



**SEPTEMBER
2023**

**BUSINESS PROGRESS
REPORT**



Northern California Power Agency
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Generation Costs & Reliability

Combustion Turbine Project

Unit Operation for August 2023

Unit	Availability		Production		Reason for Run
CT1 Alameda	Unit 1	Unit 2	Unit 1	299.7 MWh	CAISO / CAISO
	100.0%	100.0%	Unit 2	295.4 MWh	
Curtailments, Outages, and Comments:					
Unit 1:	8/1 - 8/31: AT&T comms service failure, requires 3 hour start time for local start. OMS 13812250 (ongoing).				
Unit 2:	8/1 - 8/31: AT&T comms service failure, requires 3 hour start time for local start. OMS 13812252 (ongoing).				
Unit	Availability		Production		Reason for Run
CT1 Lodi	99.02%		234.5 MWh		CAISO
Curtailments, Outages, and Comments:					
8/22 @ 06:00 - 13:17; Load gear oil leak repair, OMS 14131440					
Unit	Availability		Production		Reason for Run
CT2 STIG	98.9%		2,380.0 MWh		CAISO
Curtailments, Outages, and Comments:					
8/06 @ 16:45 - 18:36; High oil temp indication, OMS 14051644 8/08 @ 07:00 - 13:27; Steam drain repair, OMS 14041081					
Unit	Availability		Production		Reason for Run
LEC	99.2%		146,332 MWh		CAISO
Curtailments, Outages, and Comments:					
08/16 @ 03:14 - 06:45; Feedwater load control valve trip, OMS 14109663 08/22 @ 19:44 - 22:25; Feedwater control valve trouble, OMS 14150920					

Maintenance Summary – Specific per asset above.

Geothermal Facilities

Availability/Production for August 2023

Unit	Availability		Net Electricity Generated/Water Delivered		Out-of-Service/Descriptors
Unit 1	0	%	0	MWh	U1 down for outage
Unit 2	100	%	26,575	MWh	U2 in service
Unit 3	N/A	%	N/A	-	Unit 3 remains out of service.
Unit 4	100	%	33,505	MWh	U4 in service
Southeast Geysers Effluent Pipeline	100	%	169.9	mgallons	Average flow rate: 4,209 gpm
Southeast Solar Plant	N/A		162,935	KWh	Year-to-date KWh: 1,314,491
Bear Canyon Pump Station Zero Solar	N/A		116,033	KWh	Year-to-date KWh: 1,025,926

* Accounts for an additional 1,486 MWh of house load for the 21KV power supply to the effluent pipeline supplied from Unit #2.

Hydroelectric Project

Availability/Production for August 2023

Units	Availability	Net Electricity Generated	Out-of-Service
Collierville Unit 1	98.41%	17209 MWh	CV Unit 1 – Out of Service on 8/15/23 from 0733 to 1135 for Collector Ring Brush Replacement and on 8/17/23 from 0032 to 0820 for CB1412 air system trouble.
Collierville Unit 2	99.07%	10665 MWh	CV Unit 2 – Out of Service on 8/2/23 from 0904 to 1145 for Collector Ring Brush Replacement and on 8/21/23 from 0724 to 1136 for Generator Air cooler leak.
Spicer Unit 1	99.77%	1027 MWh	NSM1- Out of Service on 8/4/23 from 1001 to 1058 for Liberty Hill microwave trouble and on 8/18/23 from 1039 to 1131 for DTT comm trouble.
Spicer Unit 2	99.74%	1604 MWh	NSM2- - Out of Service on 8/4/23 from 1003 to 1104 for Liberty Hill microwave trouble and on 8/18/23 from 1039 to 1131 for DTT comm trouble.
Spicer Unit 3	99.92%	276 MWh	NSM3- Out of Service on 8/4/23 from 1003 to 1104 for Liberty Hill microwave trouble and on 8/18/23 from 1039 to 1131 for DTT comm trouble.

Operations & Maintenance Activities:

- CMMS work orders
- NSM Recreation Facilities Ongoing
- 230kV line vegetation management
- Annual Outages Prep work
- FEMA/OES storm damage engineering/administration
- DOE 247 LOIs submitted
- McKays sedimentation ERP completed
- Repairing snow damage
- Extensive FERC coordination on additional compliance requirements

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

- There were no Lost Time or Cal OSHA Recordable accidents in the month of August. There was one vehicle accident at the Geothermal facility. On August 10, a Geo employee driving a fleet vehicle ran into the back of a stopped vehicle on Highway 29 in Saint Helena, resulting in minor cosmetic damage for both vehicles.
- 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 August 26, 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.

August 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	1,019	61	50	4,048
Work Hours Since Last Recordable	89,401	11,768	11,580	2,989,417
LTA's (this month)	0	0	0	0
LTA's (calendar year)	0	1	0	0
Days without LTA	5,798	80	10,968	7,061
Work Hours without LTA	521,970	15,623	881,825	2,611,435
Vehicle Incident (month)	0	1	0	0
Vehicle Incident (calendar year)	0	3	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 August 26, 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

	August 2023		Calendar Year 2023	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	440.7 8/15 @ 1700	220,615	440.7 8/15 @ 1700	1,523,720
SVP	669.22 8/23 @ 1600	411,876	669.22 8/23 @ 1600	3,054,491
MSSA	1103.22 8/23 @ 1700	632,491	1103.22 8/23 @ 1700	4,578,211

Last Year 2022 Data*

	August 2022		Calendar Year 2022	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	442.05 8/16 @ 1800	218,976	511.56 9/6 @ 1600	1,518,048
SVP	645.81 8/16 @ 1700	405,477	687.74 9/6 @ 1300	2,987,301
MSSA	1085.82 8/16 @ 1700	624,453	1176.2 9/6 @ 1400	4,505,349

*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		
	August 2023	Calendar Year 2023
MSSA % Within the Band	98.86%	97.39%

CAISO Real-time Contingency Dispatches (RTCD):

1. 0324 hours, 8/9/23

CAISO Energy Emergency Alerts (EEA):

08/10/2023 13:30:00	CAISO Grid Restricted Maintenance Operations [202302778] The California ISO is declaring CAISO Grid RESTRICTED MAINTENANCE OPERATION for the period from 08/15/2023 12:00 through 08/15/2023 22:00
08/10/2023 13:31:00	CAISO Grid Restricted Maintenance Operations [202302779] The California ISO is declaring CAISO Grid RESTRICTED MAINTENANCE OPERATION for the period from 08/16/2023 12:00 through 08/16/2023 22:00.
08/11/2023 11:30:00	CAISO Grid Restricted Maintenance Operations [202302780] The California ISO is declaring CAISO Grid RESTRICTED MAINTENANCE OPERATION for the period from 08/17/2023 12:00 through 08/17/2023 22:00
08/24/2023 15:00:00	CAISO Grid Restricted Maintenance Operations [202302784] The California ISO is declaring CAISO Grid RESTRICTED MAINTENANCE OPERATION for the period from 08/28/2023 12:00 through 08/28/2023 22:00
08/24/2023 15:01:00	CAISO Grid Restricted Maintenance Operations [202302785] The California ISO is declaring CAISO Grid RESTRICTED MAINTENANCE OPERATION for the period from 08/29/2023 12:00 through 08/29/2023 22:00.
08/24/2023 15:02:00	CAISO Grid Restricted Maintenance Operations [202302786] The California ISO is declaring CAISO Grid RESTRICTED MAINTENANCE OPERATION for the period from 08/30/2023 12:00 through 08/30/2023 22:00.

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

1. 8/27/23: PG&E Issued a PSPS Watch for August 30-31, 2023, for the following counties:
 - a. Colusa, Glenn, Lake, Napa, Shasta, Tehama, and Yolo
2. 8/29/23: PG&E issued a PSPS Warning for 8/30/23, for the following counties:
 - a. Colusa, Glenn, Shasta, Tehama, Lake, Napa, Yolo, and Butte

Pooling, Portfolio Planning & Forecasting

- NCPA Pool loads during August 2023 were 220,464 MWh versus the budget forecast of 212,005 MWh, resulting in a forecast error of 3.84%. The current weather outlook for the remainder of September 2023 is for below normal temperatures. The Pool's September load forecast is 197,849 MWh compared with extrapolated actuals of 187,181 MWh as of September 26, 2023.
- Lodi Energy Center (LEC) ran 600 hours and produced 148,958 MWh. Due to the current cool weather LEC is not expected to run during the next two weeks.
- During August 2023, 0.99" of rain was recorded at the Big Trees gauge. August average rainfall at Big Trees is 0.26".
- The Value of Storage (VOS) of New Spicer Meadow Reservoir (NSMR) has been decreased to \$90/MWh. Releases from NSMR ranged from 175cfs to 650cfs during August.
- New Spicer Meadows storage as of August 31, 2023 was 159,759 acre feet. The historical average storage at the end of August is 118,059 acre feet. As of September 26th, storage was 147,070 acre feet.
- Combined Calaveras Project generation for the Pool in August 2023 totaled 30,661MWh, down from 37,704MWh in July 2023.

