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BUSINESS PROGRESS REPORT

October 2022

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Generation Costs & Reliability

Combustion Turbine Project

Unit Operation for September 2022

Unit	Availability		Production		Reason for Run
CT1 Alameda	Unit 1	Unit 2	Unit 1	793.0 MWh	CAISO / CAISO
	100.0%	100.0%	Unit 2	843.6 MWh	
Curtailments, Outages, and Comments:					
Unit 1: Normal operation.					
Unit 2: Normal operation.					
Unit	Availability		Production		Reason for Run
CT1 Lodi	100.00%		1,164.0 MWh		CAISO
Curtailments, Outages, and Comments:					
Normal Operation.					
Unit	Availability		Production		Reason for Run
CT2 STIG	100.0%		3,676.6 MWh		CAISO
Curtailments, Outages, and Comments:					
Normal Operation					
Unit	Availability		Production		Reason for Run
LEC	88.3%		100,052 MWh		CAISO & TESTING
Curtailments, Outages, and Comments:					
9/06 @ 14:31 - 15:54; CTG excitation transformer high temp indication 9/06 @ 20:48 - 23:35; STG ONLY, HPT trip due to speed probe issue 9/24 @ 14:31 - 9/27 @ 20:50; Rotor air cooler line failure 9/01 @ 00:00 - 9/30 @ 23:59; LEC plant de-rated to 240MW for HPST vibration issue					

Maintenance Summary – Specific per asset above.

Geothermal Facilities

Availability/Production for September 2022

Unit	Availability	Net Electricity Generated/Water Delivered	Out-of-Service/Descriptors
Unit 1	100 %	19,309 MWh	U1 had no outages for the month
Unit 2	100 %	*19,093 MWh	U2 had no outages for the month
Unit 3	N/A %	N/A -	Unit 3 remains out of service.
Unit 4	100 %	26,893 MWh	U4 had no outages for the month
Southeast Geysers Effluent Pipeline	90 %	21.6 mgallons	Average flow rate: 448 gpm
Southeast Solar Plant	N/A	144,459 KWh	Year-to-date KWh: 1,380,794
Bear Canyon Pump Station Zero Solar	N/A	92,952 KWh	Year-to-date KWh: 1,067,707

* Accounts for an additional 205 MWh of house load for the 21KV power supply to the effluent pipeline supplied from Unit #2.

Hydroelectric Project

Availability/Production for September 2022

Units	Availability	Net Electricity Generated	Out-of-Service
Collierville Unit 1	100%	9127 MWh	CV Unit 1 – No Outages.
Collierville Unit 2	100%	16281 MWh	CV Unit 2 – No Outages
Spicer Unit 1	64.24%	871 MWh	NSM1- Out of Service on 9/12/22 to 9/16/22 from 0800 to 1500 for Annual Maintenance and on 9/24/22 to 9/30/22 from 0459 to 1530 for PG&E Distribution work.
Spicer Unit 2	64.69%	801 MWh	NSM2- Out of Service on 9/19/22 to 9/23/22 from 0800 to 1150 for Annual Maintenance and on 9/24/22 to 9/30/22 from 0459 to 1530 for PG&E Distribution work.
Spicer Unit 3	68.68%	154 MWh	NSM3- Out of Service on 9/4/22 to 9/8/22 from 0116 to 1323 for Annual Maintenance and on 9/24/22 to 9/30/22 from 0858 to 2359 for PG&E Distribution work.

Operations & Maintenance Activities:

- CMMS work orders
- NSM Annual Outages
- BC and NF Dam Cleanouts
- Union Reservoir Dam Maintenance

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

- There were no Cal OSHA recordable incidents, Lost Time accidents, or vehicle accidents in the month of September.
- 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 September 24, 2022.
- 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.

September 2022 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	0	0	0
Days since Recordable	713	337	2,728	3,712
Work Hours Since Last Recordable	60,305	69,210	413,912	2,863,737
LTA's (this month)	0	0	0	0
LTA's (calendar year)	0	0	0	0
Days without LTA	5,462	2,591	10,632	6,725
Work Hours without LTA	492,874	233,420	824,456	2,485,755
Vehicle Incident (month)	0	0	0	0
Vehicle Incident (calendar year)	0	0	2	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 September 24, 2022.

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 2022 Data

	September 2022		Calendar Year 2022	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	511.56 9/6 @ 1600	204,678	511.56 9/6 @ 1600	1,722,726
SVP	687.74 9/6 @ 1300	391,637	687.74 9/6 @ 1300	3,378,925
MSSA	1176.2 9/6 @ 1400	596,315	1176.2 9/6 @ 1400	5,101,651

Last Year 2021 Data*

	September 2021		Calendar Year 2021	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	418.28 9/8 @ 1700	188,999	440.56 6/17 @ 1700	1,697,492
SVP	589.82 9/21 @ 1700	358,830	591.96 8/27 @ 1500	3,053,178
MSSA	1004.62 9/8 @ 1700	547,829	1025.46 6/17 @ 1700	4,750,670

*Last year's data added for comparison purposes only

System Peak Data

	All Time Peak Demand	2022 Peak Demand
NCPA Pool	517.83 MW on 7/24/06 @ 1500	511.56 9/6 @ 1600
SVP	687.74 MW on 9/6/22 @ 1300	687.74 9/6 @ 1300
MSSA	1176.20 MW on 9/6/22 @ 1400	1176.2 9/6 @ 1400

- 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		
	September 2022	Calendar Year 2022
MSSA % Within the Band	98.33%	98.36%

- CAISO issued a Restricted Maintenance Operations for the following dates:

- 9/01/22 – 9/09/2022: 1200-2100 hours
- CAISO issued a Flex Alert notification for the following dates:
 - 9/01/22 – 9/9/2022: 1600-2100 hours
- CAISO issued EEA Watch Notice for the following dates:
 - 9/01/22: 1800-1900 hours
 - 9/03/22: 1800-2000 hours
 - 9/04/22: 1700-2200 hours
 - 9/05/22: 1700-2200 hours
 - 9/06/22: 1700-2200 hours
 - 9/07/22: 1600-2200 hours
 - 9/08/22: 1500-2200 hours
 - 9/09/22: 1700-1800 hours
- CAISO issued EEA 1 Notice for the following dates:
 - 9/05/22: 1700-2100 hours
 - 9/06/22: 1600-2100 hours
 - 9/07/22: 1600-2100 hours
 - 9/08/22: 1500-2100 hours
- CAISO issued EEA 2 Notice for the following dates:
 - 9/05/22: 1830-2100 hours
 - 9/06/22: 1600-2100 hours
 - 9/07/22: 1600-2100 hours
 - 9/08/22: 1600-2100 hours
- CAISO issued EEA 3 Notice for the following dates:
 - 9/06/22: 1717-2000 hours
- CAISO issued Transmission Emergency following dates:
 - 9/05/22: 1800-2200 hours
 - 9/06/22: 1329-2200 hours
 - 9/07/22: 1525-2200 hours
 - 9/08/22: 1449-2100 hours

Pooling, Portfolio Planning & Forecasting

- NCPA Pool loads during September 2022 were 204,729 MWh versus the budget forecast of 192,926 MWh, resulting in a forecast error of 5.57%. Most of the under forecasting was during the first 13 days of September. The current weather outlook for October 2022 is near normal temperatures and little rainfall. The Pool's October load forecast is 184,834 MWh compared with extrapolated actuals of 184,665 MWh as of October 18, 2022.
- Lodi Energy Center (LEC) ran 448 hours out of a possible 720 producing 100,052 MWh. Natural gas and power prices are significantly higher than a year ago due to the low reservoir levels throughout the state.

