



Northern California Power Agency
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BUSINESS PROGRESS REPORT

January
2024

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Generation Costs & Reliability

Combustion Turbine Project

Unit Operation for December 2023

Unit	Availability		Production			Reason for Run
CT1 Alameda	Unit 1	Unit 2	Unit 1	0.0	MWh	No Runs. / No Runs.
	100.0%	100.0%	Unit 2	0.0	MWh	
Curtailments, Outages, and Comments:						
Unit 1: Normal Operation.						
Unit 2: Normal operation.						
Unit	Availability		Production			Reason for Run
CT1 Lodi	100.00%		0.0 MWh			No Runs.
Curtailments, Outages, and Comments:						
Normal Operation.						
Unit	Availability		Production			Reason for Run
CT2 STIG	100.0%		0.0 MWh			No Runs.
Curtailments, Outages, and Comments:						
Normal operation.						
Unit	Availability		Production			Reason for Run
LEC	100.0%		146,103 MWh			CAISO
Curtailments, Outages, and Comments:						
Normal Operation.						

Maintenance Summary – Specific per asset above.

Geothermal Facilities

Availability/Production for December 2023

Unit	Availability		Net Electricity Generated/Water Delivered		Out-of-Service/Descriptors
Unit 1	0	%	0	MWh	U1 down for outage
Unit 2	100	%	11,150	MWh	U2 in service until 12/11/2023. Down for Maintenance
Unit 3	N/A	%	N/A	-	Unit 3 remains out of service.
Unit 4	0	%	15,024	MWh	U4 out of service on 9/12/2023 for maintenance. Back online 12/19/2023
Southeast Geysers Effluent Pipeline	100	%	65.1	mgallons	Average flow rate: 1,428 gpm
Southeast Solar Plant	N/A		41,192	KWh	Year-to-date KWh: 1,142,759
Bear Canyon Pump Station Zero Solar	N/A		25,645	KWh	Year-to-date KWh: 938,898

* Accounts for an additional 193 MWh of house load for the 21KV power supply to the effluent pipeline supplied from Unit #2.

Hydroelectric Project

Availability/Production for December 2023

Units	Availability	Net Electricity Generated	Out-of-Service
Collierville Unit 1	100%	10344 MWh	None
Collierville Unit 2	100%	14645 MWh	None
Spicer Unit 1	93.94%	378 MWh	NSM1- Out of Service on 12/13/23 to 12/14/23 from 0730 to 0739 for PG&E protection circuit work. 12/14/23 from 1249 to 1316, 12/14/23 from 2052 to 2312, 12/15/23 from 1120 to 1212, 12/15/23 to 12/16/23 from 2226 to 1539 for PGE DTT comm trouble.
Spicer Unit 2	93.91%	1649 MWh	NSM2- Out of Service on 12/13/23 to 12/14/23 from 0738 to 0745 for PG&E protection circuit work. 12/14/23 from 1249 to 1319, 12/14/23 from 2052 to 2316, 12/15/23 from 1120 to 1215, 12/15/23 to 12/16/23 from 2226 to 1541 for PGE DTT comm trouble.
Spicer Unit 3	88.16	227 MWh	NSM3- Out of Service on 12/13/23 to 12/14/23 from 0812 to 0741 for PG&E protection circuit work. 12/14/23 from 1249 to 1431, 12/14/23 from 2052 to 2359, 12/15/23 from 1120 to 1229, 12/15/23 to 12/18/23 from 2226 to 0901 for PGE DTT comm trouble.

Operations & Maintenance Activities:

- CMMS work orders
- Annual Training

Environmental, Health & Safety (EH&S) Projects Incident Reports

- There were no Lost Time, Cal OSHA Recordable or vehicle accidents in the month of December.
- Find below a Safety Report that highlights the following areas: recordable incidents and lost time accidents (LTAs) reported this period and this calendar year; the number of days since last recordable or LTA; the number of work hours since last recordable or LTA; and vehicle accidents reported this month and this calendar year. In September of 2012, Generation Services completed an internal audit of its records with the results reflected in this report and was updated through the payroll period ended December 30, 2023.
- The “CT Group” column reflects the combined safety numbers of all CT employees. Beginning with the November 2009 report, the CT Group Column also includes Lodi Energy Center staff.

November 2023 Generation Services Safety Report

	Hydro	GEO	CT Group *	NCPA HQ **
Cal OSHA Recordable (this month)	0	0	0	0
Cal OSHA Recordable (calendar year)	0	2	1	0
Days since Recordable	1,145	187	120	4,174
Work Hours Since Last Recordable	101,362	36,912	39,176	3,037,445
LTA's (this month)	0	0	0	0
LTA's (calendar year)	0	1	0	0
Days without LTA	5,924	206	11,094	7,187
Work Hours without LTA	533,877	40,773	909,421	2,659,463
Vehicle Incident (month)	0	0	0	0
Vehicle Incident (calendar year)	1	4	1	0

* CT Group: Combines CT-1, CT-2 and LEC Operations

** NCPA HQ: Roseville employees at the Main Office

Data originates from OSHA logs, HR records and payroll information.
Days and Hours are calculated through pay period ended December 30, 2023.

Power Management/NCPA Market Results

Dispatch and Schedule Coordination

- NCPA Dispatch and Schedule Coordination Center safely, reliably, and economically schedules, monitors, and manages NCPA and NCPA member power resources and loads 24 hours per day, 7 days per week on a continuous basis. This process includes balancing MSSA loads and resources on a 5-minute basis, optimizing NCPA resources and minimizing ISO costs.
- NCPA MSSA Load Data:

Current Year 2023 Data

	December 2023		Calendar Year 2023	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	330.27 12/11/23 @ 1900	198,246	440.7 8/15 @ 1700	2,284,944
SVP	587.64 12/9/23 @ 1300	385,269	669.22 8/23 @ 1600	4,587,837
MSSA	891.37 12/6/23 @ 1400	583,515	1103.22 8/23 @ 1700	6,872,781

Last Year 2022 Data*

	December 2022		Calendar Year 2022	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	345.08 12/19 @ 1800	199,378	511.56 9/6 @ 1600	2,291,933
SVP	551.94 12/8 @ 1100	380,807	687.74 9/6 @ 1300	4,516,186
MSSA	890.41 12/19 @ 1800	580,185	1176.2 9/6 @ 1400	6,808,119

*Last year's data added for comparison purposes only

System Peak Data

	All Time Peak Demand	2023 Peak Demand
NCPA Pool	517.83 MW on 7/24/06 @ 1500	440.7 8/15 @ 1700
SVP	687.74 MW on 9/6/22 @ 1300	669.22 8/23 @ 1600
MSSA	1176.20 MW on 9/6/22 @ 1400	1103.22 8/23 @ 1700

- NCPA MSSA has a Deviation Band with the CAISO, which is used as a performance measure by the CAISO. The ability to stay within this Deviation Band is a measure of NCPA Dispatch's ability to balance the MSSA Loads and Resources on a 5-minute basis. The following NCPA Deviation Band Performance table includes all deviations, including deviations from unit forced outages, metering and load outages, COTP, Western, and WECC curtailments.

NCPA Deviation Band Performance		
	December 2023	Calendar Year 2023
MSSA % Within the Band	99.23%	97.45%

CAISO Real-time Contingency Dispatches (RTCD):

- None

CAISO Energy Emergency Alerts (EEA):

- None

PG&E Public Safety Power Shut-off (PSPS)

- None

Pooling, Portfolio Planning & Forecasting

- NCPA Pool loads during December 2023 were 198,260 MWh versus the budget forecast of 195,111 MWh, resulting in a forecast error of 1.59%. The current weather outlook for the remainder of January 2023 is for above average temperatures and precipitation. The Pool's January load forecast is 201,804 MWh compared with extrapolated actuals of 198,685 MWh as of January 09, 2024.
- Lodi Energy Center (LEC) ran 526 hours and produced 146,115 MWh.
- During December 2023, 3.03" of rain was recorded at the Big Trees gauge. December average rainfall at Big Trees is 7.02".
- The Value of Storage (VOS) of New Spicer Meadow Reservoir (NSMR) has been increased to \$100/MWh. Releases from NSMR ranged from 200cfs to 380cfs during December.
- New Spicer Meadows storage as of December 31, 2023 was 93,037 acre-feet. The historical average storage at the end of December is 80,366 acre-feet. As of January 10th, storage was 91,618 acre-feet.
- Combined Calaveras Project generation for the Pool in December 2023 totaled 13,708MWh, down from 23,664MWh in November 2023.
- Western Base Resource (BR) deliveries for the Pool during December 2023 were 7,349 MWh. The Displacement Program provided an additional hedge of 0 MWh in the form of an NP15 Inter-Schedule Coordinator Trade (IST). The Pool's share of expected total delivery from the Western Base Resource for January 2024 is 8,500 MWh, with 2,858 MWh having already been delivered. The WAPA exchange program has been suspended until next spring.
- The PG&E Citygate gas index averaged \$4.01 / MMBtu during the month of December as compared to an average of \$5.25 for November. January 2024 average City Gate gas price was \$5.31 / MMBtu through the 10th. The PG&E Citygate forward price for February 2024 is \$6.82 / MMBtu.
- Day-Ahead PG&E DLAP electricity prices during December averaged \$57.07 / MWh on-peak and \$51.66 off-peak, with a high of \$85.07 and a low of \$30.98. For the period January 1st through the 9th on-peak prices have averaged \$68.01 and off-peak prices have averaged \$61.04 with a low price of \$33.61 and a high of \$116.42. The forward power prices for February 2024 are \$81.32 on-peak and \$80.07 off-peak.