- Western Base Resource (BR) deliveries for the Pool during August 2023 were 58,934 MWh. The Displacement Program provided an additional hedge of 2,313 MWh in the form of an NP15 Inter-Schedule Coordinator Trade (IST) at NP15. The Pool's share of expected total delivery from the Western Base Resource for September 2023 is 32,920 MWh, with 28,531 MWh having already been delivered. The POOL also received another 3,470 MWh in the form of an NP15 IST through September 26, 2023.
- The PG&E Citygate gas index averaged \$5.18 / MMBtu during the month of August as compared to an average of \$4.57 for July. September's 2023 average City Gate gas price was \$3.72 through the 26th. The PG&E Citygate forward price for October 2023 is \$4.15 / MMBtu.
- Day-Ahead PG&E DLAP electricity prices for August averaged \$78.69 / MWh On-Peak and \$56.75 Off-Peak, with a high of \$1,133 and a low of \$31.85. DLAP prices have averaged \$46.82 On-Peak and \$41.75 Off-Peak for the period September 1st through the 26th, with a low price of \$16.72 and a high of \$106.12. The forward power prices for October are \$58.02 On-Peak and \$57.48 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 November 2023:
 - Monthly System Resource Adequacy Demonstration (filed September 17, 2023)
 - Monthly Supply Plan (filed September 17, 2023)

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:

Gas Resource Management Working Group

The Gas Resource Management working group stakeholder process focuses on ensuring gas resources are able to fully participate in ISO run markets while efficiently recovering their operational cost.

- Aligning gas and electric market timelines.
- Cost recovery
 - FERC filing required when energy sold above \$1,000 soft offer cap
 - Penalties and risk-associated costs are difficult to reflect in bids
- Bidding Flexibility
 - Is 125% cap sufficient
 - Automated reference level (default start-up, min load, and energy bids) change process is labor intensive for SCs with large gas fleets and are limited by a "Reasonableness Threshold"
 - Manual reference level change may not be approved and updated until several hours in the current gas day.

- Consider how hydrogen, a future green alternative gas, should be incorporated efficiently into CAISO markets
- Resource specific limitations
 - Effects of non-backbone resources with higher transmission rates on optimization and emissions as more efficient units are priced out of market
- Gas system limitations
 - Operational flow orders
 - Liquidity of the different gas markets
 - Accounting for differences in gas systems and storage capabilities.

New Resource Opportunities

- Lodi CT2 Conversion – LM5000 conversion to LM6000. Sierra Local Flex cat 1 RA. Hydrogen capable
- Grace Solar – PCC1 located in Riverside County, CA. COD Dec. 2027
- 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	-		\$1,275,846	\$ 102.17	\$ -	\$ 31.95
Oct-23	7,510	-		\$672,803	\$ 89.59	\$ -	\$ 32.42
Nov-23	12,128	-		\$672,803	\$ 55.48	\$ -	\$ 31.90
Dec-23	721	-		\$672,803	\$ 933.15	\$ -	\$ 32.34
Jan-24	11,160	-		\$672,803	\$ 60.29	\$ -	\$ 31.97
Feb-24	16,835	-		\$672,803	\$ 39.96	\$ -	\$ 30.88
Mar-24	11,662	-		\$672,803	\$ 57.69	\$ -	\$ 30.35
Apr-24	37,152	-		\$1,774,034	\$ 47.75	\$ -	\$ 31.91
May-24	66,765	-		\$1,774,034	\$ 26.57	\$ -	\$ 34.84
Jun-24	70,929	-		\$1,774,034	\$ 25.01	\$ -	\$ 35.57

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 61,247 MWh of Base Resource (BR) energy in August 2023. This includes displaced energy of 2,313 MWh. MEEA savings was negative at \$(58,300) and displacement savings was approximately \$14,630.
 - September 2023 WAPA Twelve-Month Rolling Forecast of CVP Generation and Base Resource.

- FY 2023 BR Generations (actuals October 2022 through August 2023; projection for September 2023)
 - FY23 Projected BR for NCPA Pool is 381,430 MWh.
 - Projected FY23 BR Generation using 90% forecast is about 20% below the historical average.
 - Projected FY23 BR Generation using 50% forecast is about 19% below the historical average.

- 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 comment due dates were extended a couple times, the deadline ended up being July 21th. Reclamation received 57 public comments but did indicate they will not be providing written responses to these comments.
 - On July 25, 2023 Reclamation held a meeting for Trinity River Interested Party. The purposes of this meeting was to engage with interested parties and hear ideas and concerns. They also introduced the Tribal Co-Leads (Hoopa Valley tribe and Yurok Tribe).
 - Monthly Interested Party Technical Meetings has been cancelled until further notice.
 - In response to the comments Reclamation received for the preliminary draft alternatives, they added Alternative 5 and labeled that as Power focused and Alternative 6 labeled as Carryover Focused. Alternative 5 was created based on WAPA’s comments and Alternative 6 is based on comments from non-government entities and Trinity. Reclamation also went over how these two added alternative fit in the Storage Management, Variable Instream Flows and Temperature management criteria. Reclamation seems to continue to lean towards alternative 2 and may incorporate certain components from Alternative 5 and 6.
 - Alternative 5 suggest vetting through modeling approaches. To pivot from Long Term average from the 50/50 split between Trinity Basin and Sacramento basin and shift some of ROD water out of releases to rebuild cold water storage. Also minimal diversions in Sacramento River to promote project generation.
 - Alternative 6 mostly focused on higher minimum storage in Trinity Lake and carrying water volumes from one water year to the next and no summer flow reductions.

- Reclamation requested Power Customers to provide final description for Alternative 5 by September 29, 2023.
- Draft Cooperating Agency Environmental Impact Statement (EIS) sent to Cooperating Agencies on 9/15. Comments are due on October 16th, 2023.
 - WAPA, SMUD, Roseville, Redding listed as cooperating agencies.
 - NCPA is looking to be a cooperating agency as well (TBD).
- Pending decision on whether there will be a separate EIS for the Trinity portion.

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 protested the refunds calculation citing three issues
- ISO stated it will not issue refunds until there is a FERC Order on PG&E's compliance filing

Current Status

- JI and PG&E settled two of the three outstanding issues
- In May 2023, FERC ruled in customers' favor on the income tax accounting issue (the third outstanding issue), and ordered PG&E to make another compliance filing by June 20
- CAISO will issue refunds once FERC issues an order on the compliance filing

CAISO Initiative – 2023 Interconnection Process Enhancements Track 2 – NCPA Comments Summary

- Noted if access to interconnection capability is to be determined or prioritized by existing capacity and capacity additions approved in the CAISO TPP, there must be a mechanism for non-jurisdictional LSEs to include their planned resources in the TPP planning process.
- Supported the concept of organizing intake to the Interconnection Queue by prioritizing projects identified in the resource portfolios of LSEs.
- Opposed the use of an auction mechanism to allocate access to grid interconnection. Stated as a load-serving entity that recognizes that load pays the vast majority of CAISO costs, NCPA is focused on reducing costs to its customers. The auction appears to create additional costs that will be passed onto load.

PG&E RY2024 Formula Rate Annual Update

TO-20 was PG&E's first formula rate filing. After the formula is set/final, the revenue requirement is revised through an annual update. This process is FERC approved and allows for a pass through of changing costs without further approval. Amounts charged by PG&E are later trued-up to recorded cost.

Annual update schedule is as follows:

- July 1 – Utility posts proposed cost for the next calendar year
- July 1 – Oct 15 – Customers examine new costs and issue discovery
- August 15 – Sept 1 – Technical Conference
- November 1 – Last changes to Annual Update
- December 1 – Utility submits to FERC
- January 1 – New revenue requirement becomes effective

PG&E's Revenue Requirement for RY2024 (Jan 1 – Dec 31, 2024) is as follows:

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 are PG&E's:

- Prior Over Collections
- \$83M decrease to Administrative and General expenses
- \$6.8M decrease to Operations and Maintenance expenses
- ~\$285M decrease to the Accumulated Depreciation Reserve

Key Notes

- Numbers are subject to change especially since PG&E as not filed its 2024 Transmission Revenue Balancing Account Adjustment
- Indications of upward rate pressure in the future years, \$2B in forecasted capital additions next year
- In Oct, 2023 PG&E will file it's TO-21 formula for rates effective Jan 1, 2024

Next Steps

- TANC is now engaged in the 2024 TRR review process to negotiate with PG&E over amounts found to be excessive or unsupported

Debt and Financial Management

- The Consumer Price Index rose 0.6% over the last month and 3.7% over the prior year in August. The year-over-year increase was slightly higher than economist forecasts of a 3.6% annual jump, according to data from Bloomberg. A significant rise in energy prices drove the bulk of those increases.
- At their September meeting, the Federal Reserve held its key interest rate steady but signaled another hike is likely this year amid still elevated inflation and a sturdy economy. The latest decision leaves the benchmark short-term rate at a 22-year high of 5.25% to 5.5%. It marks just the second meeting at which the Fed hasn't raised its federal funds rate since it began its hiking campaign in March 2022.
- The NCPA team and the Finance Committee members want to thank Catalina Sanchez, City of Gridley, for serving as the Chair of the Finance Committee. She was appointed to this role in 2021 and during this time, she provided staff with direction, input, suggestions, and recommendations on a wide variety of financial matters. Catalina will continue to be actively involved in other NCPA committees. Thank you, Catalina!