- During September 2022, 1.30" of rain was recorded at the Big Trees gauge. September average rainfall at Big Trees is 0.90". New Spicer Meadows storage decreased by just over 14,600 acre feet in September.
- The Value of Storage (VOS) of New Spicer Meadow Reservoir (NSMR) has been maintained at \$250/MWh. Releases from NSMR have been set to meet and maintain the June 1st summer minimum Big Trees flows of 150 cfs.
- New Spicer Meadows storage as of September 30, 2022 was 89,702 acre feet. The historical average storage at the end of September is 102,633 acre feet. As of October 18th, storage was 84,087 acre feet.
- Combined Calaveras Project generation for the Pool in September 2022 totaled 13,929MWh, up from 8,955 MWh in August 2022.
- Western Base Resource (BR) deliveries for the Pool during September 2022 were 7,893 MWh. Displacement program energy totaled 0 MWh. The Pool's share of expected total delivery from the Western Base Resource for October 2022 is 9,500 MWh, with 6,513 MWh having been delivered through October 19, 2022.
- The PG&E Citygate gas index averaged \$8.84 / MMBtu during the month of September as compared to an average of \$9.77 for August. October's current average price is \$7.59 through the 20th. The November 2022 PG&E Citygate forward price is \$7.06 / MMBtu.
- Day-Ahead PG&E DLAP electricity prices for September averaged \$135.38 / MWh On-Peak and \$99.90 Off-Peak, with a high of \$1,324.24. DLAP prices have averaged \$78.45 On-Peak and \$70.71 Off-Peak for the period October 1st through the 20th. The forward power prices for November are \$79.70 On-Peak and \$72.58 Off-Peak. Much lower than the November forwards on September 19th which were \$99.35 On-Peak and 87.51 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 December 2022:
 - Monthly System Resource Adequacy Demonstration (filed October 17, 2022)
 - Monthly Supply Plan (filed October 17, 2022)

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:

EIM Resource Sufficiency Evaluation Enhancements Phase 1B

Phase 1B of this initiative enhances the accuracy and equitable application of the WEIM resource sufficiency evaluation (RSE). The phase 1B enhancements aim to resolve outstanding concerns regarding the accuracy of the RSE that were raised by

stakeholders in the phase 1 initiative. As part of the phase 1B initiative, the ISO will analyze the impact of load conformance on WEIM transfers, the interplay of WEIM transfers with hourly block exports, and the performance of the methodology to estimate uncertainty requirements.

- CAISO published the final proposal on Oct. 3rd and held a stakeholder meeting on Oct. 6th. The final proposal was not modified from the draft final. CAISO announced that it will not initially opt in to the proposed WEIM Emergency Energy Assistance program and will facilitate a stakeholder process with CAISO LSEs to discuss next steps regarding that aspect of the RSE. Also discussed were DMM findings that September 2022 events uncovered the need for further refinements to the RSE and plans on initiating a 3rd phase of the RSE Enhancements Initiative.
- Next steps:
 - Oct. 25-26, 2022 – ISO Board of Governors and WEIM Governing Body Joint Meeting
 - TBD – CAISO LSE WEIM Emergency Energy Assistance program opt-in stakeholder process.
 - TBD – WEIM RSEE Phase 3

Energy Storage Enhancements

This initiative aims to enhance the optimization, dispatch, and settlement of energy storage and other similarly-situated resources, through developing bid enhancements to help resources accurately represent their marginal costs in the real-time market; ensure the ISO has sufficient state-of-charge to cover critical hours; and explore modifications to the ISO's exceptional dispatch and bid cost recovery mechanisms.

- Next steps:
 - Nov. 2022 – Final Proposal
 - Dec. 2022 – ISO Board of Governors and WEIM Governing Body Joint Meeting

Extended Day-Ahead Market

This initiative will develop an approach to extend participation in the day-ahead market to the Western Energy Imbalance Market (WEIM) entities in a framework similar to the existing WEIM approach for the real-time market, rather than requiring full integration into the California ISO balancing area. The extended day-ahead market (EDAM) will improve market efficiency by integrating renewable resources using day-ahead unit commitment and scheduling across a larger area.

- Next steps:
 - Oct 19, 2022 Draft final proposal posting
 - Nov 02-03, 2022 Meeting
 - Nov 03, 2022 Draft tariff posting
 - Nov 18, 2022 Comments due on draft final proposal and draft tariff language
 - Dec 07, 2022 Final proposal posting
 - Dec 14, 2022 ISO Board of Governors and WEIM Governing Body joint meeting

Transmission Services and Market Scheduling Priorities Phase 2

As part of the Market Enhancements for Summer 2021 Readiness initiative conducted earlier in the year, the ISO committed to undertaking an initiative to develop a long-term, holistic, framework for establishing scheduling priorities in the ISO market. This initiative will evaluate the development of this holistic, long-term, framework while also evaluating near-term enhancements to the current scheduling priority framework that can be implemented by next summer.

- Next steps:
 - Week of Oct 24, 2022 Revised straw proposal posting
 - Week of Nov 14, 2022 Comments due
 - Week of Jan 09, 2023 Draft Final Proposal posting
 - Week of Jan 16, 2023 Meeting
 - Week of Jan 30, 2023 Comments due
 - Jan-Feb 2023 Draft tariff language and business requirement specifications
 - Week of Feb 20, 2023 Final proposal posted
 - Week of Feb 27, 2023 meeting
 - Mar 2023 WEIM Governing Body and Board of Governors meeting

Price formation enhancements

This initiative will explore several topics related to price formation in the California ISO markets focused on real-time market pricing. Scarcity prices are important to attract supply and incent resources to be available and perform. They are also important to provide appropriate price signals to reduce demand. Recent energy shortages and associated prices in the ISO real-time market have emphasized the need for the ISO to review and enhance its scarcity pricing provisions. Consequently, the ISO plans to consider the following topics in this initiative: (1) enhance real-time market scarcity pricing to better reflect tight supply conditions, (2) consider fast-start pricing, and (3) enhance how the real-time market uses advisory prices to dispatch resources.

- Next steps:
 - Sep 21, 2022 Meeting
 - Nov 10, 2022 Web meeting
 - Dec 12, 2022 Comments due

Resource Adequacy Enhancements

The rapid transformation of resources to a cleaner, variable and energy limited fleet is driving the need to re-examine the ISO's Resource Adequacy program. In this initiative the California ISO, in collaboration with the California Public Utilities Commission and stakeholders, will explore reforms needed to the ISO's resource adequacy rules, requirements, and processes to ensure the future reliability and operability of the grid.

- CAISO delayed further work on RA Enhancements indefinitely in order to align bid insertion, must offer obligation, and flexible RA proposals with DAME, EDAM, and CPUC stakeholder initiatives. No schedule is currently available other than fall 2023 implementation.

Day-Ahead Market Enhancements

This initiative will explore a new day-ahead product that will address ramping needs between intervals and uncertainty that can occur between the day-ahead and real-time markets.

- Next steps
 - Oct 13, 2022 Revised straw proposal posting
 - Oct 14, 2022 Meeting
 - Oct 28, 2022 Comments due

Transmission Access Charge Structure Enhancements

This initiative will consider possible changes to the ISO's current volumetric Transmission Access Charge (TAC) structure for recovering participating transmission owners' costs of owning, operating and maintaining transmission facilities under ISO operational control. The ISO will consider stakeholder input on the initiative scope, which will include possible changes to reflect the benefits of distributed energy resources in reducing future transmission needs. Formerly titled review transmission access charge structure.