Industry Restructuring, Contracts and Interconnection Affairs

Resource Adequacy Compliance Filings

- NCPA made the following Resource Adequacy compliance filings with the CAISO for the compliance period of March 2024:
 - Monthly System Resource Adequacy Demonstration (filed January 17, 2024)
 - Monthly Supply Plan (filed January 17, 2024)

Industry Restructuring

NCPA is actively participating in a number of CAISO stakeholder initiatives on behalf of the Members. The following is a brief description of key active initiatives:

Resource Adequacy Modeling and Program Design (RAMPD) Dec. 6, 2023

Resource Adequacy Modeling and Program Design Working Group:

- CAISO provided RA 101 and followed up on questions that arose from the 11/1 working group meeting on the ISO's showing mechanics, data inputs, and the CPM processes.
- CAISO recapped Slice of Day key takeaway - that CAISO will continue to consume a single QC value from all LRAs, including under the CPUC's Slice of Day reform.
- CAISO reviewed its short term study of the RA fleet's resource sufficiency and if it is meeting a 0.1 LOLE.
- Cal CCA proposed additional language to non-RA availability problem statement.
- Middle River Power requested for CAISO to perform analysis to quantify the extent the 0.1 LOLE was met or not met in prior years.
- NCPA comments
 - Current annual showing requirement in place today is appropriate.
 - Restated importance of CAISO Tariff delegation of certain RA program determinations to Local Regulatory Authorities.
 - Current RA metrics provided by the CAISO are useful and sufficient to track the status of the fleet.
 - Market participants' focus on non-RA availability is misguided. Focus should be on root causes of the current market scarcity that exists in the West, including focusing on removing barriers for new resource interconnection and development.
 - Evaluating PRMs against a 0.1 LOLE could provide useful information that LSEs can use for planning purposes but there are a number of questions or concerns:
 - Calculating the 0.1 LOLE is subjective. No industry consensus for standard method, inputs, and effectiveness.
 - Results of this type of analysis have been varying and do not appear to result in a material change in the PRM.
 - Focus on PRM is misguided. Focus on finding ways to enable timelier and more efficient interconnection of new generating capacity to the grid.
 - NCPA's adoption of CAISO's default 15% PRM has served well through recent extreme heat events with minimal loss of load.
 - NCPA subject to extensive penalties if it does not balance supply and demand every five minutes in real time.
 - NCPA monitoring CEC proceeding under AB 209.

- NCPA's PRM and counting criteria are designed to support reliable electric service to its customers, and reflect any unique operating characteristics and capabilities of its resource portfolio. Adopting a uniform criterion will not result in greater reliability for its customers.
- Cost allocation alone should not be the primary driver for changing rules that have worked well to support reliability in the past, particularly since CPM and other costs are relatively low.

New Resource Opportunities

- SCE FCDS Stand Alone Storage
- McCloud Solar + Storage – PCC1 only or PCC1+RA. Tehama County, CA
- SunZia Wind – PCC1 wind located in New Mexico, COD 2026
- Lodi CT2 Conversion – LM5000 conversion to LM6000. Sierra Local Flex cat 1 RA – Hydrogen capable
- Wildcat Solar – PCC1 located in Imperial County, CA. COD Jun. 2026

Please contact mike.whitney@ncpa.com for more information

Western

Western Base Resource Tracking - NCPA Pool							
	Actual			Costs & Rates			
	BR Forecast ¹ (MWh)	BR Delivered (MWh)	Difference (MWh)	Base Resource & Restoration Fund (\$)	Monthly Cost of BR ² (\$/MWh)	CAISO LMP Differential ³ (\$/MWh)	12-Mo Rolling Avg. Cost of BR ⁴ (\$/MWh)
Jul-23	35,526	63,713	28,187	\$1,276,102	\$ 20.03	\$ (2.07)	\$ 39.84
Aug-23	26,389	61,247	34,858	\$1,276,102	\$ 20.84	\$ (0.99)	\$ 33.28
Sep-23	12,488	36,612	24,124	\$1,275,846	\$ 34.85	\$ 0.12	\$ 29.86
Oct-23	7,510	36,999	29,489	\$479,789	\$ 12.97	\$ 0.03	\$ 27.56
Nov-23	12,128	14,426	2,298	\$479,789	\$ 33.26	\$ 0.11	\$ 26.56
Dec-23	721	7,349	6,628	\$479,789	\$ 65.29	\$ 0.14	\$ 26.00
Jan-24	11,160	-		\$479,789	\$ 42.99	\$ -	\$ 25.33
Feb-24	16,835	-		\$479,789	\$ 28.50	\$ -	\$ 24.18
Mar-24	11,662	-		\$479,789	\$ 41.14	\$ -	\$ 23.43
Apr-24	37,152	-		\$1,252,357	\$ 33.71	\$ -	\$ 23.54
May-24	66,765	-		\$1,252,357	\$ 18.76	\$ -	\$ 24.50
Jun-24	70,929	-		\$1,252,357	\$ 17.66	\$ -	\$ 24.13

1/ As forecasted in NCPA 23/24 Budget
2/ = (Western Cost + Restoration Fund)/BR Delivered, for Pool Participants only.
3/ = (MEEA LMP - PG&E LAP LMP) using public market information (i.e. not settlement quality).
4/ Based on BR Delivered (Actual) when available and BR Forecast in all other cases. Includes CAISO LMP impact.

- NCPA Pool received 7,349 MWh of Base Resource (BR) energy in December 2023. There was no displaced energy as the Displacement Program hibernation started on November 1, 2023. MEEA savings was about \$1,000.
- WAPA SNR is filing a 5-year formulated rate under rate order no. WAPA-207 for the Central Valley Project (CVP) power, transmission, and ancillary services; and the California-Oregon Transmission Project (COTP) transmission (through September

30, 2029), which is unchanged from the existing formula rates. The current rate schedules will expire on September 30, 2024, and December 31, 2024. The Public Comment period ended on December 28th, 2023. The Final Federal Register Notice will be published in May 2024. The New Rate Schedules will be effective October 1, 2024. A separate rate case will be conducted for the Pacific Alternating Current Intertie (PACI) rate schedule as the Transmission Exchange Agreement (TEA) is set to expire on December 31, 2024.

- Re-initiation of Consultation of the Long-Term Operations (ROC on LTO) – Trinity Component.
 - In September 2021, Bureau of Reclamation and California Department of Water Resources requested a new Endangered Species Act (ESA) with National Marine Fisheries Service (NMFS) and US Fish & Wildlife (USFWS). The ESA requires formal consultation of the CVP operation’s impact on the species. As part of the National Environmental Policy Act (NEPA) requirement, Reclamation is required to provide three or four alternatives to compare against baseline operations and analyze the effect in an Environmental Impact Statement for public comment. As a final step, Reclamation publishes a Record of Decision adopting its preferred operational alternative. On February 28, 2022, Reclamation published a Notice of Intent in the Federal Register, for the preparation of an Environmental Impact Statement (EIS).
 - Reclamation provided the preliminary four alternatives for the Trinity portion for the EIS early June and comments were due mid-July 2023.
 - Per Reclamation’s request, Power Customers/WAPA provided final description for Alternative 5 late September 2023 for “Low Emissions with Flexible Management”.
 - Reclamation provided the Cooperating Agencies the Draft Cooperating Agency Environmental Impact Statement (EIS) mid-September 2023.
 - NCPA became a Cooperating Agency on September 27, 2023. NCPA submitted comments for the draft EIS supporting WAPA’s comments, and emphasized a few of the general themes.
 - This EIS does not include Trinity’s portion. Reclamation just started working on the EIS for Trinity. Their plan to eventually do a joint analysis on the EIS.
 - Reclamation mentioned there may be a second round of comment for the Draft Cooperating Agency EIS but date has not been confirmed.
 - Reclamation is targeting to publish the Public Draft EIS in Spring 2024, Final EIS late Spring/early Summer 2024, and Record of Decision Summer/Fall 2024.

Interconnection Affairs

Rate Case Update – TO18 Refunds

Background

- PG&E calculated refund amount to be \$234M.
- PG&E’s compliance filing stated ISO is responsible for administering the refunds.
- JI’s protested the refunds calculation citing three issues which have been resolved.
- ISO stated it will not issue refunds until there is a FERC Order on PG&E’s compliance filing.
- FERC is under no obligation to rule.

Current Status

- PG&E proposed a settlement offer. JI's counteroffered by end of 2023. PG&E to provide their counter by Jan 19th.

PG&E RY2024 Formula Rate Annual Update

Background

- In July 2023 PG&E proposed RY2024 (Jan 1 to Dec 31, 2024) transmission rates:

PG&E Wholesale Rates	RY2023 (Current)	As Filed RY 2024	% Change
Revenue Requirement	\$2.7B	\$2.3B	-15%
HV TAC (\$/MWH)	\$9.50	\$7.68	-19%
LV TAC (\$/MWH)	\$20.40	\$17.87	-12%

- Major Contributing Factors to the Decrease
 - Prior Over Collections
 - \$83M decrease to A&G expenses
 - \$6.8M decrease to O&M expenses
 - ~\$285M decrease to the Accumulated Depreciation Reserve
- Numbers were subject to change especially since PG&E at the time did not file its 2024 TRBAA.
- Joint Interveners (NCPA, TANC, CPUC, Six Cities, CDWR) engaged in the 2024 TRR review process to negotiate with PG&E over amounts found to be excessive or unsupported.

PG&E Wholesale Rates	As Filed RY 2024	Effective RY 2024	Delta	% Change
Revenue Requirement	\$2.3B	\$2.3B	\$0.00B	0%
HV TAC (\$/MWH)	\$7.68	\$7.30	(\$0.38)	-5%
LV TAC (\$/MWH)	\$17.87	\$18.33	\$0.46	3%

- Indications of upward rate pressure in the future years, increase forecasted capital additions next year.

NCPA TO Rate Case Program

Background

- TANC's PA 6 Program expired at the end of 2023
- NCPA picked up TANC's prior TO case work
- \$600,000 Funds included in FY24 Budget

- NCPA ran an RFP and solicited offers from rate case attorneys – DWGP selected.
- Commission Resolution approved entering into an amended contract with DWGP and to bill members according to an approved cost split for funds actually incurred.

Scope of Work

- Coordinated with others (Joint Interveners) to avoid duplication
- Focus on the following Rate Cases
 - Pacific Gas and Electric Company – low voltage and high voltage
 - Southern California Edison – high voltage
 - San Diego Gas and Electric Company – high voltage
 - Private transmission developers – specific high value or precedential issues

Program Development

- NCPA Staff and participating NCPA Members are working on developing program scope, cost allocation, and governance.
 - Committee Role: Set annual program goals, provide direction on level of participation throughout the year.
- Draft of the Program Agreement has been circulated to Participating Members and meeting scheduled for Jan 10 to discuss.

Debt and Financial Management

- Prices across a broad range of goods and services edged higher in November 2023 but were mostly in line with expectations, further easing pressure on the Federal Reserve. The consumer price index increased 0.1% and was up 3.1% from a year ago. Economists surveyed by Dow Jones had been looking for no gain and a yearly rate of 3.1%.
- At their December meeting and in a widely expected move, the Federal Reserve kept the overnight federal funds rate steady in its range of 5.25% to 5.5% in its latest policy meeting. This marks the third consecutive meeting where the central bank has chosen to hold off on monetary policy changes. The Fed signaled it would cut rates three times in 2024 in projections – released after the two-day meeting.