Schedule Coordination Goals

Software Development

- Applications and Enhancements
 - RPS app with WREGIS API integration development and testing is on-going
 - Development of the NCPA Logger app replacement of the legacy system is on-going, estimated 6-12 month development timeline split into multiple phases
- Integrations
 - EBCE's Daggett PV and BESS resources successful for September 2023 COD
 - On-going various new resource integrations for Q3 and Q4 COD
 - SVP's GRIZZLY resource re-integration for November 2023 COD

Network

- SCADA and Networking team is currently working with a number of stakeholders to bring online the Scarlett 1A and 1B solar project in the coming months. Meetings have been conducted and information has been shared in an effort to establish real-time telemetry to the project in the near future.
- 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. Several new draft recovery procedures for a variety of cyber assets have been developed and will continue to be refined.
- Operations and Support Oracle DBA team has rolled out phase 2 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 worked closely with the Generations Services CT staff to implement a new ANIRA wireless backup solution for a downed circuit at Alameda. Going forward the plan is to extend this method to LEC and Lodi CT.

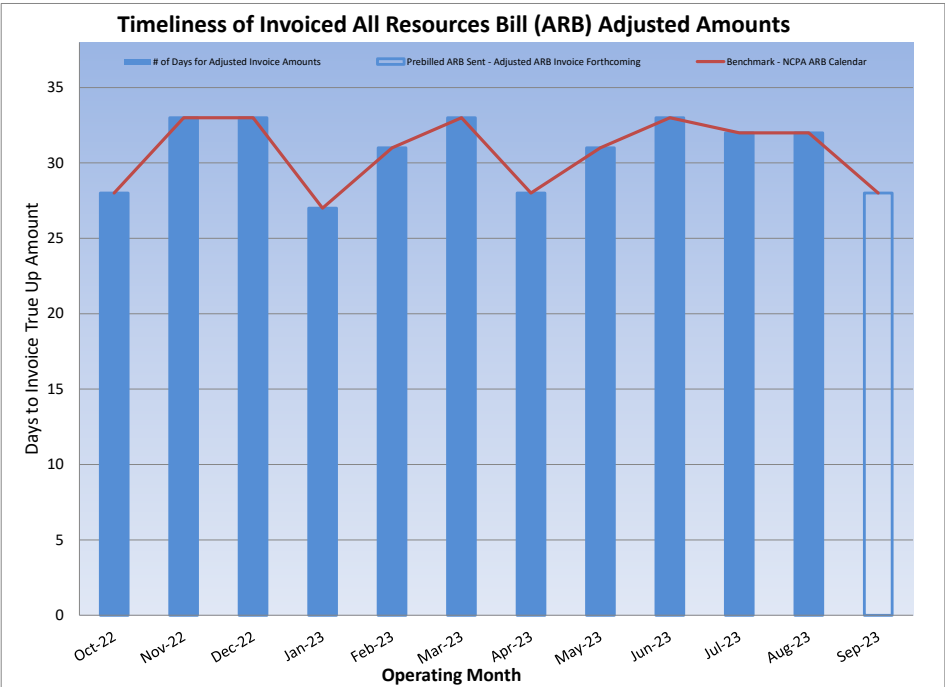
NCPA Bills & Settlements

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 September 2023 NCPA All Resources Bill (ARB) monthly invoice sent to members on August 26, 2023 contains:

- September 2023 monthly pre-billed budget/forecast amounts;
- July 2023 (1st Adjustment) NCPA Project and CAISO Initial settlement true-ups;
- June 2023 (2nd Adjustment) NCPA Project settlement true-up and T+20 business day recalculated CAISO settlement true-up allocations;
- April 2023 (3rd Adjustment) T+70 business day recalculated CAISO settlement true-up allocations and NCPA Projects true-up;
- August 2022 (4th Adjustment) T+11-month recalculated CAISO settlement true-up allocations;
- October 2021 (5th Adjustment) T+21-month recalculated CAISO settlement true-up;
- June 2021 (6th Adjustment) T+24-month recalculated CAISO settlement true-up;
- September 2020 (6th Adjustment) T+33-month recalculated CAISO settlement true-up;
- June 2020 (7th Adjustment) T+36-month CAISO settlement true-up;



Legislative & Regulatory

Customer Programs Update:

- NCPA issued a Request for Proposals (RFP) on September 18 for demand-side management (DSM) program services, including the evaluation, measurement, and verification of energy efficiency and electrification programs. NCPA's three existing contracts for DSM program services are expiring year the end of the year, and Members have requested that NCPA enter into new contracts for continued services. Responses are due by October 13, 2023, and agreements are expected to be in place in December 2023.

State Legislative Update:

- After nine months of deliberations and negotiations, the 2023 legislative session concluded on September 15, 2023. Several bills related to California's energy policies were sent to the Governor's desk for signature. As of September 26, 2023, the Governor has not yet signed or vetoed any of those energy measures. NCPA and its public power partners were successful in advancing key legislation to address safety concerns related to CARB's Advanced Clean Fleets Rule, and protected the interests of public power systems with regard to the imposition of new planning reserve margin requirements. The Governor has until October 14, 2023, at midnight, to give the final word to sign or veto the bills. Bills signed will become laws effective on January 1 or, for urgency bills, upon signature. NCPA's L&R Committee will be meeting on November 29th to review this year's gains, and to identify strategic issues for the coming legislative session.

State Regulatory Update:

- NCPA efforts to blend hydrogen at the Lodi Energy Center were highlighted on September 8th at a California Energy Commission workshop addressing the potential role of hydrogen in addressing statewide decarbonization efforts. NCPA General Manager Randy Howard led a panel focusing on potential hydrogen power generation opportunities, outlining the steps that NCPA has already taken to blend hydrogen today, with a pathway to full hydrogen use by 2028. NCPA's participation on the panel was crucial for state policymakers to fully understand, as the only project that is currently ready to blend hydrogen at utility scale.

Human Resources

Hires:

Kevin Howard joined NCPA Headquarters as a Federal Power Program Manager, effective September 11, 2023. Prior to his retirement last year, Kevin was an employee of the Western Area Power Administration (WAPA) for over twenty years and most recently served five years as the Executive Vice President and Chief Operating Officer of WAPA in its Denver headquarters office. Before assuming that role in 2018, he served nine years as the Vice President of Operations for WAPA's Sierra Nevada Region (SNR) headquartered in Folsom, California. With broad experience that comes from serving in multiple and diverse roles within WAPA over the past two decades, he brings to the position a deep knowledge of the federal power program as well as strong relationships across multiple federal agencies and among a broad spectrum of stakeholder organizations.

Intern Hires:

None.

Promotions:

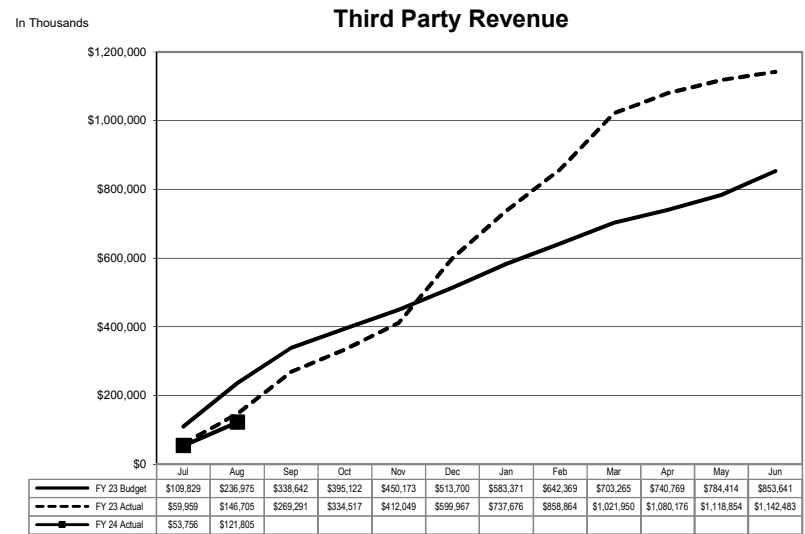
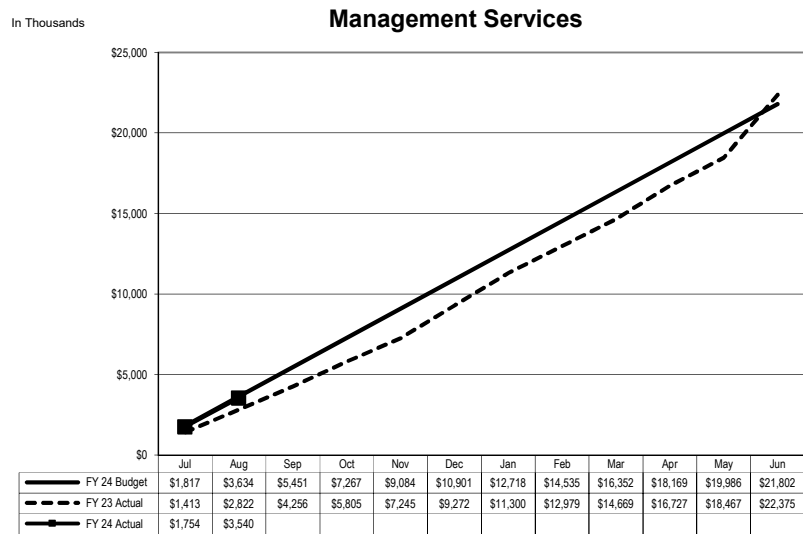
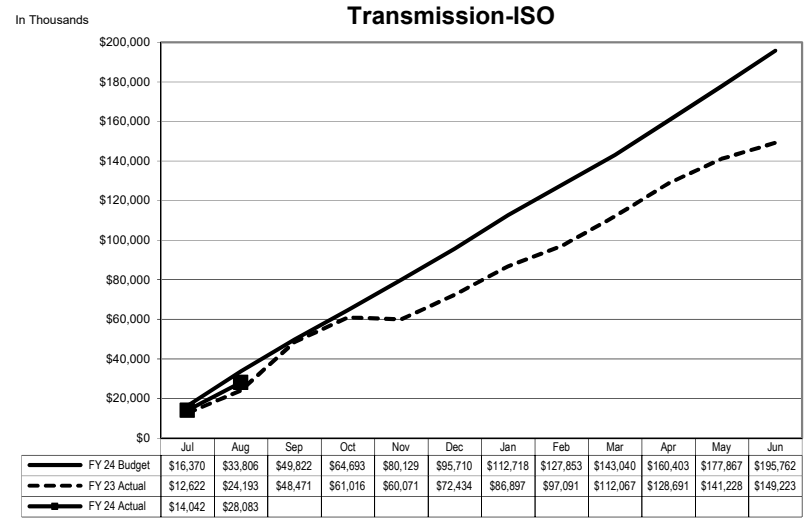
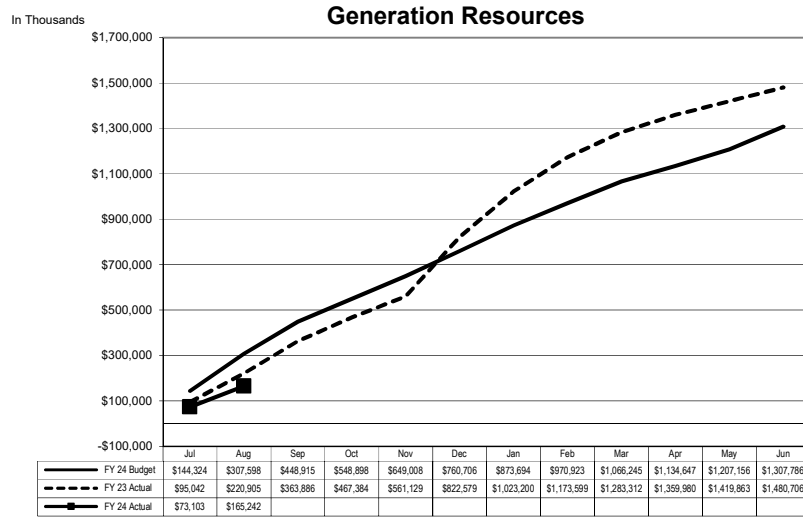
Rick Pepiot was promoted to Superintendent, Generation Resources (Geo), effective August 28, 2023. Rick joined NCPA in 2011 at our Lodi Energy Center as a Combustion Turbine Specialist III and most recently has been in the role of Combustion Turbine Specialist V. During his time at NCPA, Rick has been instrumental in creating a maintenance program for the CT projects.

Separations:

James Mearns resigned from his position as an Engineer V at NCPA Headquarters on September 5, 2023, after 3 years of service.

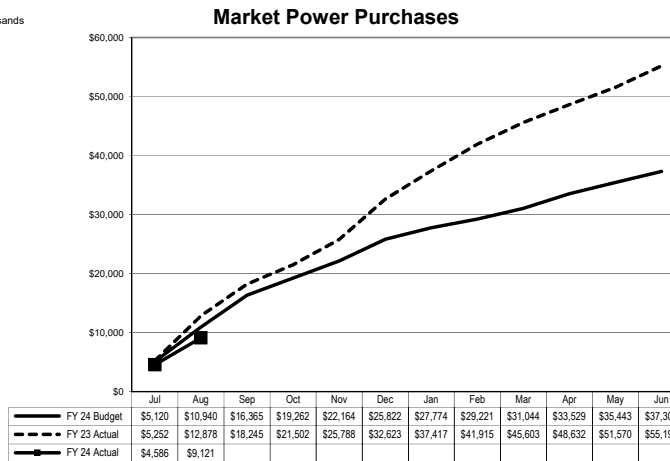
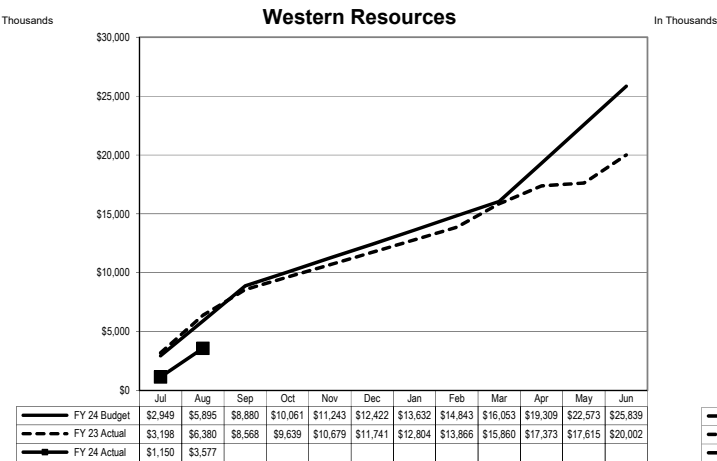
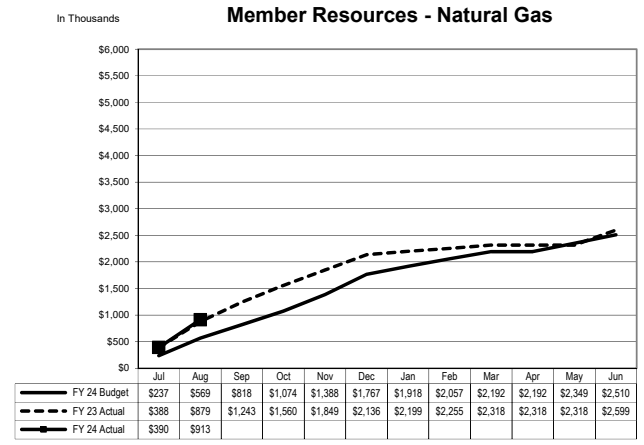
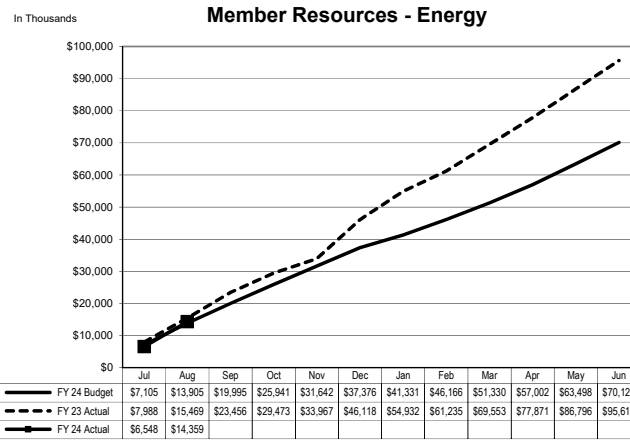
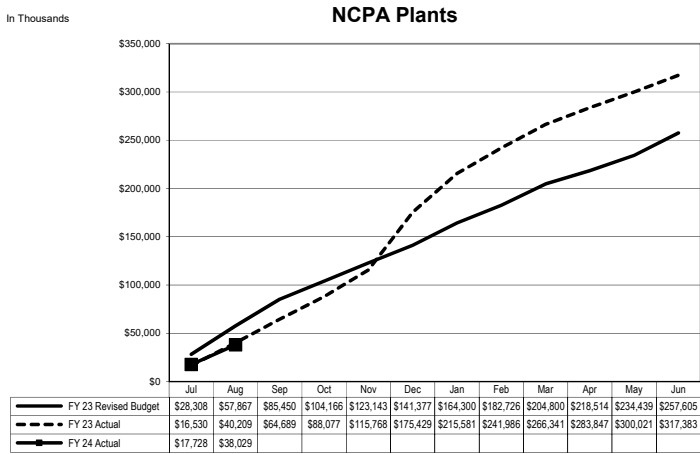
Sara Fitzsimon resigned from her position as a Government Relations Representative IV at NCPA Headquarters on September 7, 2023, after 5 months of service.