This initiative is on hold until further notice.

Western

Western Base Resource Tracking (NCPA Pool)

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-22	51,082	26,633	(24,449)	\$1,733,503	\$ 65.09	\$ (0.41)	\$ 68.38
Aug-22	33,542	18,632	(14,910)	\$1,733,503	\$ 93.04	\$ 2.72	\$ 80.68
Sep-22	20,613	7,893	(12,720)	\$1,605,598	\$ 203.42	\$ (0.55)	\$ 92.15
Oct-22	8,931	-	0	\$662,777	\$ 74.21	\$ -	\$ 102.24
Nov-22	-	-	0	\$662,777	\$ -	\$ -	\$ 107.97
Dec-22	-	-	0	\$662,777	\$ -	\$ -	\$ 108.12
Jan-23	12,388	-	0	\$662,777	\$ 53.50	\$ -	\$ 99.11
Feb-23	18,712	-	0	\$662,777	\$ 35.42	\$ -	\$ 90.95
Mar-23	12,955	-	0	\$662,777	\$ 51.16	\$ -	\$ 89.29
Apr-23	41,280	-	0	\$1,699,926	\$ 41.18	\$ -	\$ 76.34
May-23	74,195	-	0	\$1,699,926	\$ 22.91	\$ -	\$ 59.61
Jun-23	78,807	-	0	\$1,699,926	\$ 21.57	\$ -	\$ 48.04

1/ As forecasted in NCPA 22/23 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 7,893 MWh of Base Resource (BR) energy in September 2022 with an estimated MEEA savings of \$(4,370). There was zero MWh displaced energy in September.

CVP Rate Case (Rate Order No. WAPA-207)

WAPA-SNR plans to file new formula rate schedules for CVP and the COTP under Rate Order No. WAPA-207.

Next Steps:

- October 31, 2022 Informal Customer Meeting – Power Repayment Fundamentals
- November 30, 2022 Information Customer Meeting – Transmission & Ancillary Services Repayment Fundamentals
- June/July 2023 – Proposed Rate Adjustment FRN Published – start of public process and 90-day Comment Period

Interconnection Affairs

CAISO Initiative – 2021-2022 Transmission Planning Process Update

CAISO is in phase 3/the competitive solicitation phase. Projects eligible for competitive bid are:

- New Collinsville 500 kV substation
- New Manning 500 kV substation
- San Jose Area HVDC Lines (Newark to NRS)
- San Jose Area HVDC Line (Metcalf – San Jose)

On Sept 2 – ISO posted four valid project sponsor applications for the New Collinsville and New Manning substation projects:

- Avangrid Networks
- Horizon West Transmission
- LS Power
- Starwood Energy Group

Currently CAISO is in a selection process to determine which sponsor should finance, construct, own, operate and maintain the two 500kV substation projects. Selection report is to be posted on January 23, 2023.

On October 17 – ISO will post valid project sponsors applications for the San Jose HVDC Line projects. Selection report for the HVDC line projects is to be posted on March 3, 2023.

CAISO Initiative – 2022-2023 Transmission Planning Process Update

On Sept 27th and 28th – CAISO hosted a stakeholder call to discuss reliability study results and proposed mitigations by PTOs.

Comments are due Oct 12. Potential NCPA comments:

- Request ISO to make available project list which are being approved as a result of load growth (i.e. additional transportation electrification scenarios).
- Support BAMX comments stating PTO mitigations are not aligning with CAISO's reliability assessment results.

On Nov 17, ISO will post preliminary policy and economic study results.

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 have settled two of the three outstanding issues

Next Steps

- Mid October – JI and PG&E make a joint filing describing the settlement of two of the three remaining issues and ask FERC to issue an order. This hopefully should allow ISO to issue refunds.

Debt and Financial Management

- The Bureau of Labor Statistics released its Consumer Price Index (CPI) for September which showed prices rose 8.2% over the prior year and 0.4% over the prior month. The core consumer price index, which excludes food and energy, rose 6.6% from a year ago, marking the highest level since 1982.
- At their September meeting, the Fed implemented a third consecutive 0.75 percentage-point increase in its benchmark interest rate, bringing it to a range of 3% to 3.25%. With a stronger-than-expected 0.4% rise in consumer prices in September, driven yet again by a stronger increase in core prices, this clearly indicates another 75 bp rate hike at the November meeting and, in contrast to recent Fed minutes, suggests that the Fed may need to continue raising rates at that pace in December and perhaps beyond.
- Social Security benefits are set to rise by 8.7% in 2023, the biggest bump in four decades as stubbornly high inflation erodes the buying power of retired Americans. The increase, known as a cost-of-living adjustment (COLA), is the biggest since 1981 when recipients saw an 11.2% jump. More than 64 million Americans collecting Social Security will receive the bigger payments beginning in January increasing the average monthly benefit by about \$140.

- The Agency recently renewed agreements with Public Financial Management (financial advisor) and US Bank (commercial bank) extending their services for one more year. These extensions will be the final ones before the staff prepares RFPs to solicit bids for these services sometime next year.

Schedule Coordination Goals

Software Development

- Applications and Enhancements under development
 - Development of the Renewable Portfolio Standards application continues and data validation continues. Rollout delayed pending completion of other higher priority projects
 - IS team successfully upgraded all of the Oracle databases to 2019
- Integrations
 - EBCE's Tulare Solar resource configured for Self-Scheduling in the DAM and RTM
 - Antelope Expansion 1B Solar resource integrated into the NCPA Pool's portfolio, anticipated COD by end of October
- IS currently working in collaboration with Accounting and the consultants to streamline the agency's Budgeting Process and Accounting Reports.
- Development team going through Cross-Training exercises to manage the increasing technical support needs

Network

- SCADA and Networking team continue to work with a variety of customers in an effort to integrate several new wind, solar and hydro resources,
 - Deer Creek – This resource integration is currently on hold pending NID contract with PG&E.
 - Luciana Solar – SCADA real-time telemetry for monitoring and providing curtailment services to this resource has been completed and is currently in production.
 - Antelope 1B Solar – telemetry has been established and initial point testing has been successful. Curtailment logic testing was successfully completed and operations is expecting the resource to go live by end of October.
- IS continues the process of upgrading network and server equipment at the Primary and Backup Control Centers. This effort will refresh several aging systems and also prepare infrastructure needs required for NERC CIP Medium impact.
- Operations and Support continues to work with VOIP vendor Integration Partners and ISP Consolidated Communications (CCI) to replace HQ and Disaster Recovery Center (DRC) phone systems and migrate to Session Initiation Protocol (SIP) from a legacy PRI circuit. Cut over is tentatively set for the 2nd week of November.

Simultaneously IS has been fast tracking to replace the Geothermal legacy phone system by end of October due to existing equipment failures.

- The Ops and Support team successfully migrated the last two Oracle database from Oracle 11.1 to 2019. This was a multi-year effort that required many different participating departments to plan, test and execute with minimal downtime. This project is now considered completed.
- IS continues to work with facilities to replace an outdated visitor management software program with a new solution called Splan. This work includes setting up new servers and working with our security vendor to install the necessary applications and services. Expected to be completed by the fall.