Schedule Coordination Goals

Network

- SCADA and Networking team is currently working with a number of stakeholders to bring a variety of different generation projects online within the next few months. The team successfully integrated Dispatch Control systems with NID's Deer Creek powerhouse and has provided real-time telemetry for Dispatch monitoring. Further, work continues to integrate the Lodi Strategic Reserve in preparation for go-live this winter.
- IS continues the work toward preparing the HQ and DRC Control Centers to be compliant with the NERC CIP Medium standards as we continue to work with AESI to review draft CIP-007, CIP-009 and CIP-010 procedures. IS has completed the draft backup/recovery procedures for applicable assets for the medium impact program.

- Operations and Support Oracle DBA team has rolled out phase 12 of the meter data cleanup which includes archiving old legacy data into a separate database. This is an effort to comply with retention policies and to improve query performance.
- IS has upgraded all domain controllers to Windows 2022 and have since deprecated all older versions.

Software Development

- NCPA IS team coordinated the GRIZZLY Resource integration for Santa Clara and its counterparty, PGE, after the resource had been inactive in the last five years. The integration includes the Day-Ahead Energy Inter-SC Trade, Custom LAP ETC, Real-time Energy and Spin AS Inter-SC Trade. First actual GRIZZLY Trade scheduled on the December 23, 2023 Day-Ahead Market.
- NCPA IS team is providing technical support and coordination on a couple of accounting projects. One is to upgrade the Dynamics Great Plains system related to the year-end IRS 1099 changes which starts mid-November and expected to complete mid-December 2023. The second project, which is a longer duration, is to restructure the General Ledger Chart of Accounts. Development has commenced in the test environment this month and will continue for at least a couple of months. The GL Code restructuring is part of the larger Budget and Reporting project. Dynamics GP upgrade was completed successfully on January 5th. An extra 3rd party software will be rolled out this month enable electronic submission of the 1099 forms to the IRS' IRIS system. GL Code restructuring is on-going.
- NID's Deer Creek successfully integrated under the NCPA SCID as of December 2023.
- Integration of the Lodi Strategic Reserve, owned by CDWR and operated by Enchanted Rock is undergoing system configuration within the NCPA SCID portfolio.
- The NCPA Logger app development is on-going with prototype update releases every couple of weeks for testing by the business users. Anticipated early production release by late December 2023 or early January 2024.

NCPA Bills & Settlements

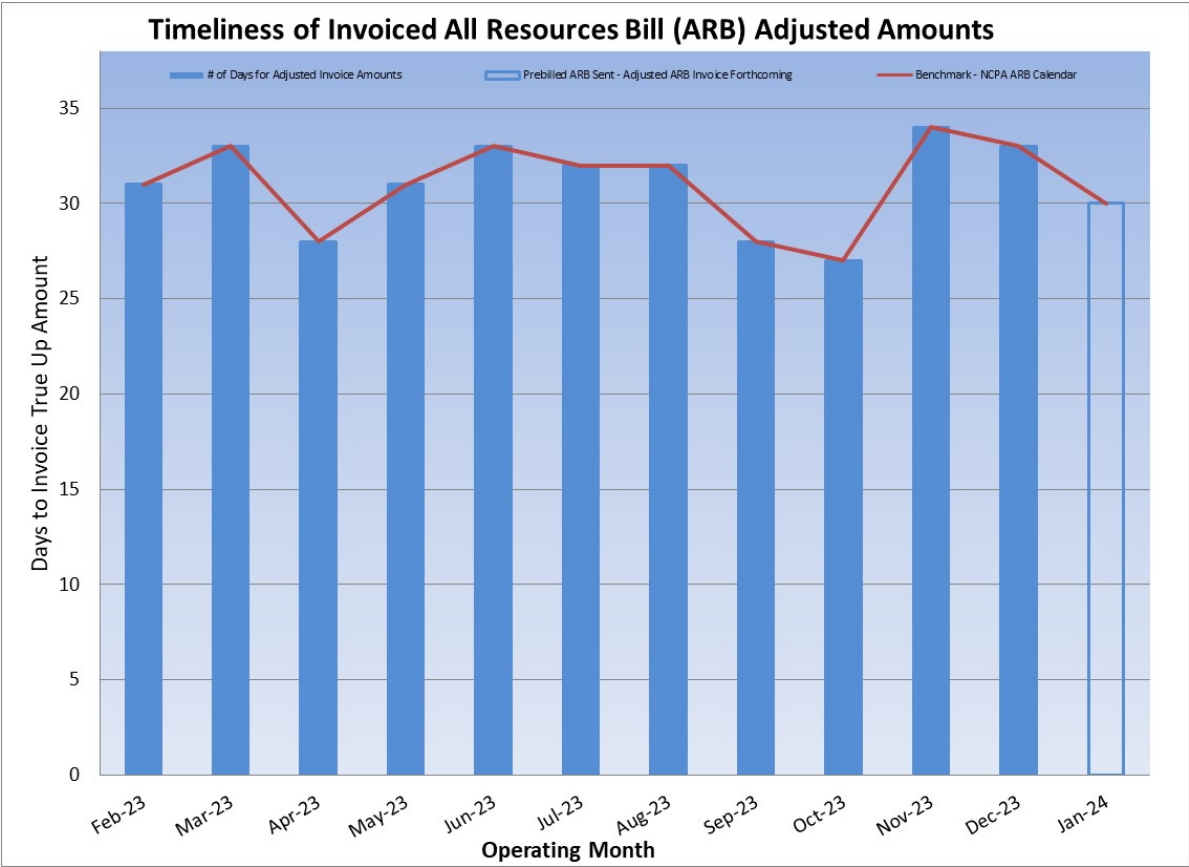
Progress Against the Strategic Plan

Adjusted Power bills, which include CAISO transactions, invoiced to members the following month subsequent to the monthly pre-billed ARB month. Timely ARB settlements adjustments help improve members' cash flow and reconciliation of their budget performance.

The November 2023 NCPA All Resources Bill (ARB) monthly invoice sent to members on December 26, 2023 contains:

- January 2024 monthly pre-billed budget/forecast amounts;
- November 2023 (1st Adjustment) NCPA Project and CAISO Initial settlement true-ups;
- October 2023 (2nd Adjustment) NCPA Project settlement true-up and T+20 business day recalculated CAISO settlement true-up allocations;

- August 2023 (3rd Adjustment) T+70 business day recalculated CAISO settlement true-up allocations and NCPA Projects true-up;
- December 2022 (4th Adjustment) T+11-month recalculated CAISO settlement true-up allocations;
- February 2022 (5th Adjustment) T+21-month recalculated CAISO settlement true-up;
- November 2021 (6th Adjustment) T+24-month recalculated CAISO settlement true-up;
- October 2020 (7th Adjustment) T+36-month CAISO settlement true-up



Legislative & Regulatory

Customer Programs Update:

- In response to Member requests, NCPA has selected two vendors as “qualified” to provide managed EV charging services: Optiwatt and WeaveGrid. The two vendors were selected as part of NCPA’s RFP LR 2301 and evaluated by a committee of NCPA Members. Services provided includes telematics based EV- managed charging, driving data, AMI-based EV detection, fleet solutions, and integrated smart thermostat load management. Members are able to enter into separate agreements with Optiwatt and Weavegrid for services, or can request services from Optiwatt through NCPA’s Multi-Task Consulting Services Agreement.

Human Resources

Hires:

None.

Intern Hires:

None.

Promotions:

Dustin Palmer was promoted to Computer Technology Analyst IV, effective December 18, 2023. Dustin joined NCPA in 2017 and during his time at the Agency, he has been an essential part of the successes of many of the server, storage, and voice communication projects within NCPA. As the Agency seeks to grow its customer and member resources as part of its strategic goals, Dustin's expertise will be required to expand and maintain stable operations. Dustin has a Bachelor of Science degree in Mechanical Engineering from the University of Utah.

Gordon Loyd was promoted to Engineer III, Lodi Energy Center, effective December 31, 2023. In the past five years at NCPA, Gordon has provided support as needed to the Operations and Maintenance Supervisors, FOA, and Materials Warehouse Coordinator and transitioned into developing and engineering multiple projects for the Combustion Turbine Facilities. Gordon is a registered P.E. and has a Bachelor of Science degree in Mechanical Engineering from the University of Nevada, Reno.

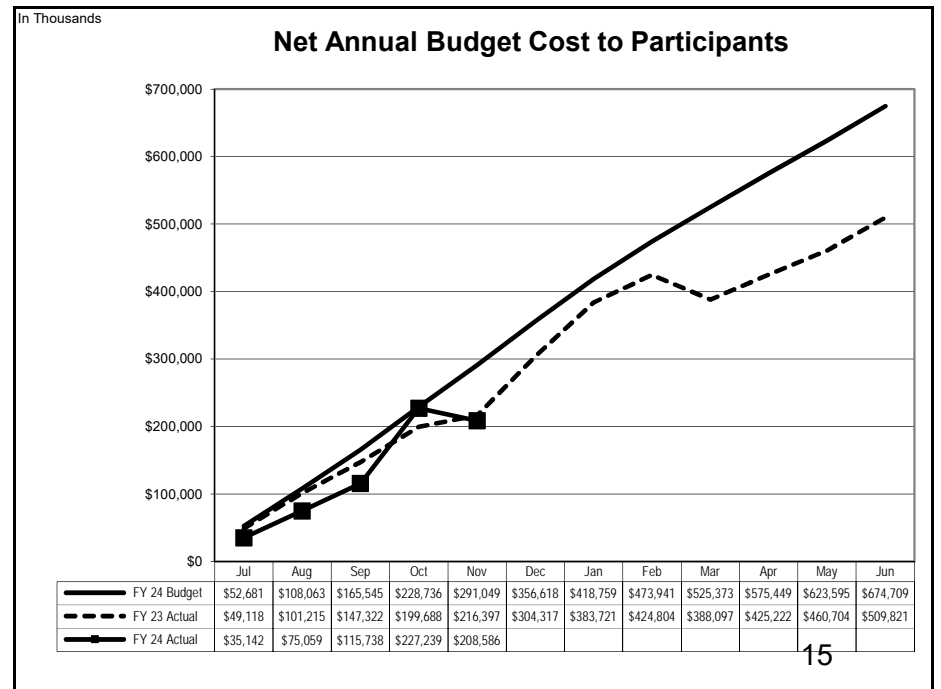
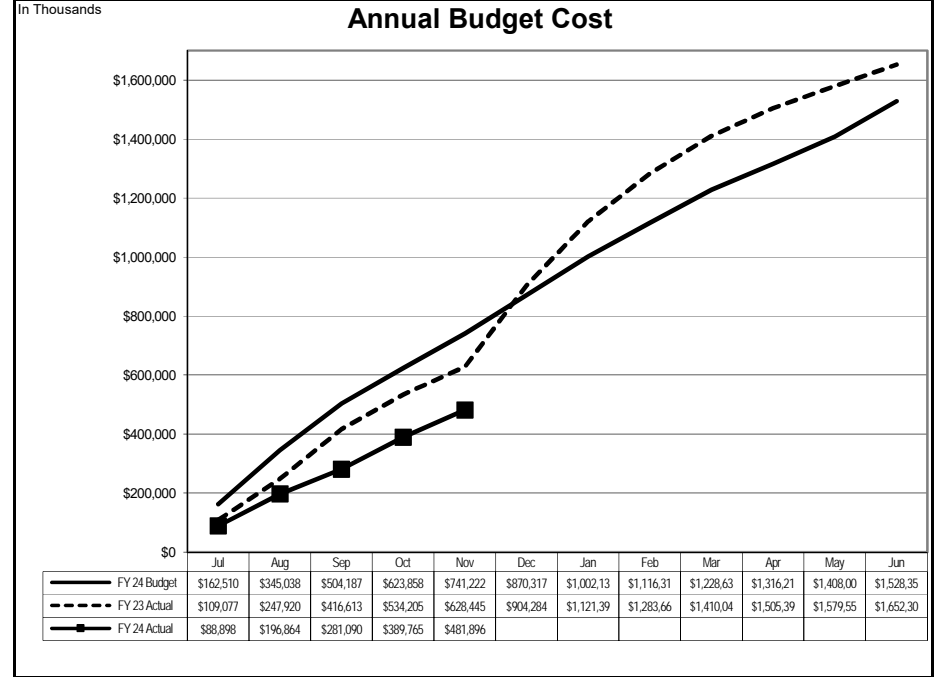
Gerald (Jerry) Santoro was promoted to Supervisor II, Plant, Technical at our Hydroelectric Facilities, effective December 18, 2023. Jerry joined NCPA in 2006 and worked as a Hydro Tech Operator through 2015, where he then expanded his skills and responsibilities, becoming responsible for governor controls and instrumentation. Gerald's knowledge and expertise will be vital in supporting NCPA's Hydroelectric Facilities to ensure excellence in maintenance and safety as we meet our strategic goals.