Annual Budget Budget vs. Actual By Major Area As of August 31, 2023

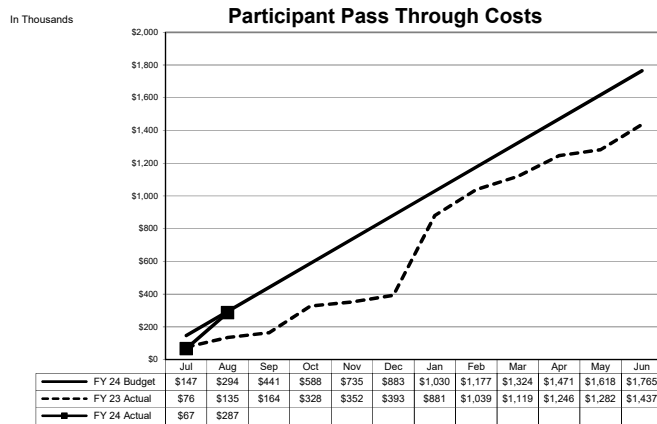
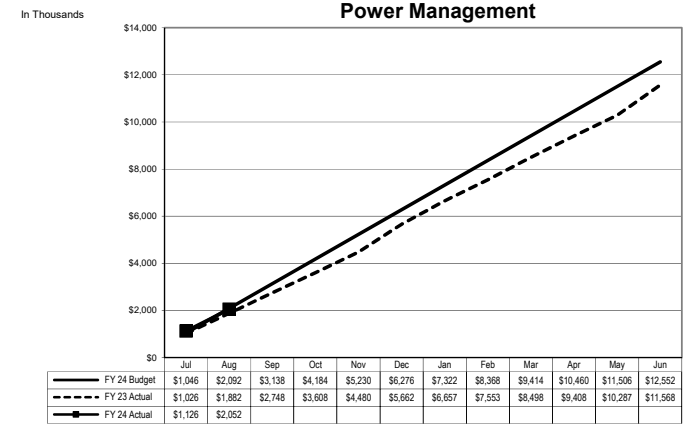
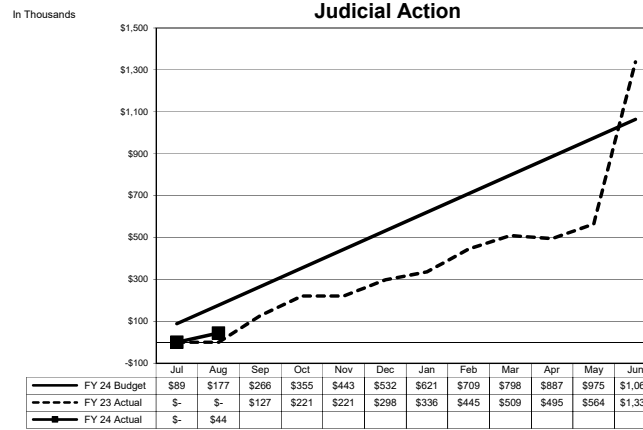
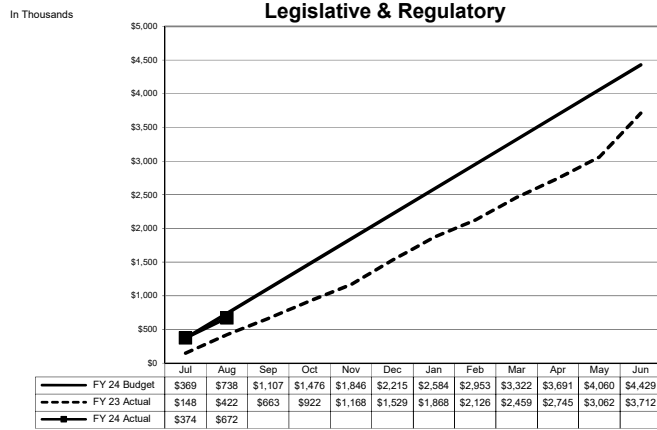


Footnote: Transmission is solely reflective of Independent System Operator (ISO) costs

Annual Budget Cost Generation Resources Analysis By Source As of August 31, 2023



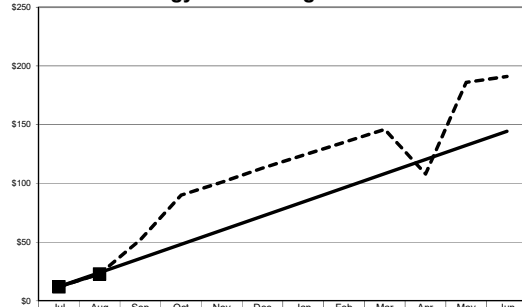
Annual Budget Cost Management Services Analysis By Source As of August 31, 2023



**Annual Budget Cost
Management Services Analysis By Source
As of August 31, 2023**

In Thousands

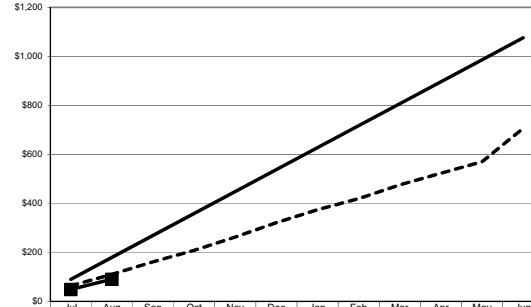
Energy Risk Management



	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										

In Thousands

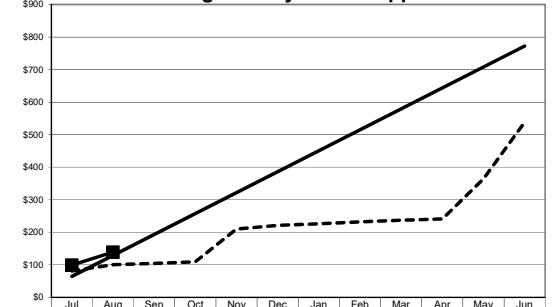
Settlements



	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										

In Thousands

Integrated Systems Support

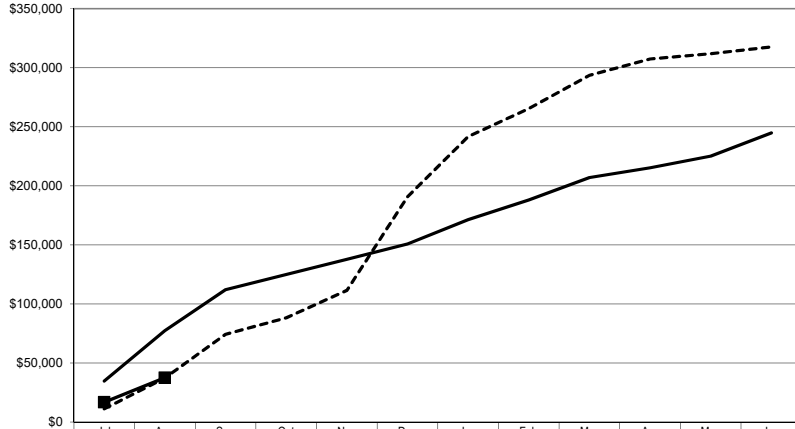


	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 24 Budget	\$64	\$129	\$193	\$257	\$322	\$386	\$451	\$515	\$579	\$644	\$708	\$772
FY 23 Actual	\$81	\$100	\$104	\$109	\$210	\$221	\$226	\$232	\$237	\$241	\$364	\$538
FY 24 Actual	\$99	\$139										