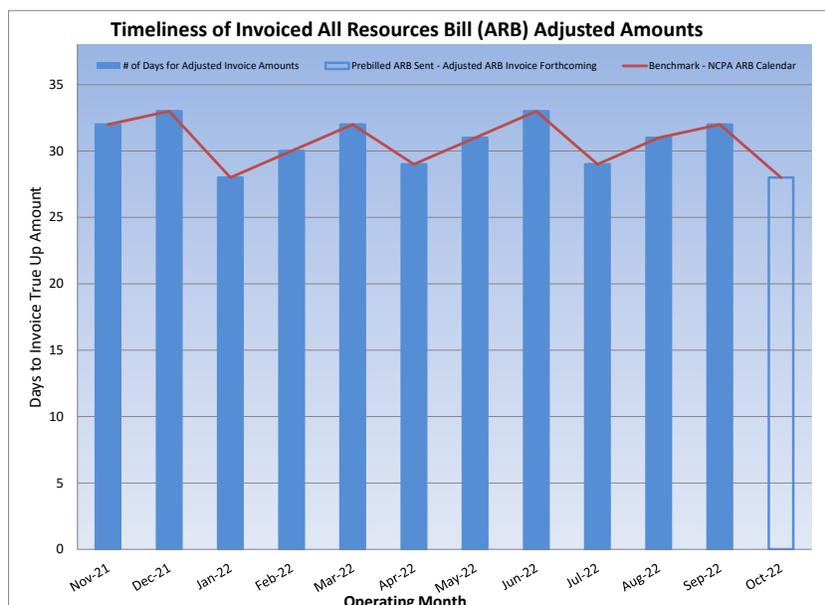
NCPA Bills & Settlements

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 October 2022 NCPA All Resources Bill (ARB) monthly invoice sent to members on September 25, 2022 contains:

- October 2022 monthly pre-billed budget/forecast amounts;
- September 2022 (1st Adjustment) NCPA Project and CAISO Initial settlement true-ups;
- July 2022 (2nd Adjustment) NCPA Project settlement true-up and T+20 business day recalculated CAISO settlement true-up allocations;
- May 2022 (3rd Adjustment) T+70 business day recalculated CAISO settlement true-up allocations and NCPA Projects true-up;
- September 2021 (4th Adjustment) T+11-month recalculated CAISO settlement true-up allocations;
- October 2019 (6th Adjustment) T+33-month recalculated CAISO settlement true-up;
- July 2019 (7th Adjustment) T+36-month CAISO settlement true-up;



Legislative & Regulatory

- NCPA held its 2022 Annual Conference from September 21-23 at the Resort at Squaw Creek in Olympic Valley, California. Around 200 people attended the conference, including NCPA members, staff, and industry partners. The program explored the difficult challenges that exist as the electric utility sector support efforts to decarbonize the economy, while attempting to maintain affordable and reliable service. The conference explored several approaches that could assist our efforts, both operationally and from a workforce development perspective. NCPA's 2023 Annual Conference will be held in Monterey in early October.

Human Resources

Hires:

- Cary Garcia joined NCPA Headquarters as an Energy Resource Analyst IV (Forecaster), effective October 17, 2022. Cary joins NCPA from the California Energy Commission, where he was an Electric Generation System Program Specialist/Principal Econometric Modeler. He was the project manager and technical lead for the development and documentation of the Energy Commission's annual energy demand forecast. He also guided the maintenance and development of multiple sector energy demand models and worked on model development. Cary brings over 10 years of experience. Cary holds a Bachelor of Arts degree in Economics from California State University, Fresno, and a Master of Arts in Economics from California State University, Sacramento.
- Howard Quan joined NCPA Headquarters as State Government Relations and External Affairs Manager, effective October 17, 2022. Howard joins NCPA from the Office of State Senator Sydney Kamlager, where he served as Legislative Director, advising on policy, managing legislative portfolios, and directing position development. Howard brings a depth of knowledge on legislative issues and the state legislative process stemming from his over 14 years of experience in the State Capitol. He holds a Bachelor of Arts degree in International Relations from the University of California, Davis.

Intern Hires:

- Garrett Pack joined the City of Healdsburg as a Student Assistant III effective October 3, 2022.
- Sanah Khan joined NCPA Headquarters' Human Resources team as a Student Assistant III, effective October 5, 2022.

Promotions:

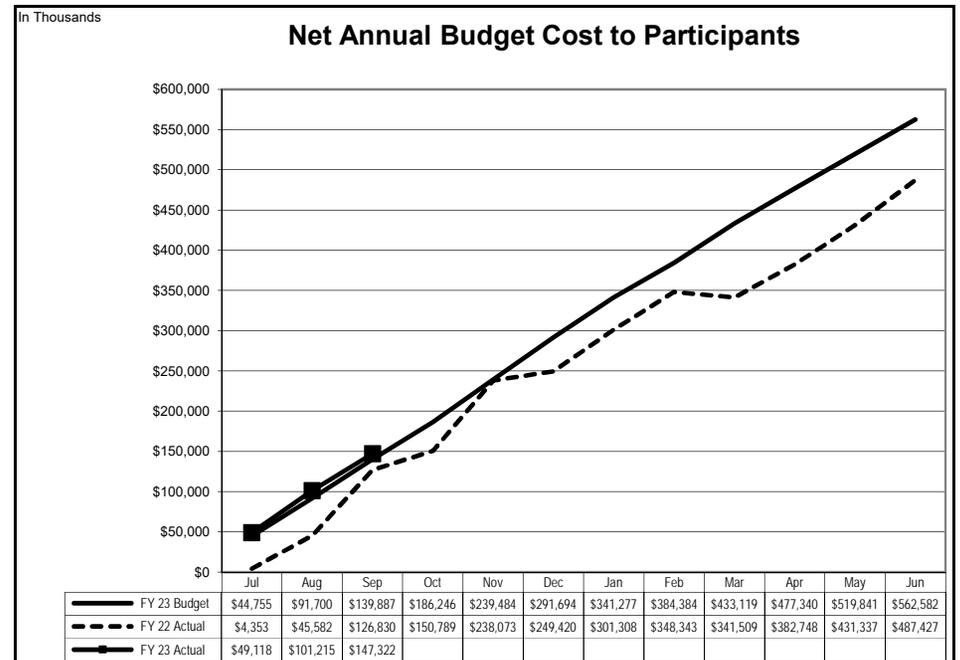
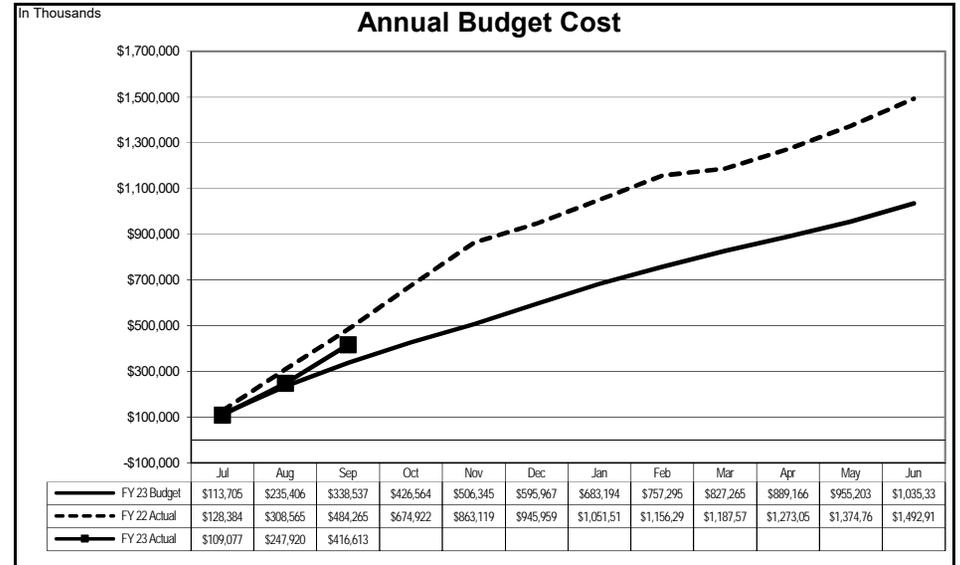
None.