Separations:

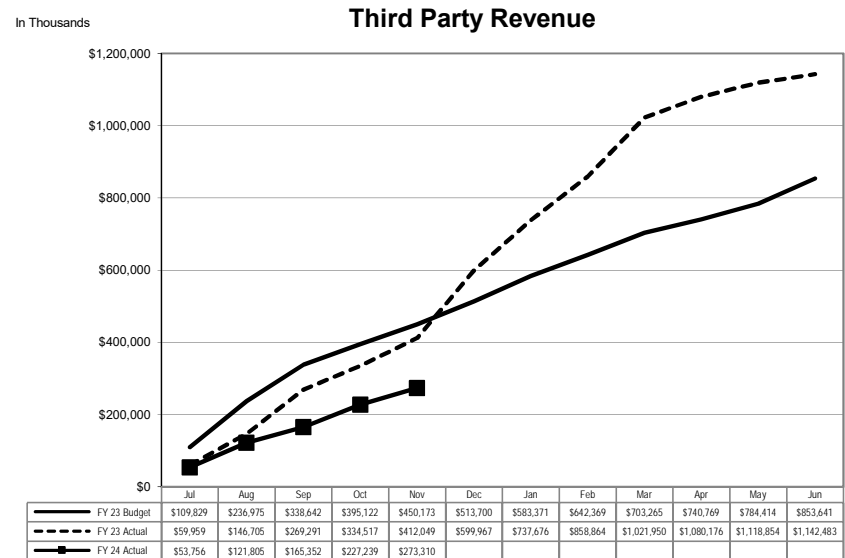
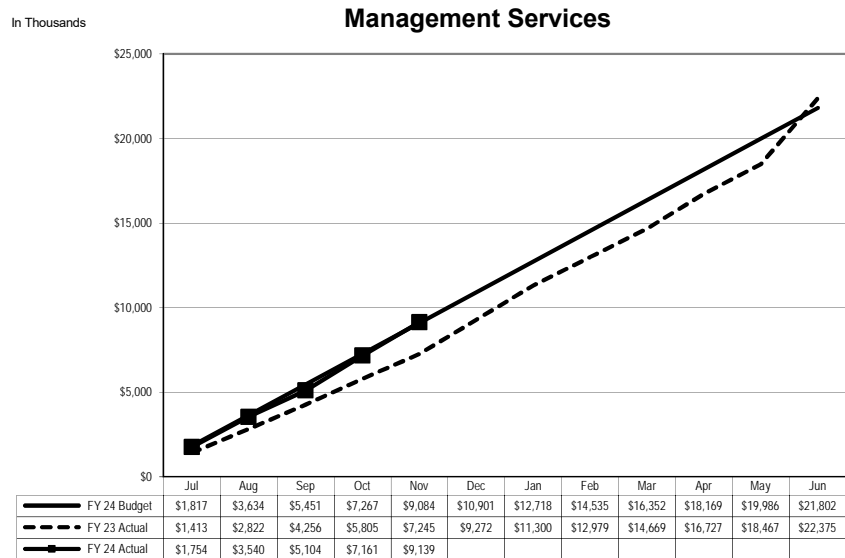
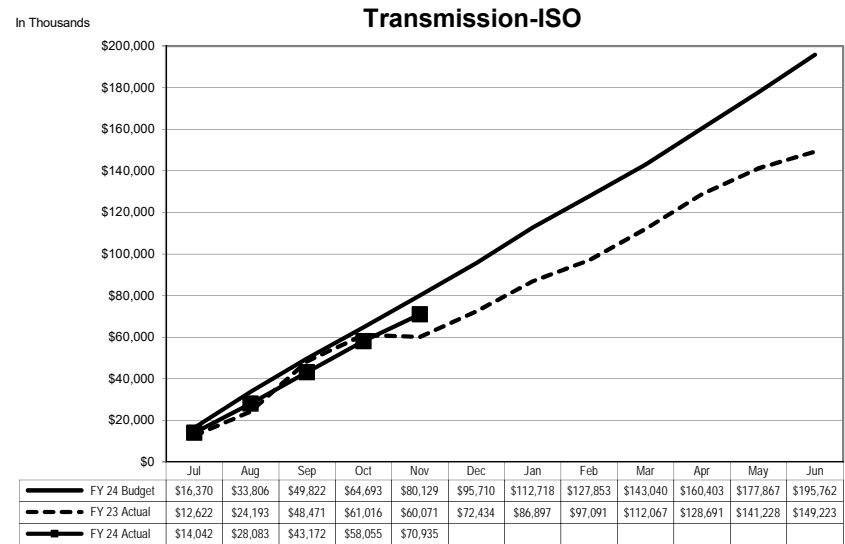
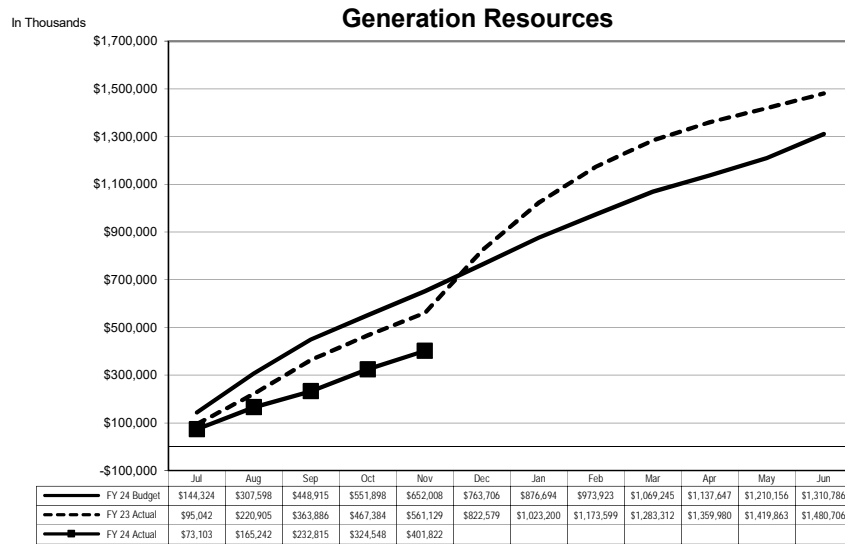
Seneschel Sims resigned from her position as an Office Assistant II at NCPA Headquarters on December 20, 2023, after 1 year of service.

Annual Budget 2023-2024 Fiscal Year To Date As of November 30, 2023

In Thousands	Program			
	Budget	Actual	Under(Ovr) Budget	YTD % Remaining
GENERATION RESOURCES				
NCPA Plants				
Hydroelectric	57,650	24,587	\$ 33,063	57%
Geothermal Plant	50,009	17,395	32,614	65%
Combustion Turbine No. 1	6,932	2,414	4,518	65%
Combustion Turbine No. 2 (STIG)	9,217	3,855	5,362	58%
Lodi Energy Center	136,797	49,171	87,626	64%
	260,605	97,423	163,182	63%
Member Resources - Energy	70,125	33,321	36,804	52%
Member Resources - Energy (Customer)	359	23	336	94%
Member Resources - Natural Gas	2,510	2,169	341	14%
Western Resource	25,839	6,559	19,280	75%
Market Power Purchases	37,309	21,044	16,265	44%
Gross Load Costs	691,439	186,051	505,388	73%
Gross Load Costs (Customer)	220,937	53,744	167,193	76%
Net GHG Obligations	1,363	486	877	64%
Net GHG Obligations (Customer)	-	1,003	(1,003)	
Preliminary Surveys and Investigations	300	-	300	100%
	1,310,786	401,822	908,964	69%
TRANSMISSION				
Independent System Operator	195,762	66,179	129,583	66%
Independent System Operator - Customer	-	4,755	(4,755)	
	195,762	70,935	124,827	64%
MANAGEMENT SERVICES				
Legislative & Regulatory				
Legislative Representation	2,250	859	1,391	62%
Regulatory Representation	763	320	443	58%
Western Representation	768	144	624	81%
Customer Programs	649	193	455	70%
	4,429	1,517	2,913	66%
Judicial Action				
	1,064	215	849	80%
Power Management				
System Control & Load Dispatch	7,900	3,052	4,848	61%
Forecasting & Prescheduling	2,891	1,147	1,744	60%
Industry Restructuring	392	189	203	52%
Contract Admin, Interconnection Svcs & Ext. Affairs	1,176	451	725	62%
Gas Purchase Program	79	25	54	69%
Market Purchase Project	113	33	80	71%
	12,552	4,897	7,655	61%
Energy Risk Management				
	144	57	88	61%
Settlements				
	1,076	258	818	76%
Integrated System Support				
	772	256	516	67%
Participant Pass Through Costs				
	1,765	878	887	50%
Support Services				
	-	1,062	(1,062)	
	21,802	9,139	12,663	58%
TOTAL ANNUAL BUDGET COST	1,528,350	481,896	1,046,454	68%
LESS: THIRD PARTY REVENUE				
Plant ISO Energy Sales	244,824	73,180	171,644	70%
Member Resource ISO Energy Sales	74,477	29,636	44,841	60%
Member Owned Generation ISO Energy Sales	179,429	67,642	111,786	62%
Revenue from Customers	70,212	16,777	53,436	76%
Customer Owned Generation ISO Energy Sales	154,466	381	154,085	100%
NCPA Contracts ISO Energy Sales	45,275	10,704	34,571	76%
Western Resource ISO Energy Sales	31,463	16,276	15,187	48%
Load Aggregation Energy Sales	-	28,909	(28,909)	
Ancillary Services Sales	9,295	772	8,523	92%
Transmission Sales	110	46	64	58%
Western Credits, Interest & Other Income	44,090	28,987	15,104	34%
	853,641	273,310	580,331	68%
NET ANNUAL BUDGET COST TO PARTICIPANTS	674,709	208,586	\$ 466,123	69%