**Annual Budget Cost
Third Party Revenue Analysis By Source
As of August 31, 2023**

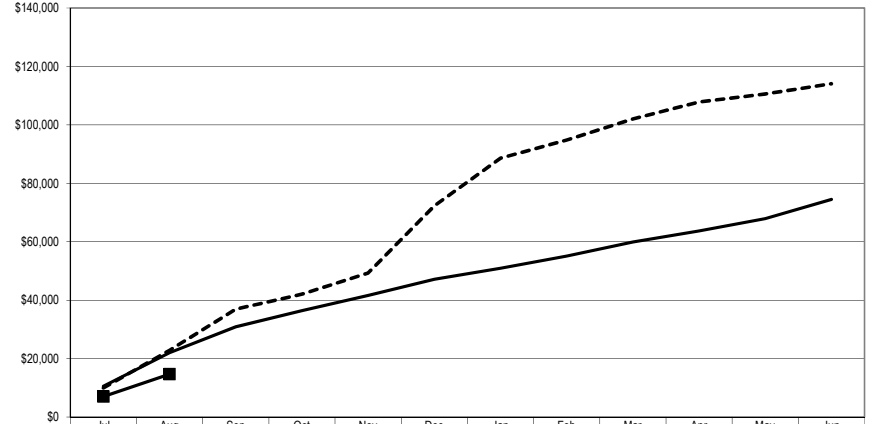
In Thousands

Plant ISO Energy Sales



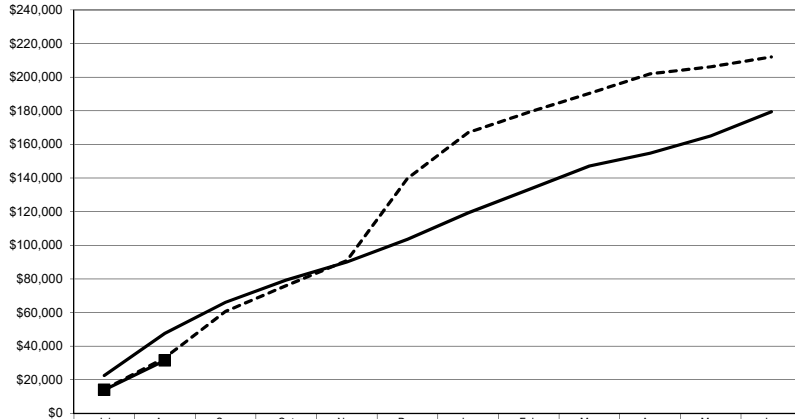
In Thousands

Member Resource ISO Energy Sales



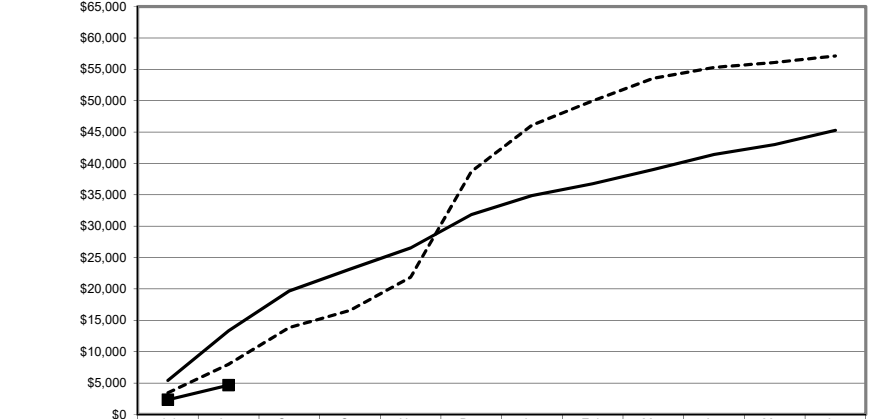
In Thousands

Member Owned Generation ISO Energy Sales

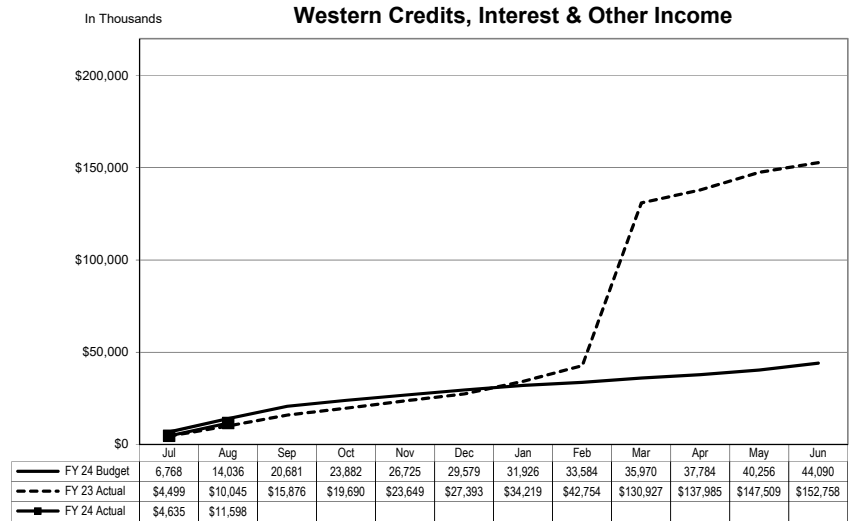
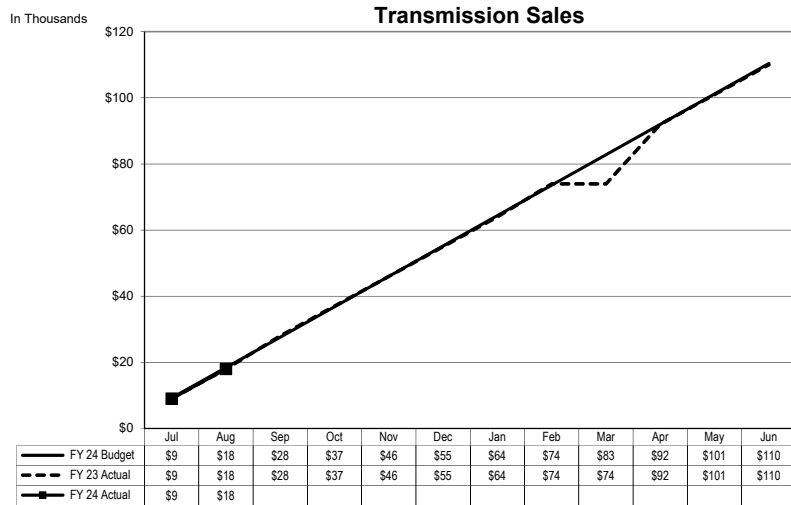
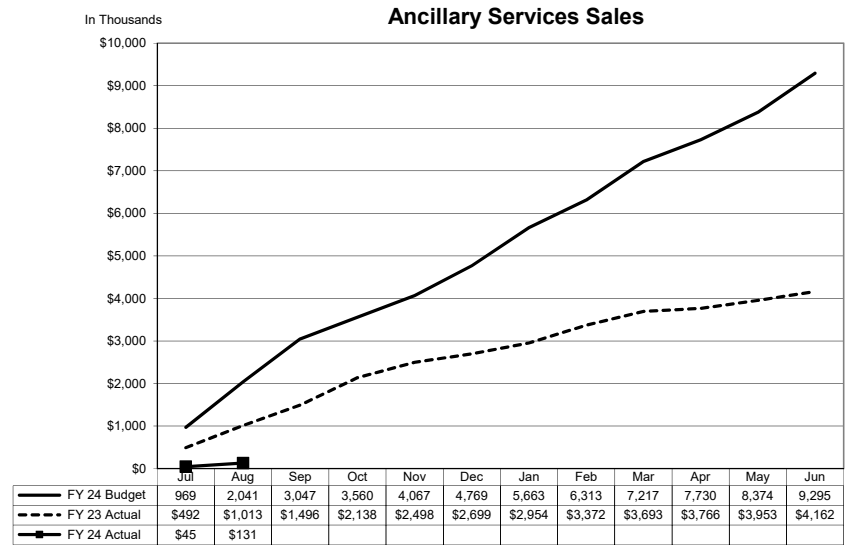
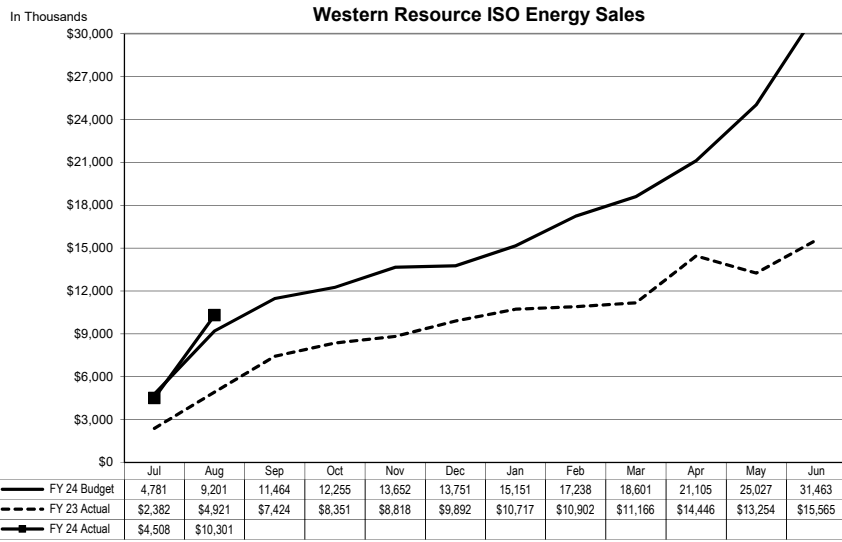


