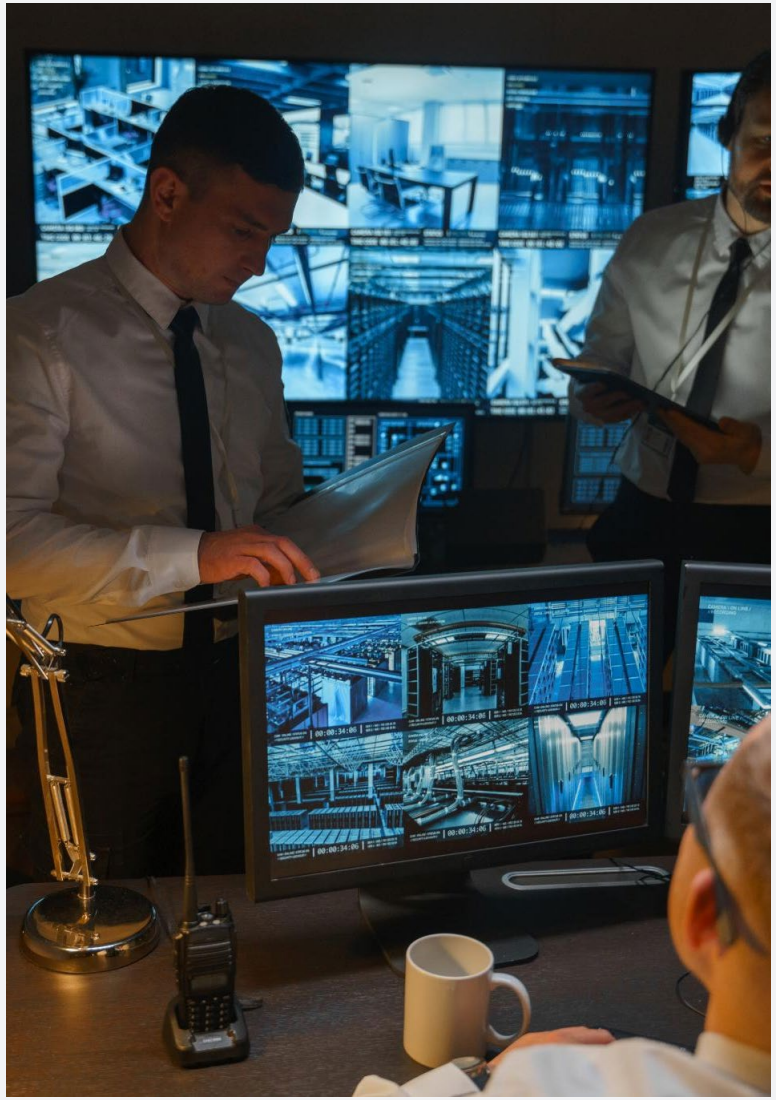
EDAM requires utilities to actively participate in coordinated day-ahead resource scheduling and forecasting.

Enhanced Operational Discipline

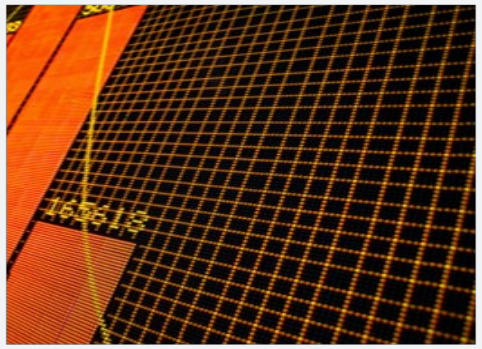
Utilities experience the need for tighter scheduling and forecasting precision under EDAM.

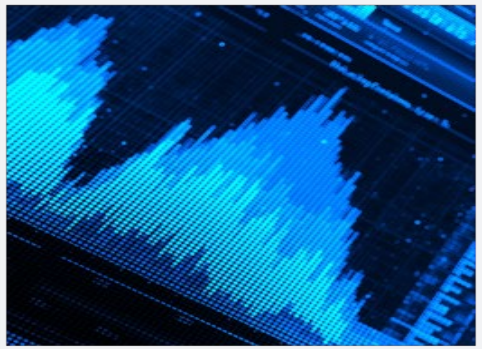
Continuous Operating Cycle

Teams will need to regularly adjust workflows as conditions and the market evolve. Systems must be flexible and cross-team alignment becomes an ongoing requirement. Communication becomes crucial.



Market Optimization Changes





Today with EIM

The Load Serving Entity (Roseville) decides which resources will serve its expected load. EIM only adjusts around that schedule in Real-Time.

Future With EDAM:

The LSE no longer directly determines the Day-Ahead dispatch of participating resources.

CAISO Day-Ahead economic optimization process determines which resources run, when they run, and at what output to serve regional load.

Generation and load are financially decoupled and the market determines which resources serve regional demand rather than assigning an LSE's generation to its own load. Load is priced by the CAISO’s economic dispatch of resources.

Resource Adequacy, Reserves, and Reliability

Differences in RA Requirements

EIM focuses on real-time balancing while EDAM requires formal resource sufficiency evaluations day-ahead and real-time.

New Market Products for Reliability

Imbalance reserves provide upward and downward flexibility, enhancing system reliability under EDAM.

Regional Integration Benefits

EDAM's broader footprint improves renewable integration and flexible resource dispatch across regions.

Enhanced Compliance and Forecasting

Forecasting accuracy provides greater opportunity for a reliable, efficient, and resilient grid.

Summary and Next Steps

Key Takeaways

EDAM provides improved day-ahead certainty, transmission optimization, and reliability benefits. Integration will require continued cross-team coordination and communication.

Roseville's EDAM Onboarding Status

Roseville and BANC are in the process of onboarding with CAISO for EDAM. Council communication likely in September/October.

Next Steps for Roseville

Finalize remaining onboarding tasks with CAISO. Work with ACES on system readiness for EDAM with a Fall 2027 go-live.

Questions?