Separations:

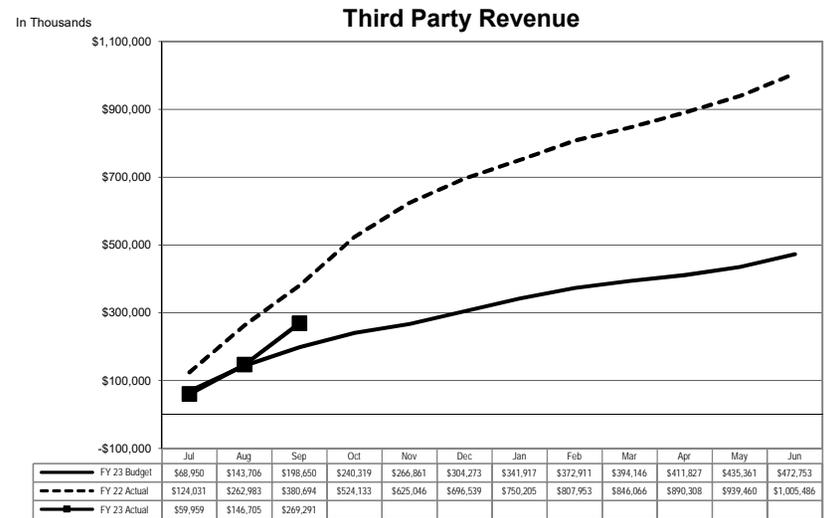
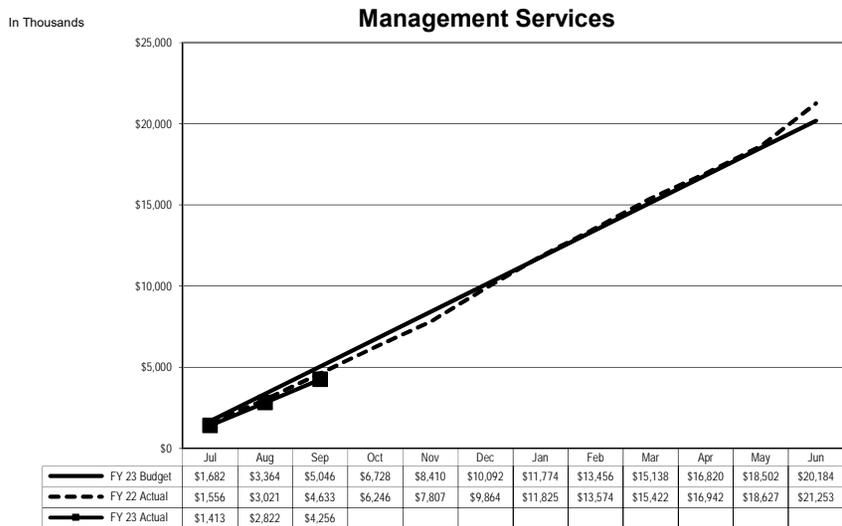
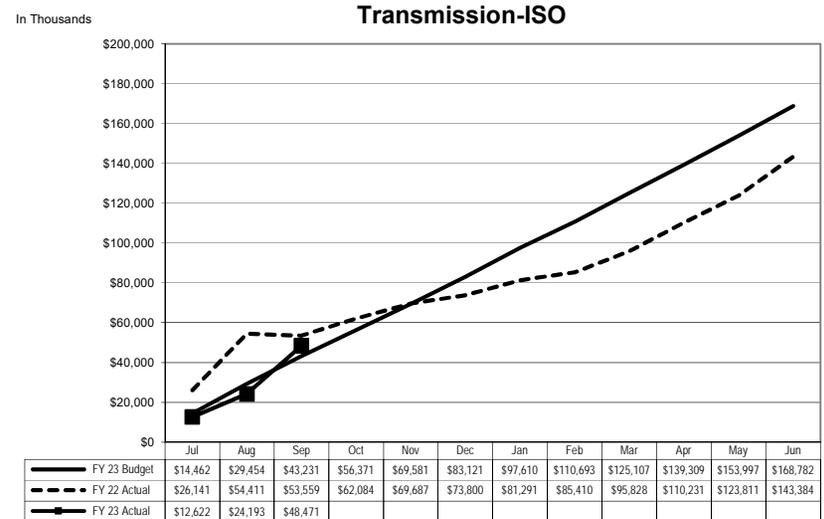
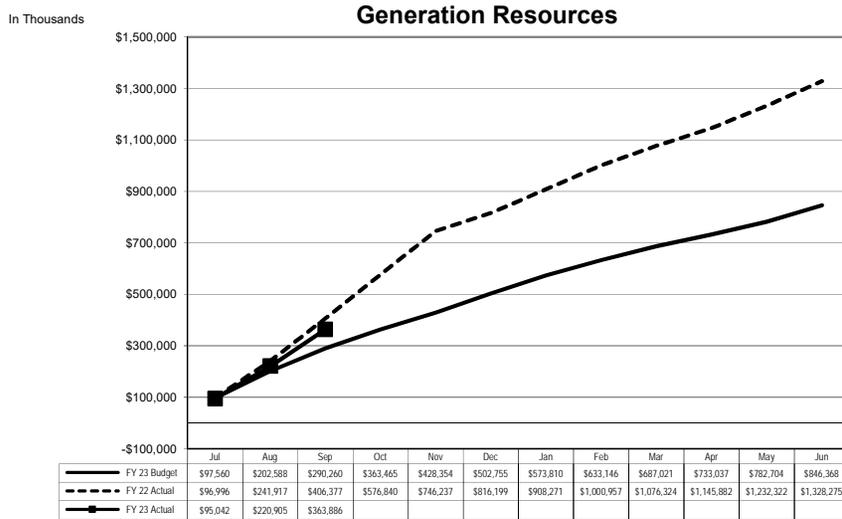
None.