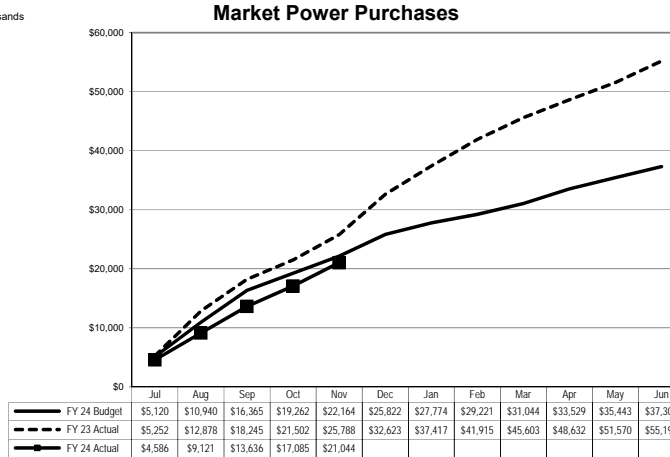
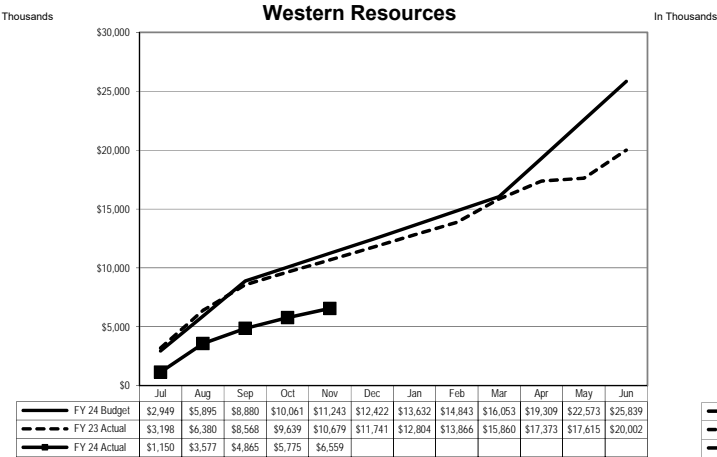
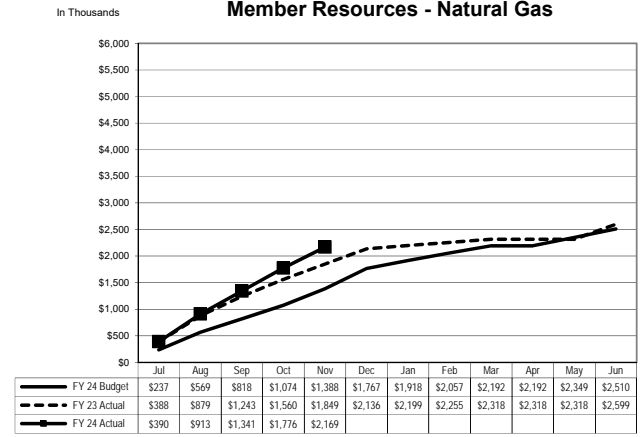
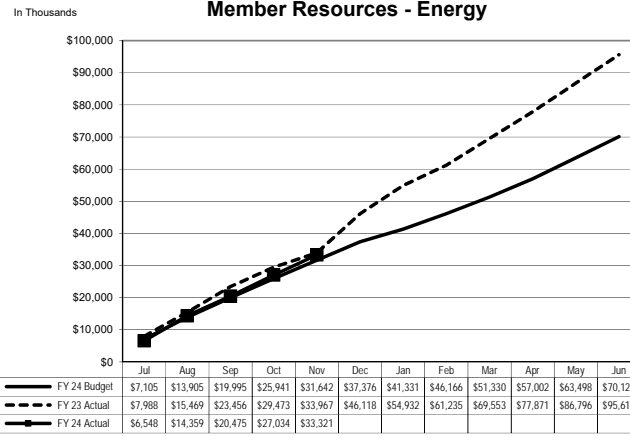
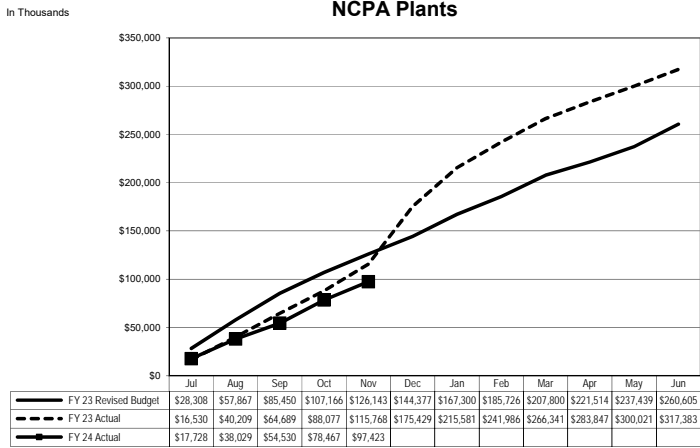


Annual Budget Budget vs. Actual By Major Area As of November 30, 2023

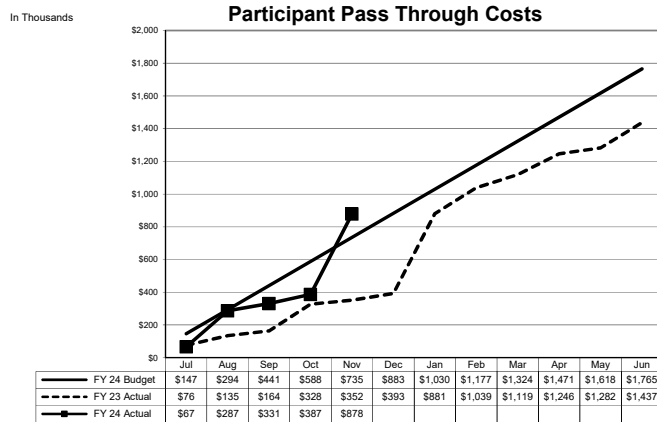
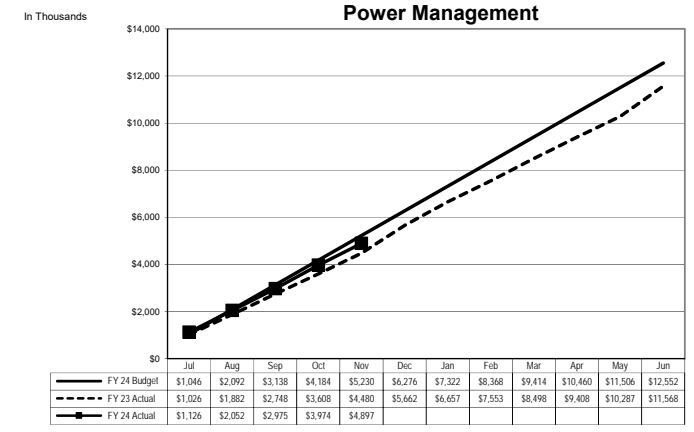
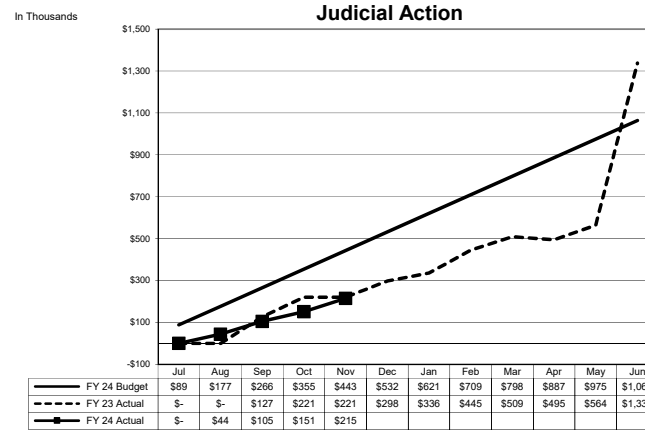
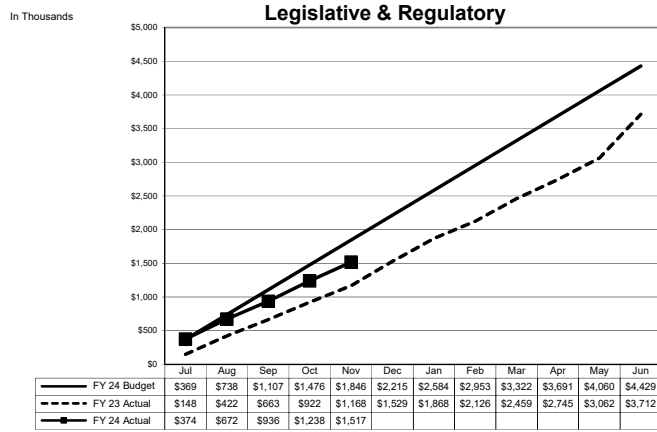


Footnote: Transmission is solely reflective of Independent System Operator (ISO) costs

Annual Budget Cost Generation Resources Analysis By Source As of November 30, 2023



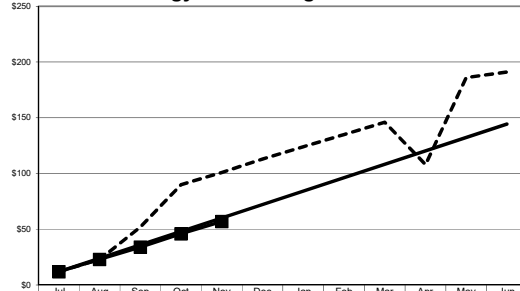
Annual Budget Cost Management Services Analysis By Source As of November 30, 2023