In Thousands

NCPA Contracts ISO Energy Sales



**Annual Budget Cost
Third Party Revenue Analysis By Source
As of August 31, 2023**



**Annual Budget
NCPA Generation Detail Analysis By Plant
As of August 31, 2023**

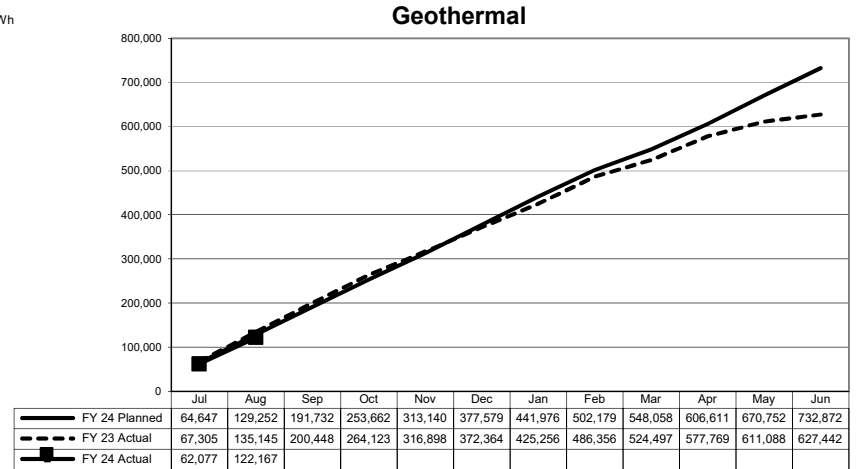
Generation Cost Analysis

\$ in thousands

	Geothermal				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 18,513	\$ 3,601	\$ 29.48	\$ 14,912	81%
Capital Assets/Spare Parts Inventories	11,032	799	6.54	10,233	93%
Other Costs	12,998	1,997	16.34	11,001	85%
CA ISO Charges	984	164	1.34	819	83%
Debt Service	3,482	580	4.75	2,902	83%
Annual Budget	47,009	7,142	58.46	39,867	85%
Less: Third Party Revenue					
Interest Income	150	81	0.66	69	46%
ISO Energy Sales	65,632	7,786	63.73	57,847	88%
Ancillary Services Sales	-	-	-	-	0%
Effluent Revenues	750	-	-	750	100%
Misc	113	18	0.15	95	84%
	66,646	7,885	64.54	58,760	88%
Net Annual Budget Cost to Participants	\$ (19,637)	\$ (743)	\$ (6.08)	\$ (18,894)	96%
Net Generation--MWh @ Meter	732,872	122,167			
\$/MWh (A)	\$ (31.55)	\$ (10.83)			

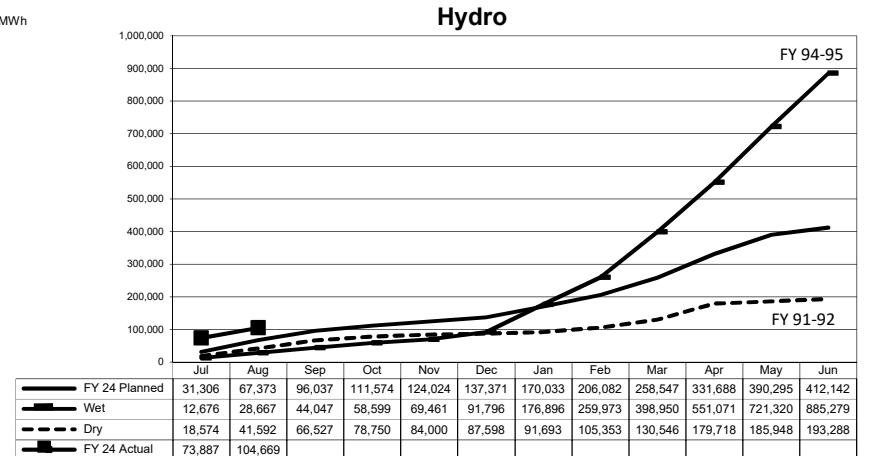
MWhs Generated

In MWh



	Hydroelectric				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 10,555	\$ 1,256	\$ 12.00	\$ 9,300	88%
Capital Assets/Spare Parts Inventories	6,445	887	8.47	5,558	86%
Other Costs	4,706	675	6.45	4,031	86%
CA ISO Charges	1,298	659	6.30	639	49%
Debt Service	34,646	5,774	55.17	28,872	83%
Annual Budget	57,650	9,251	88.38	48,399	84%
Less: Third Party Revenue					
Interest Income	150	37	0.35	113	75%
ISO Energy Sales	47,892	9,682	92.50	38,211	80%
Ancillary Services Sales	4,579	35	0.33	4,544	99%
Misc	-	0	0.00	(0)	0%
	52,622	9,754	93.19	42,868	81%
Net Annual Budget Cost to Participants	\$ 5,029	\$ (503)	\$ (4.80)	\$ 5,531	
Net Generation--MWh @ Meter	412,142	104,669			
\$/MWh (A)	\$ (71.86)	\$ (59.97)			

In MWh



Footnotes:

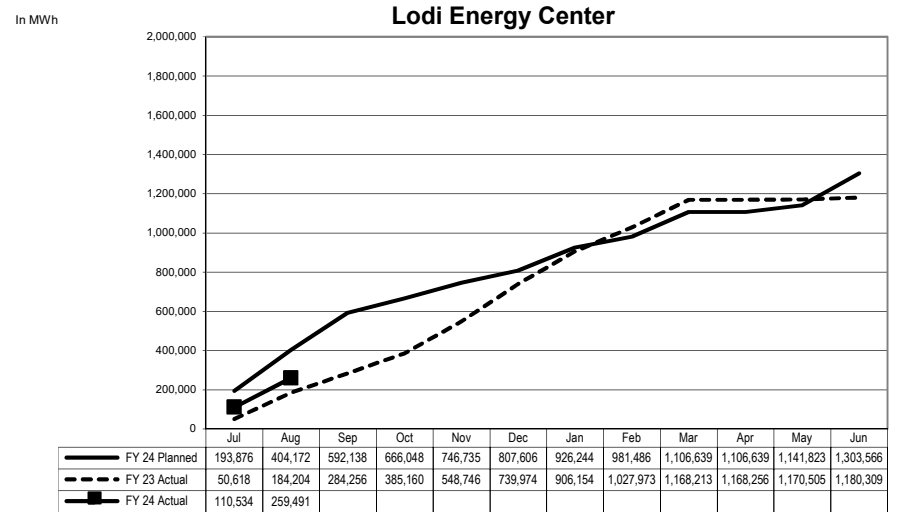
(A) Aggregate fiscal year generation in \$/MWh (excluding debt service)

**Annual Budget
NCPA Generation Detail Analysis By Plant
As of August 31, 2023**

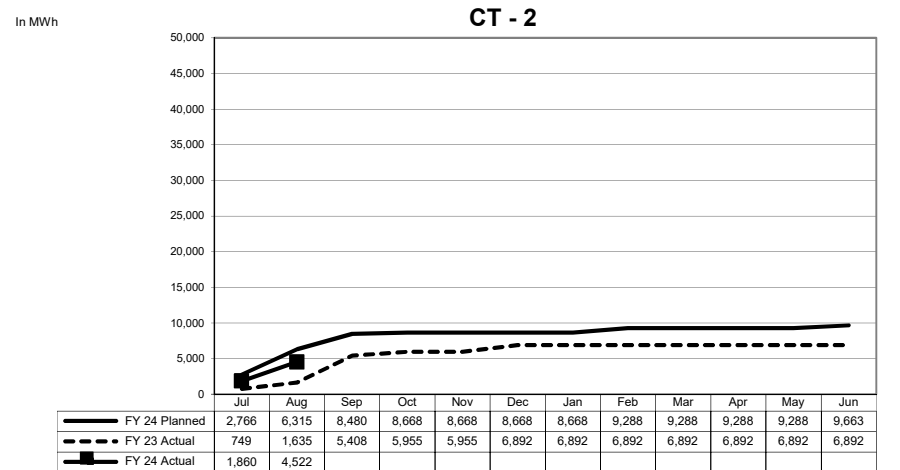
Generation Cost Analysis

	Lodi Energy Center				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 10,580	\$ 2,328	\$ 8.97	\$ 8,252	78%
Fuel	71,518	10,153	39.13	61,364	86%
GHG Allowance Costs	13,985	195	0.75	13,790	99%
CA ISO Charges and Energy Purchases	1,364	772	2.97	592	43%
Capital Assets/Spare Parts Inventories	3,913	399	1.54	3,513	90%
Other Costs	9,445	1,069	4.12	8,376	89%
Debt Service	25,992	4,332	16.69	21,660	83%
Annual Budget	136,797	19,249	74.18	117,547	86%
Less: Third Party Revenue					
Interest Income	250	226	0.87	24	10%
ISO Energy Sales	123,919	18,396	70.89	105,523	85%
Ancillary Services Sales	2,011	66	0.25	1,945	97%
Transfer Gas Credit	-	-	-	-	0%
GHG Allowance Credits	13,612	195	0.75	13,417	99%
Misc	-	1	0.00	(1)	0%
	139,791	18,884	72.77	120,907	86%
Net Annual Budget Cost to Participants	\$ (2,994)	\$ 365	\$ 1.41	\$ (3,360)	112%
Net Generation--MWh @ Meter	1,303,566	259,491			
\$/MWh (A)	\$ (22.24)	\$ (15.29)			