Annual Budget 2022-2023 Fiscal Year To Date As of September 30, 2022

In Thousands	Program			
	Annual Budget	Actual	Under(Ovr) Budget	YTD % Remaining
GENERATION RESOURCES				
NCPA Plants				
Hydroelectric	55,514	14,380	\$ 41,134	74%
Geothermal Plant	41,633	10,621	31,012	74%
Combustion Turbine No. 1	5,602	1,798	3,804	68%
Combustion Turbine No. 2 (STIG)	10,361	2,250	8,112	78%
Lodi Energy Center	137,737	35,641	102,096	74%
	250,847	64,689	186,157	74%
Member Resources - Energy	63,024	23,456	39,568	63%
Member Resources - Natural Gas	2,474	1,243	1,232	50%
Western Resource	26,100	8,568	17,533	67%
Market Power Purchases	35,533	18,245	17,288	49%
Load Aggregation Costs - ISO	467,469	245,984	221,485	47%
Net GHG Obligations	921	1,701	(780)	-85%
	846,368	363,886	482,482	57%
TRANSMISSION				
Independent System Operator	168,782	48,471	120,311	71%
MANAGEMENT SERVICES				
Legislative & Regulatory				
Legislative Representation	2,231	350	1,882	84%
Regulatory Representation	715	146	569	80%
Western Representation	723	57	665	92%
Customer Programs	615	110	505	82%
	4,284	663	3,621	85%
Judicial Action	460	127	333	72%
Power Management				
System Control & Load Dispatch	7,504	1,776	5,728	76%
Forecasting & Prescheduling	3,044	628	2,417	79%
Industry Restructuring	438	113	326	74%
Contract Admin, Interconnection Svcs & Ext. Affairs	1,032	201	831	81%
Gas Purchase Program	77	13	64	83%
Market Purchase Project	112	19	93	83%
	12,208	2,748	9,459	77%
Energy Risk Management	150	52	97	65%
Settlements	1,012	161	851	84%
Integrated System Support	405	104	301	74%
Participant Pass Through Costs	1,666	164	1,501	90%
Support Services	-	235	(235)	
	20,184	4,256	15,928	79%
TOTAL ANNUAL BUDGET COST	1,035,334	416,613	618,722	60%
LESS: THIRD PARTY REVENUE				
Plant ISO Energy Sales	193,457	74,267	119,191	62%
Member Resource ISO Energy Sales	49,954	36,898	13,057	26%
Member Owned Generation ISO Energy Sales	118,709	60,686	58,023	49%
Revenue from Customers	-	28,247	(28,247)	
Customer Owned Generation ISO Energy Sales	-	328	(328)	
NCPA Contracts ISO Energy Sales	34,944	13,845	21,099	60%
Western Resource ISO Energy Sales	26,527	7,424	19,103	72%
Load Aggregation Energy Sales	-	30,197	(30,197)	
Ancillary Services Sales	5,514	1,496	4,018	73%
Transmission Sales	110	28	83	75%
Western Credits, Interest & Other Income	43,537	15,876	27,661	64%
	472,753	269,291	203,462	43%
NET ANNUAL BUDGET COST TO PARTICIPANTS	562,582	147,322	\$ 415,260	74%

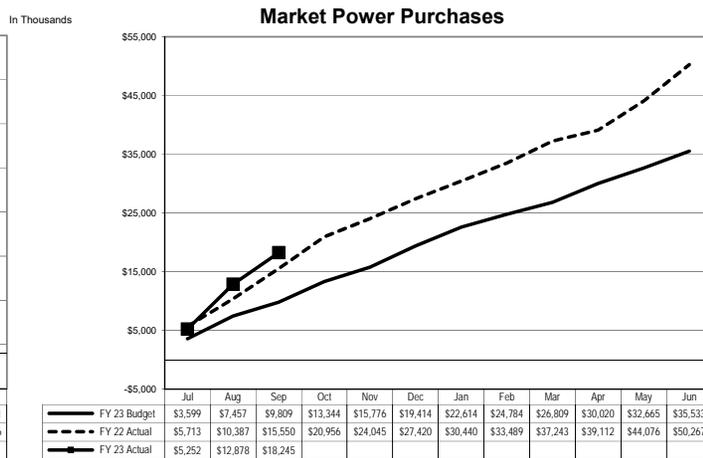
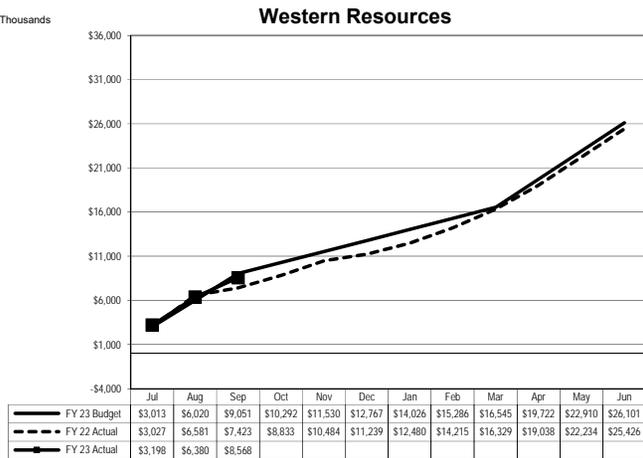
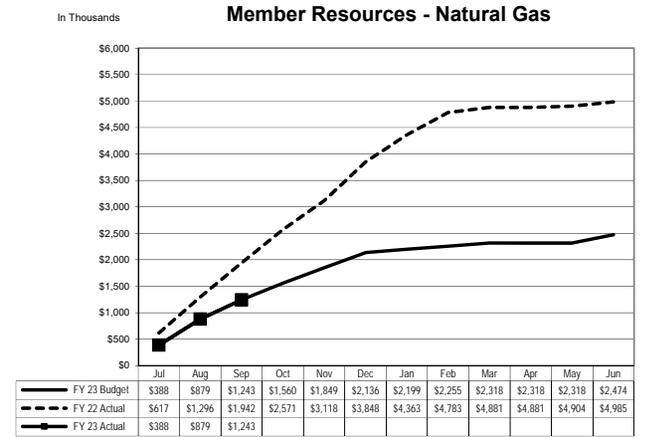
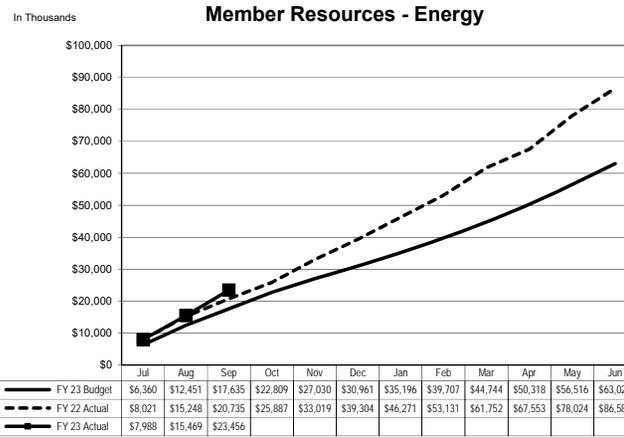
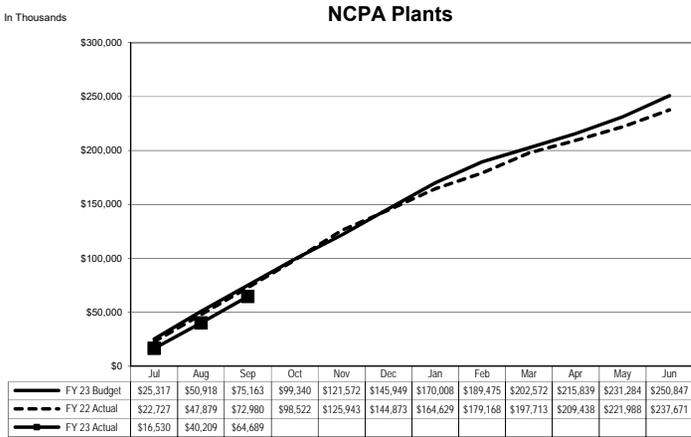