Annual Budget Cost Management Services Analysis By Source As of November 30, 2023

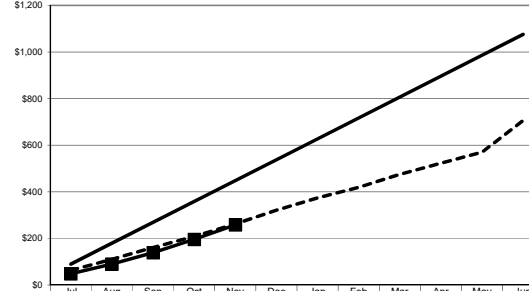
In Thousands

Energy Risk Management



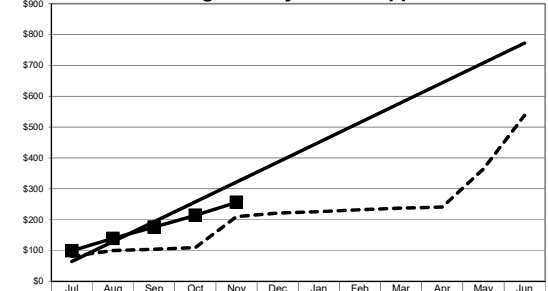
In Thousands

Settlements



In Thousands

Integrated Systems Support



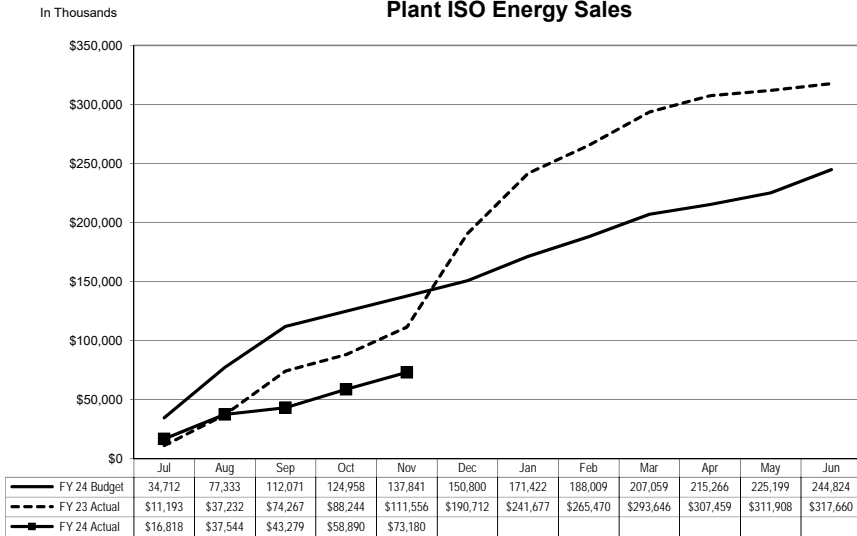
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 24 Budget	\$12	\$24	\$36	\$48	\$60	\$72	\$84	\$96	\$108	\$120	\$132	\$144
FY 23 Actual	\$12	\$23	\$52	\$90	\$101	\$113	\$124	\$135	\$146	\$108	\$186	\$191
FY 24 Actual	\$12	\$23	\$34	\$46	\$57							

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 24 Budget	\$90	\$179	\$269	\$359	\$448	\$538	\$627	\$717	\$807	\$896	\$986	\$1,076
FY 23 Actual	\$63	\$110	\$161	\$208	\$262	\$321	\$374	\$419	\$475	\$523	\$570	\$706
FY 24 Actual	\$48	\$90	\$139	\$196	\$268							

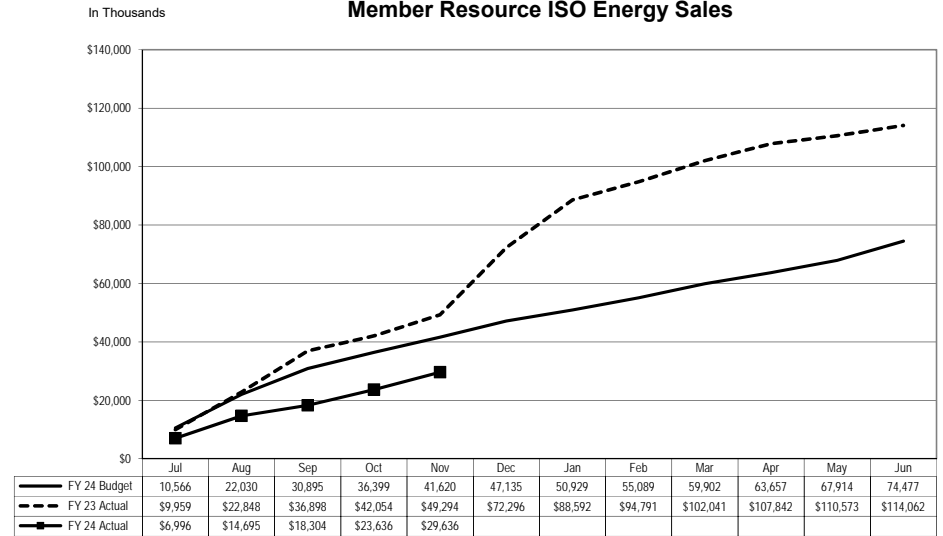
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 24 Budget	\$64	\$129	\$193	\$257	\$322	\$386	\$451	\$515	\$579	\$644	\$708	\$772
FY 23 Actual	\$81	\$100	\$104	\$109	\$210	\$221	\$226	\$232	\$237	\$241	\$364	\$538
FY 24 Actual	\$99	\$139	\$176	\$214	\$256							