MWhs Generated



	Combustion Turbine No. 2 (STIG)				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 1,674	\$ 333	\$ 73.75	\$ 1,340	80%
Fuel and Pipeline Transport Charges	1,177	223	49.26	954	81%
GHG Allowance Costs	171	-	-	171	100%
Capital Assets/Spare Parts Inventories	390	2	0.50	387	99%
Other Costs	728	104	23.02	624	86%
CA ISO Charges	19	45	10.00	(26)	-136%
Debt Service	5,058	843	186.44	4,215	83%
Annual Budget	9,217	1,551	342.98	7,666	83%
Less: Third Party Revenue					
Interest Income	42	38	8.46	4	9%
ISO Energy Sales	2,828	805	177.97	2,023	72%
Ancillary Service Sales	-	-	-	-	0%
Fuel and Pipeline Transport Credits	951	423	93.45	528	56%
GHG Allowance Credits	171	-	-	171	100%
Misc	-	0	0.01	(0)	0%
	3,992	1,266	279.89	2,726	68%
Net Annual Budget Cost to Participants	\$ 5,226	\$ 285	\$ 63.09	\$ 4,940	95%
Net Generation--MWh @ Meter	9,663	4,522			
\$/MWh (A)	\$ 17.30	\$ (123.35)			



Footnotes:

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

**Annual Budget
NCPA Generation Detail Analysis By Plant
As of August 31, 2023**

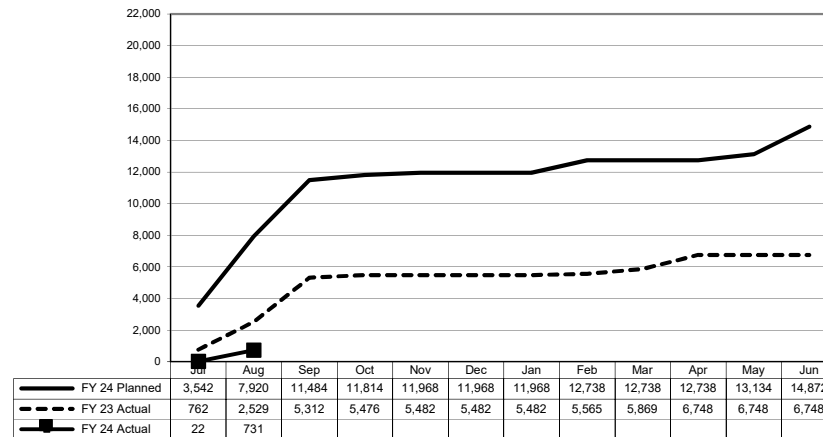
Generation Cost Analysis

	Combustion Turbine No. 1				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 2,597	\$ 358	\$ 490.00	\$ 2,238	86%
Fuel and Pipeline Transport Charges	2,388	28	37.89	2,360	99%
Capital Assets/Spare Parts Inventories	1,045	114	156.00	931	89%
Other Costs	852	131	178.89	721	85%
CA ISO Charges	50	205	280.95	(155)	-309%
Debt Service	-	-	-	-	
Annual Budget	6,932	836	1,143.72	6,096	88%
Less: Third Party Revenue					
Interest Income	55	25		30	55%
ISO Energy Sales	4,552	876	1,198.22	3,676	81%
Ancillary Services Sales	-	-	-	-	0%
Misc	-	-	-	-	0%
	4,607	901	1,198.22	3,707	80%
Net Annual Budget Cost to Participants	\$ 2,325	\$ (65)	\$ (88.62)	\$ 2,390	103%
Net Generation--MWh @ Meter	14,872	731			
\$/MWh (A)	\$ 156.32	\$ (88.62)			

MWhs Generated

In MWh

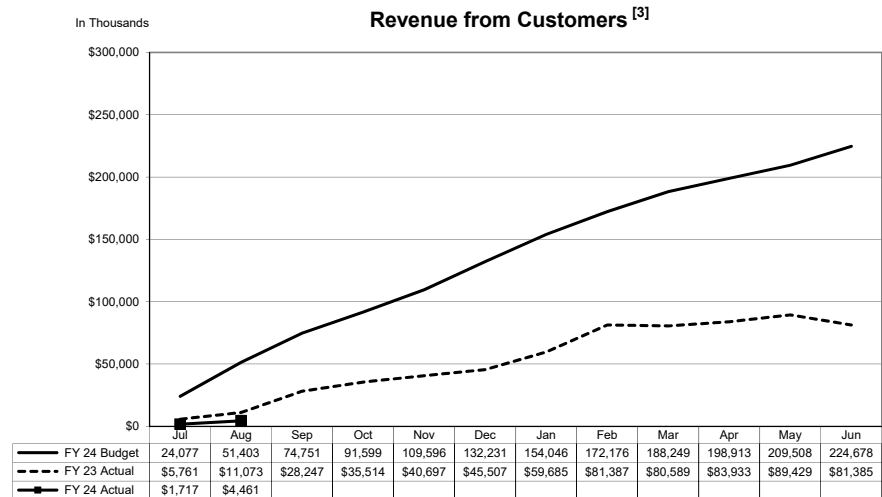
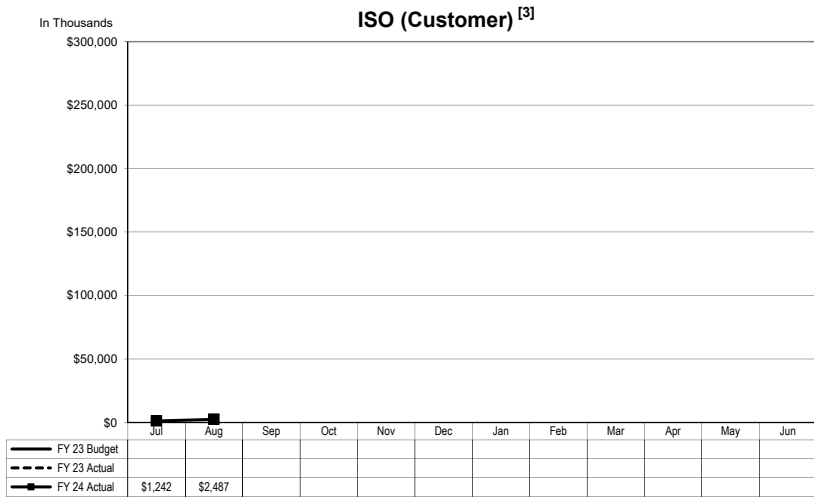
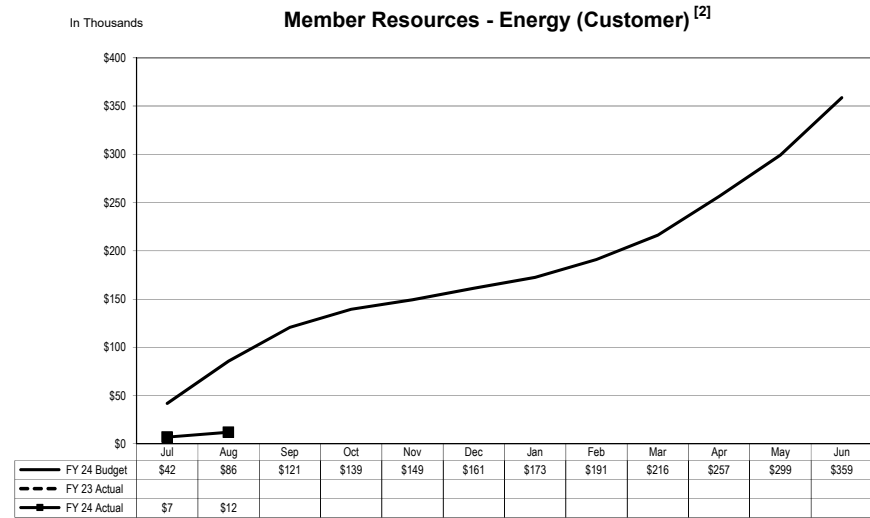
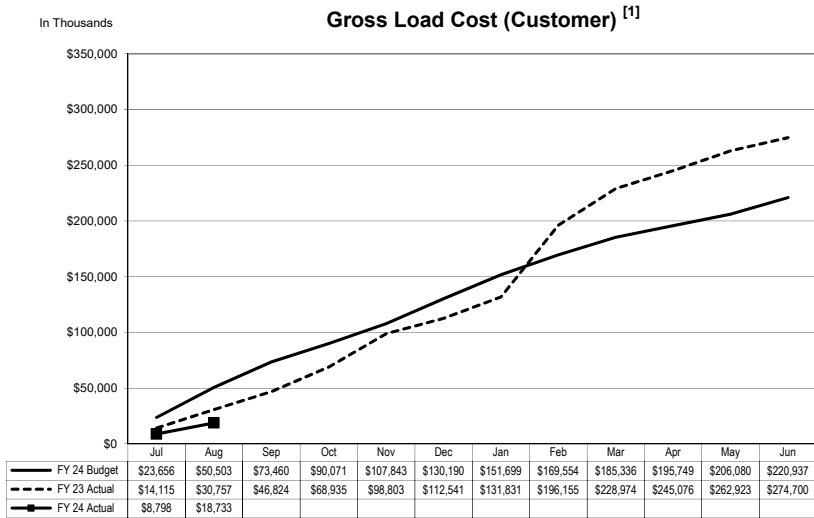
CT - 1



Footnotes:

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

**Annual Budget Cost
NCPA Customers
As of August 31, 2023**



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