**Annual Budget
Budget vs. Actual By Major Area
As of September 30, 2022**



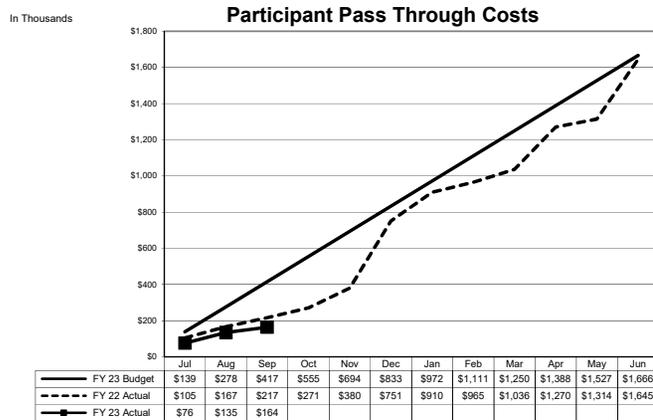
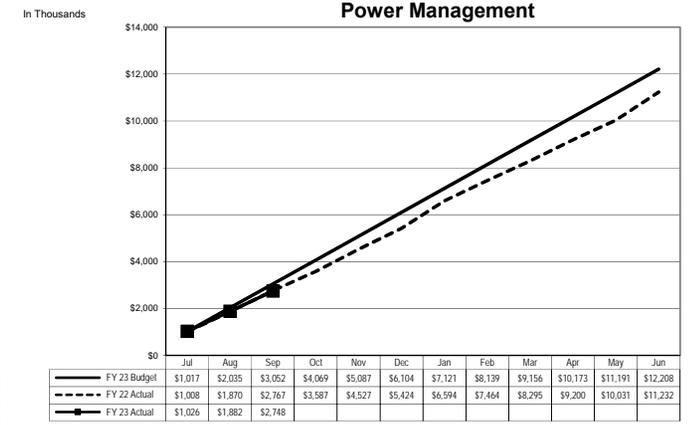
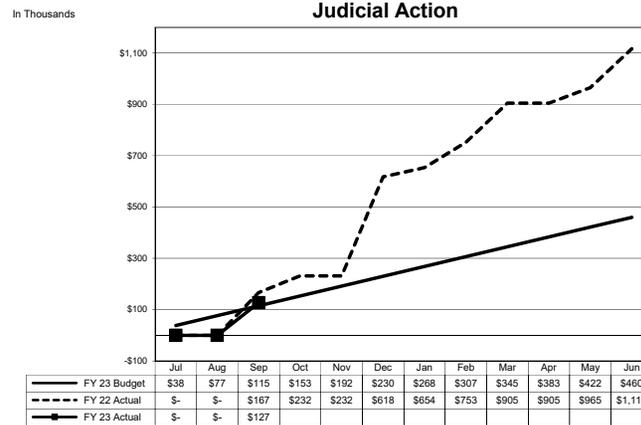
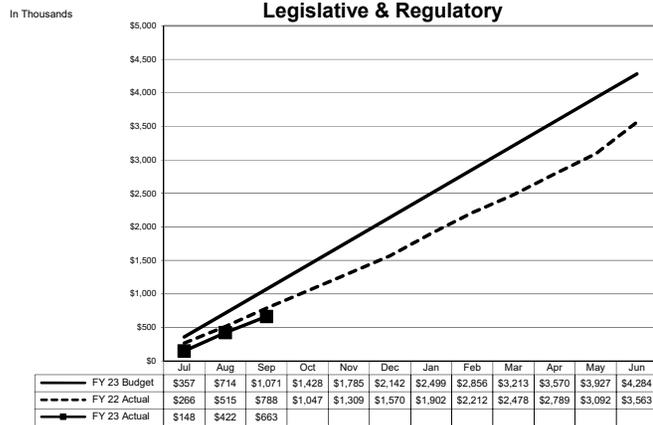
Footnote: Transmission is solely reflective of Independent System Operator (ISO) costs

Annual Budget Cost Generation Resources Analysis By Source As of September 30, 2022



Footnote: Other Resources (Graeagle, BART PV, Gridley PV) are included in Market Power Purchases

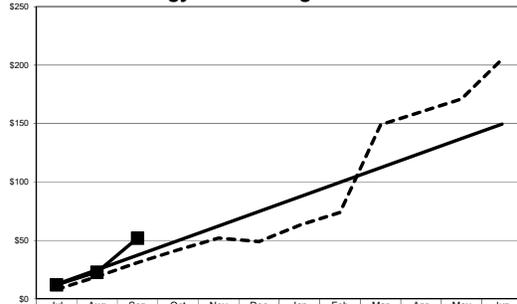
Annual Budget Cost Management Services Analysis By Source As of September 30, 2022