**Annual Budget Cost
Third Party Revenue Analysis By Source
As of November 30, 2023**

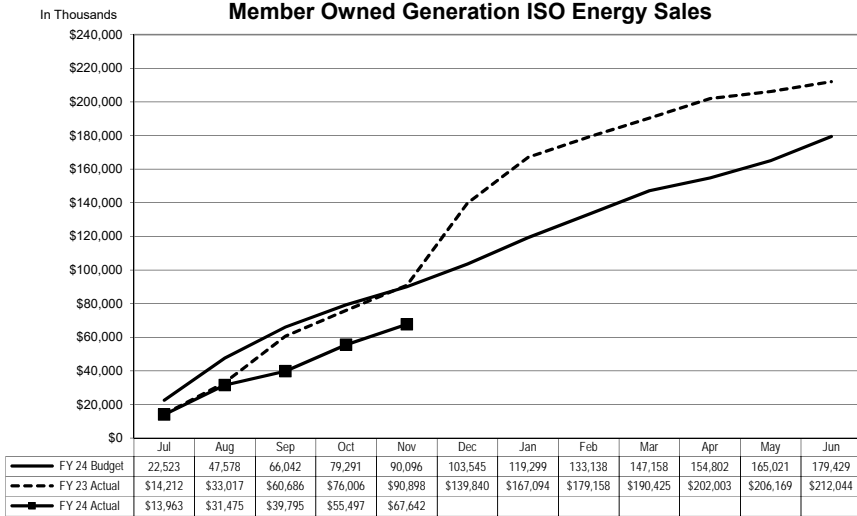
Plant ISO Energy Sales



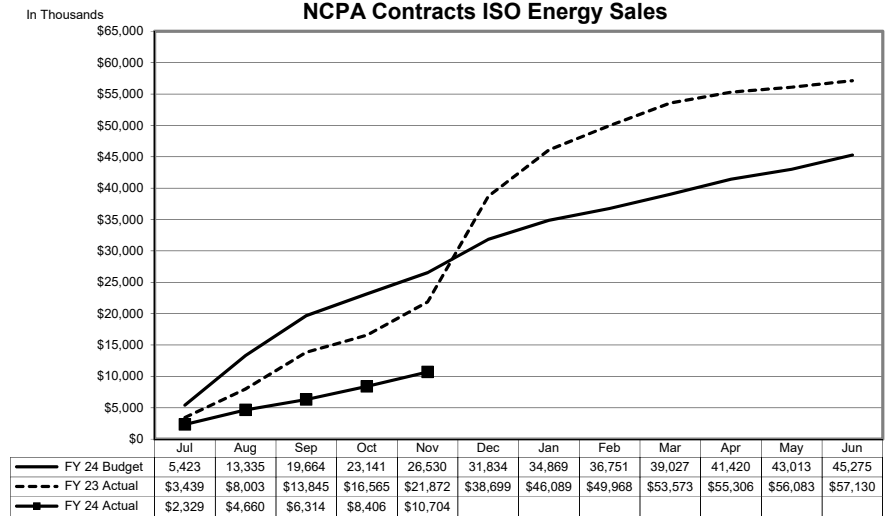
Member Resource ISO Energy Sales



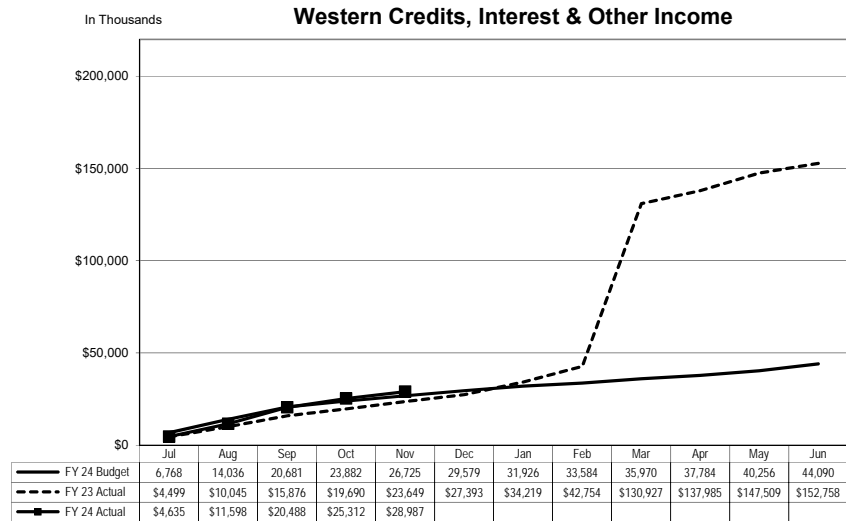
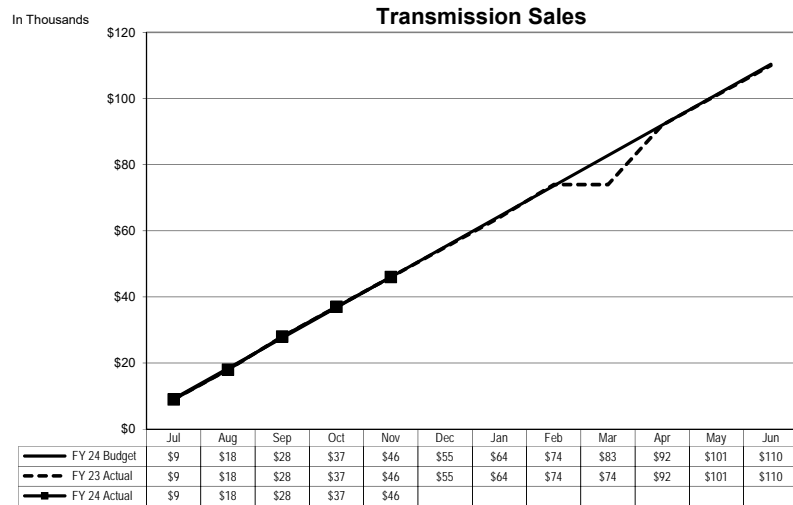
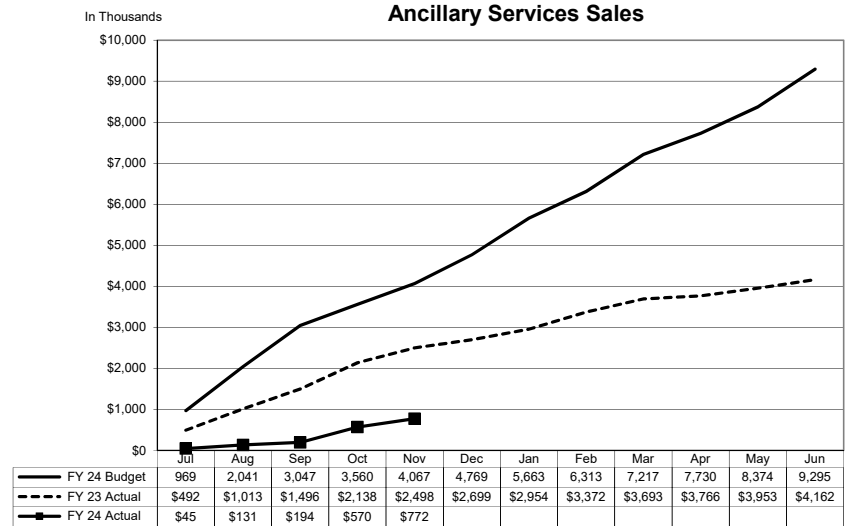
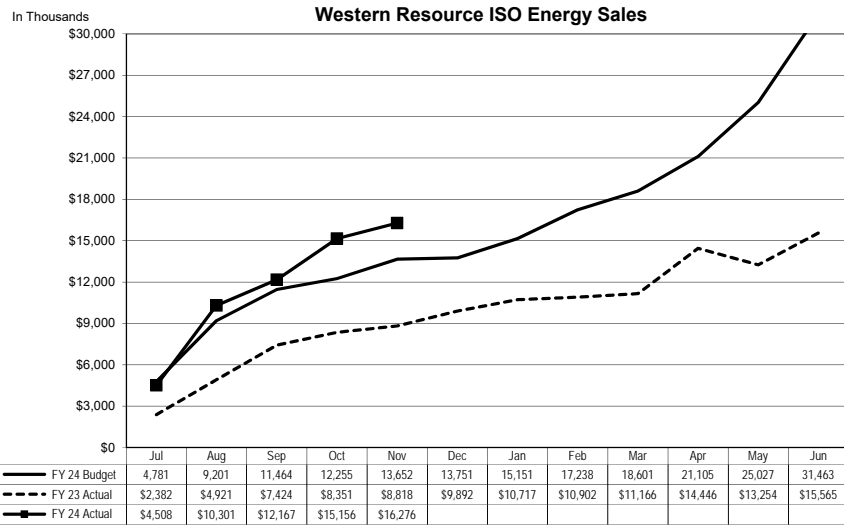
Member Owned Generation ISO Energy Sales



NCPA Contracts ISO Energy Sales



**Annual Budget Cost
Third Party Revenue Analysis By Source
As of November 30, 2023**



**Annual Budget
NCPA Generation Detail Analysis By Plant
As of November 30, 2023**

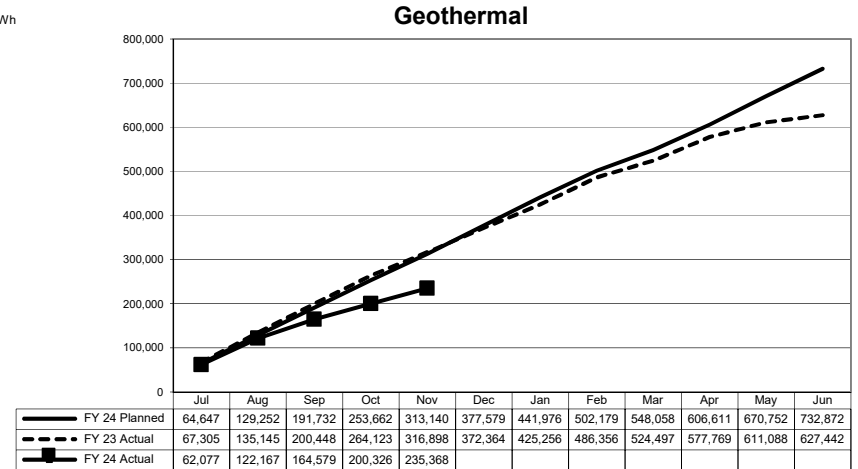
Generation Cost Analysis

\$ in thousands

	Geothermal				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
	Routine O & M	\$ 18,513	\$ 8,861	\$ 37.65	\$ 9,652
Capital Assets/Spare Parts Inventories	14,032	1,950	8.28	12,083	86%
Other Costs	12,998	4,826	20.50	8,172	63%
CA ISO Charges	984	308	1.31	676	69%
Debt Service	3,482	1,451	6.16	2,031	58%
Annual Budget	50,009	17,395	73.91	32,614	65%
Less: Third Party Revenue					
Interest Income	150	269	1.14	(119)	-79%
ISO Energy Sales	65,632	14,276	60.65	51,357	78%
Ancillary Services Sales	-	-	-	-	0%
Effluent Revenues	750	491	2.08	259	35%
Misc	113	47	0.20	66	59%
	66,646	15,082	64.08	51,564	77%
Net Annual Budget Cost to Participants	\$ (16,637)	\$ 2,313	\$ 9.83	\$ (18,950)	114%
Net Generation--MWh @ Meter	732,872	235,368			
\$/MWh (A)	\$ (27.45)	\$ 3.66			

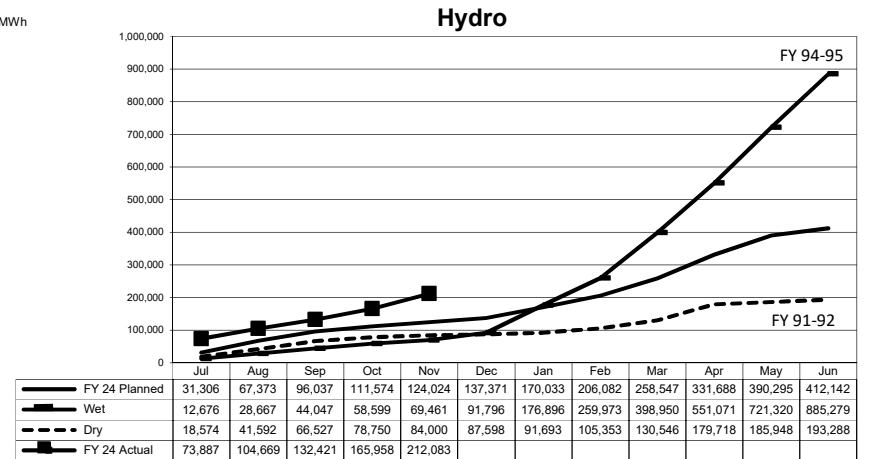
MWhs Generated

In MWh



	Hydroelectric				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
	Routine O & M	\$ 10,555	\$ 4,016	\$ 18.94	\$ 6,539
Capital Assets/Spare Parts Inventories	6,445	2,363	11.14	4,081	63%
Other Costs	4,706	1,688	7.96	3,018	64%
CA ISO Charges	1,298	2,084	9.83	(786)	-61%
Debt Service	34,646	14,436	68.07	20,210	58%
Annual Budget	57,650	24,587	115.93	33,063	57%
Less: Third Party Revenue					
Interest Income	150	203	0.96	(53)	-35%
ISO Energy Sales	47,892	18,710	88.22	29,182	61%
Ancillary Services Sales	4,579	249	1.18	4,330	95%
Misc	-	29	0.14	(29)	0%
	52,622	19,191	90.49	33,430	64%
Net Annual Budget Cost to Participants	\$ 5,029	\$ 5,396	\$ 25.44	\$ (367)	
Net Generation--MWh @ Meter	412,142	212,083			
\$/MWh (A)	\$ (71.86)	\$ (42.62)			

In MWh



Footnotes:

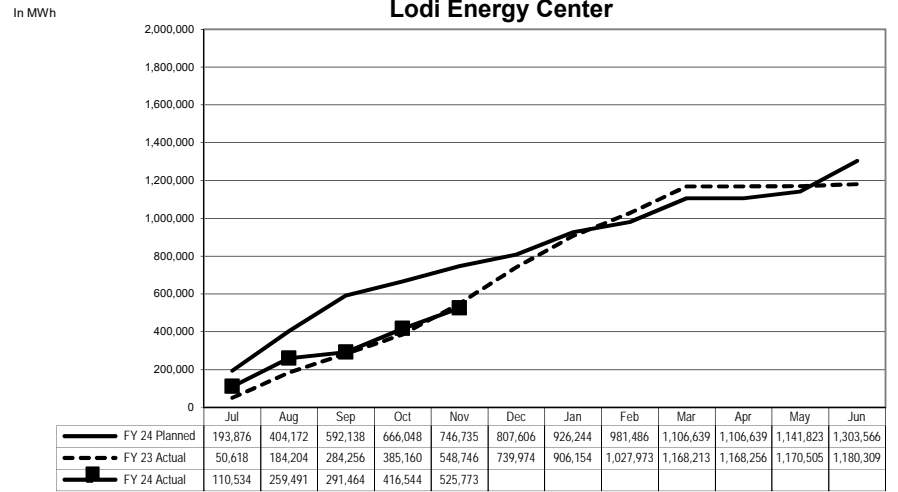
(A) Aggregate fiscal year generation in \$/MWh (excluding debt service)

**Annual Budget
NCPA Generation Detail Analysis By Plant
As of November 30, 2023**

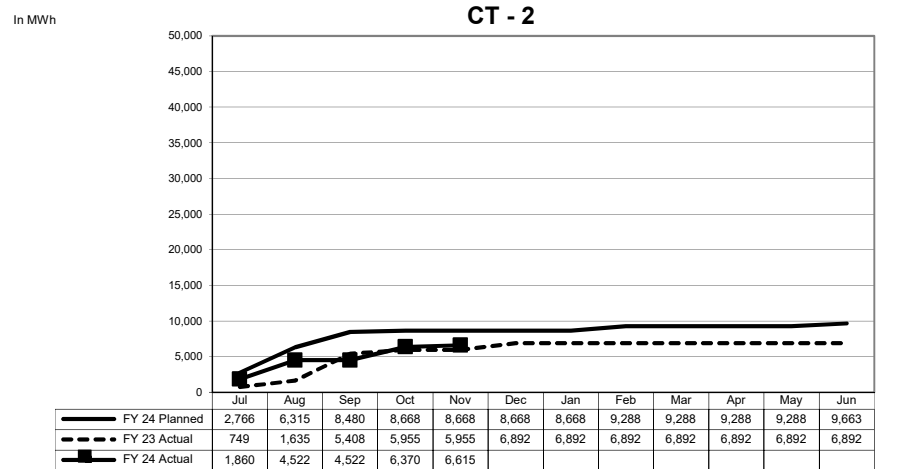
Generation Cost Analysis

	Lodi Energy Center				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
	Routine O & M	\$ 10,580	\$ 5,160	\$ 9.81	\$ 5,421
Fuel	71,518	22,298	42.41	49,220	69%
GHG Allowance Costs	13,985	4,609	8.77	9,376	67%
CA ISO Charges and Energy Purchases	1,364	1,787	3.40	(424)	-31%
Capital Assets/Spare Parts Inventories	3,913	1,124	2.14	2,789	71%
Other Costs	9,445	3,362	6.40	6,083	64%
Debt Service	25,992	10,830	20.60	15,162	58%
Annual Budget	136,797	49,171	93.52	87,626	64%
Less: Third Party Revenue					
Interest Income	250	569	1.08	(319)	-127%
ISO Energy Sales	123,919	37,944	72.17	85,974	69%
Ancillary Services Sales	2,011	461	0.88	1,550	77%
GHG Allowance Credits	13,612	4,609	8.77	9,003	66%
Misc	-	1	0.00	(1)	0%
	139,791	43,584	82.89	96,207	69%
Net Annual Budget Cost to Participants	\$ (2,994)	\$ 5,587	\$ 10.63	\$ (8,581)	287%
Net Generation--MWh @ Meter	1,303,566	525,773			
\$/MWh (A)	\$ (22.24)	\$ (9.97)			

MWhs Generated



	Combustion Turbine No. 2 (STIG)				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
	Routine O & M	\$ 1,674	\$ 690	\$ 104.26	\$ 984
Fuel and Pipeline Transport Charges	1,177	697	105.36	480	41%
GHG Allowance Costs	171	-	-	171	100%
Capital Assets/Spare Parts Inventories	390	32	4.85	357	92%
Other Costs	728	272	41.11	457	63%
CA ISO Charges	19	57	8.64	(38)	-199%
Debt Service	5,058	2,108	318.62	2,951	58%
Annual Budget	9,217	3,855	582.84	5,362	58%
Less: Third Party Revenue					
Interest Income	42	87	13.16	(45)	-107%
ISO Energy Sales	2,828	1,074	162.33	1,754	62%
Ancillary Service Sales	-	-	-	-	0%
Fuel and Pipeline Transport Credits	951	1,134	171.46	(183)	-19%
GHG Allowance Credits	171	-	-	171	100%
Misc	-	0	0.02	(0)	0%
	3,992	2,295	346.97	1,697	43%
Net Annual Budget Cost to Participants	\$ 5,226	\$ 1,560	\$ 235.87	\$ 3,665	70%
Net Generation--MWh @ Meter	9,663	6,615			
\$/MWh (A)	\$ 17.30	\$ (82.75)			



Footnotes:

(A) Aggregate fiscal year generation in \$/MWh (excluding debt service)

**Annual Budget
NCPA Generation Detail Analysis By Plant
As of November 30, 2023**

Generation Cost Analysis

	Combustion Turbine No. 1				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 2,597	\$ 931	\$ 267.18	\$ 1,666	64%
Fuel and Pipeline Transport Charges	2,388	406	116.62	1,982	83%
Capital Assets/Spare Parts Inventories	1,045	463	132.82	582	56%
Other Costs	852	331	95.15	521	61%
CA ISO Charges	50	283	81.35	(233)	-465%
Debt Service	-	-	-	-	-
Annual Budget	6,932	2,414	693.12	4,518	65%
Less: Third Party Revenue					
Interest Income	55	71	-	(16)	-29%
ISO Energy Sales	4,552	1,176	337.58	3,376	74%
Ancillary Services Sales	-	-	-	-	0%
Misc	-	-	-	-	0%
	4,607	1,247	337.58	3,360	73%
Net Annual Budget Cost to Participants	\$ 2,325	\$ 1,167	\$ 335.11	\$ 1,158	50%
Net Generation--MWh @ Meter	14,872	3,483			
\$/MWh (A)	\$ 156.32	\$ 335.11			

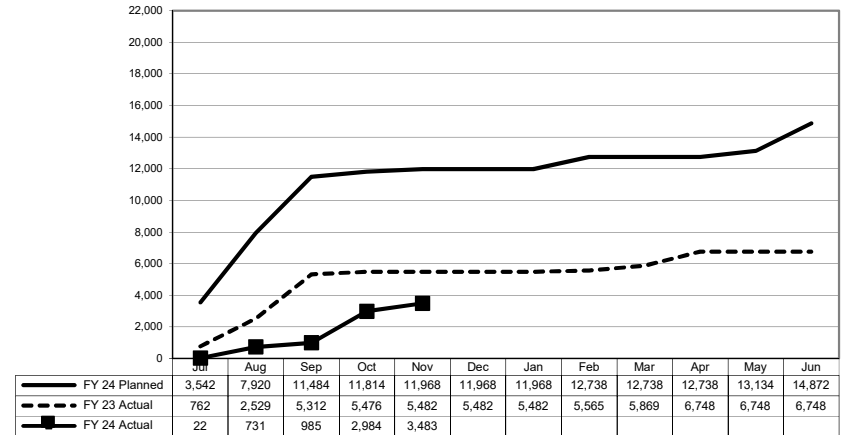
Footnotes:

(A) Aggregate fiscal year generation in \$/MWh (excluding debt service)

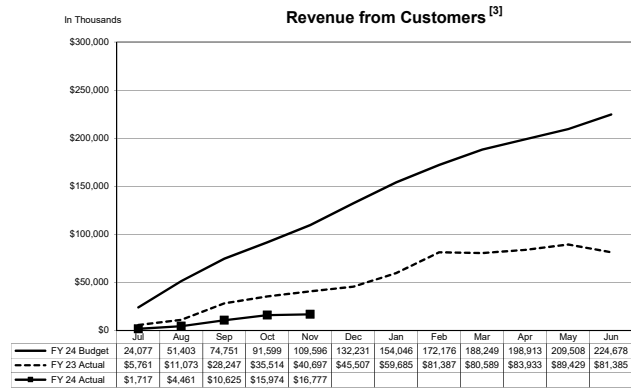
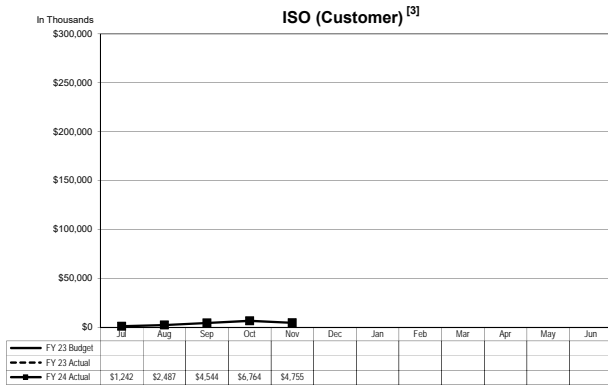
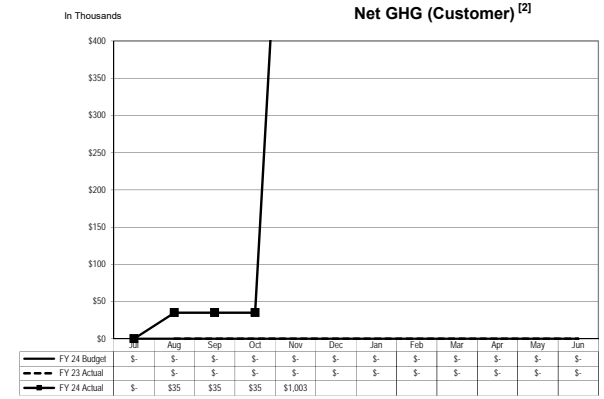
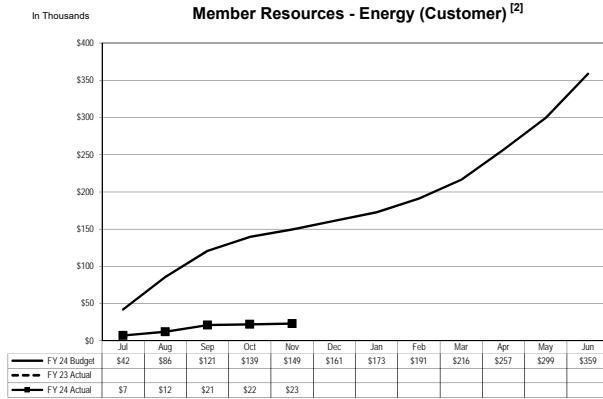
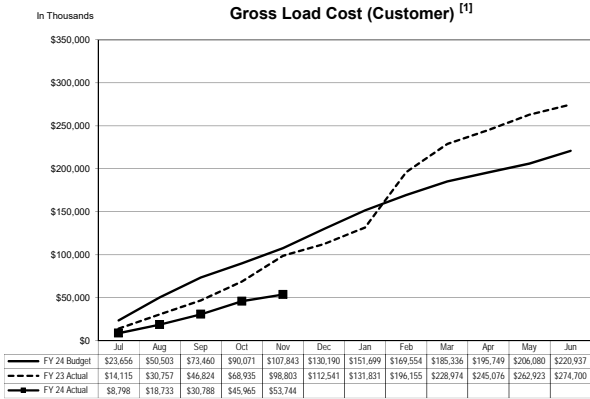
MWhs Generated

In MWh

CT - 1



**Annual Budget Cost
NCPA Customers
As of November 30, 2023**



- Notes:
- 1 Energy purchased by customers
 - 2 Power generators and customer owned resources
 - 3 Pertains to all customers