**Annual Budget Cost
Management Services Analysis By Source
As of September 30, 2022**

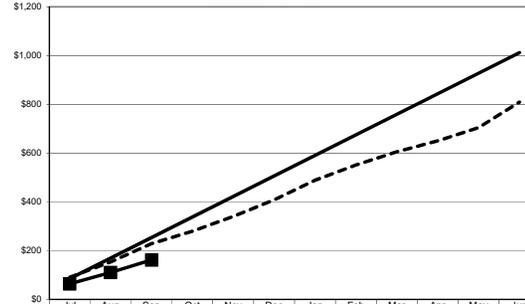
In Thousands

Energy Risk Management



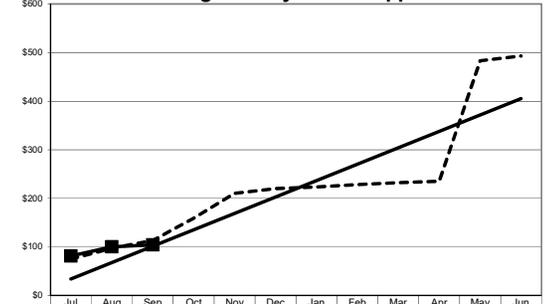
In Thousands

Settlements



In Thousands

Integrated Systems Support

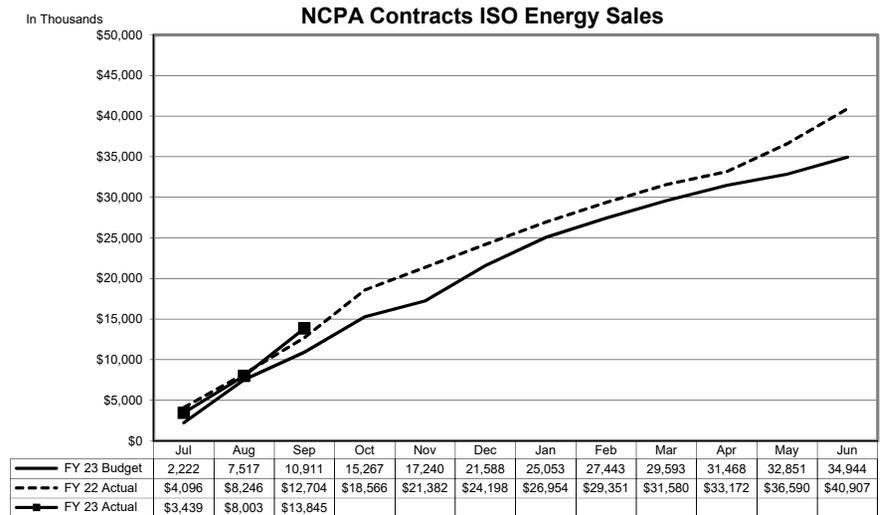
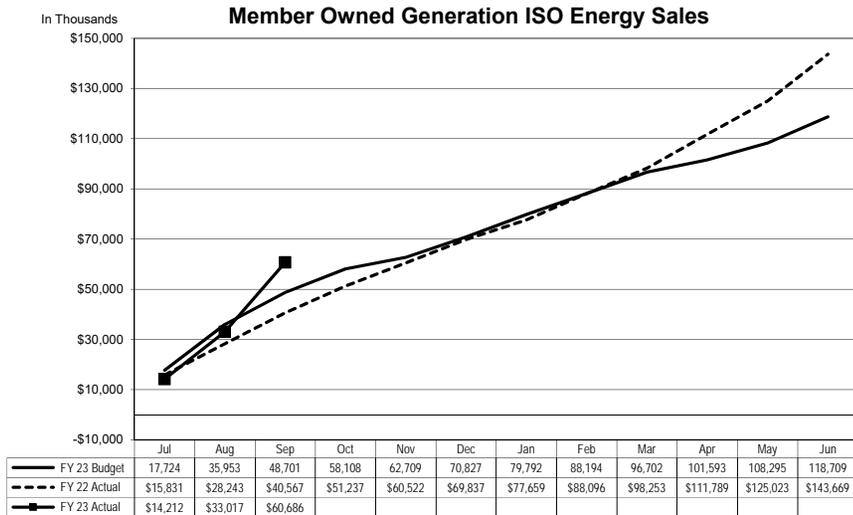
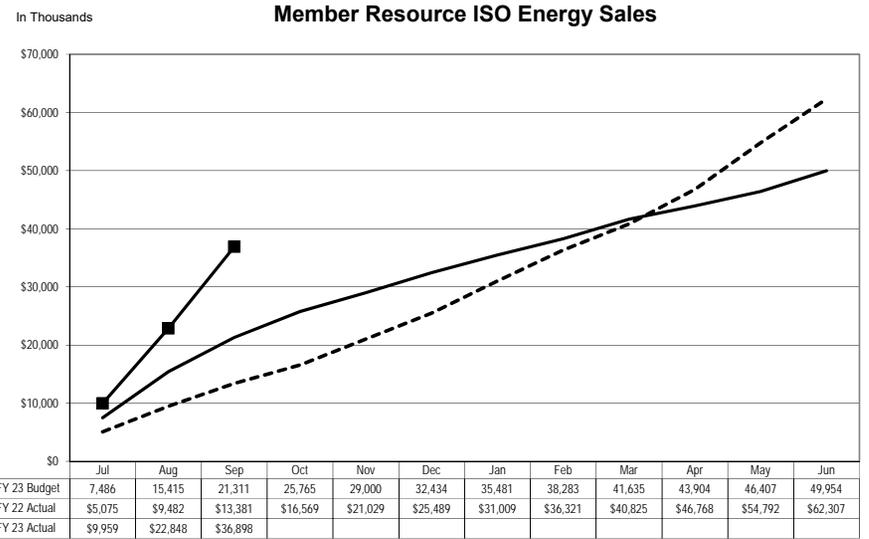
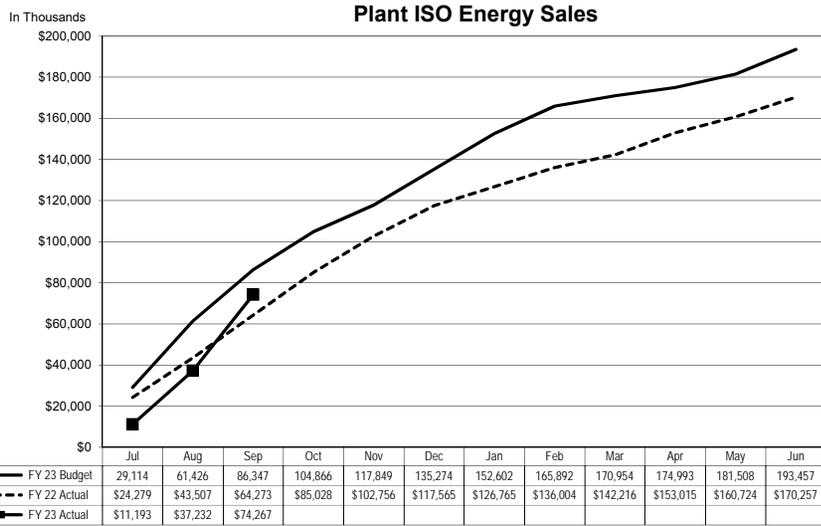


	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 23 Budget	\$12	\$25	\$37	\$50	\$62	\$75	\$87	\$100	\$112	\$125	\$137	\$150
FY 22 Actual	\$8	\$19	\$31	\$42	\$52	\$49	\$63	\$74	\$149	\$160	\$171	\$205
FY 23 Actual	\$12	\$23	\$52									

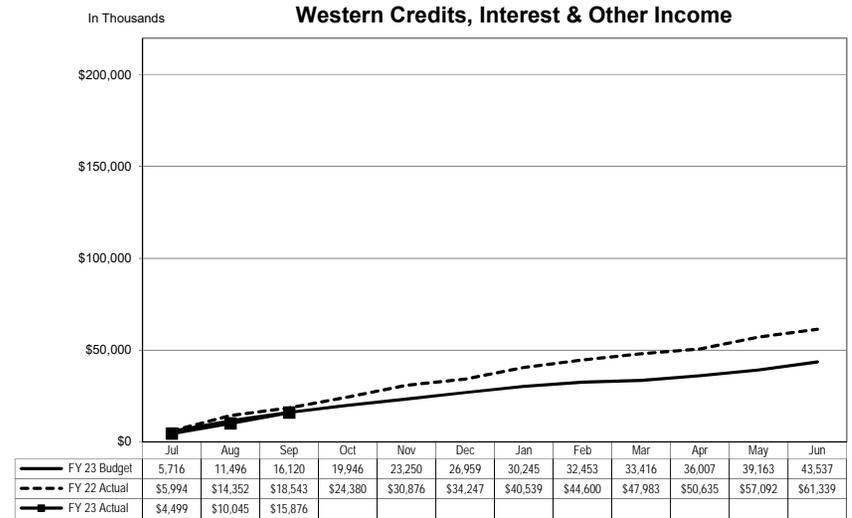
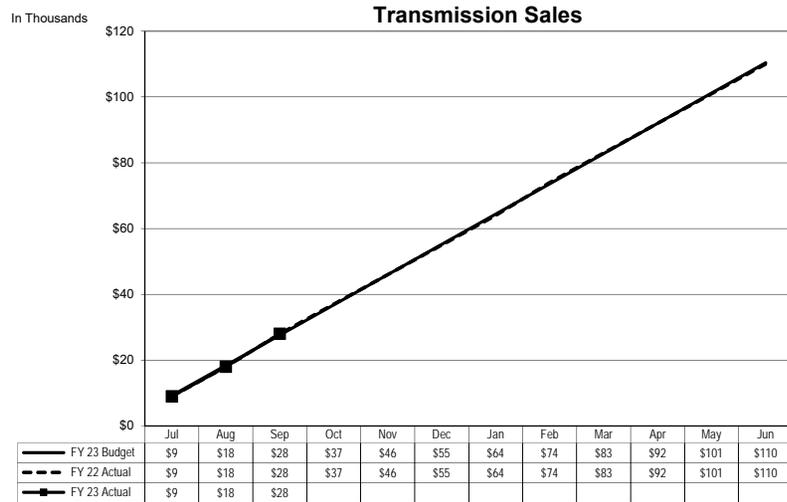
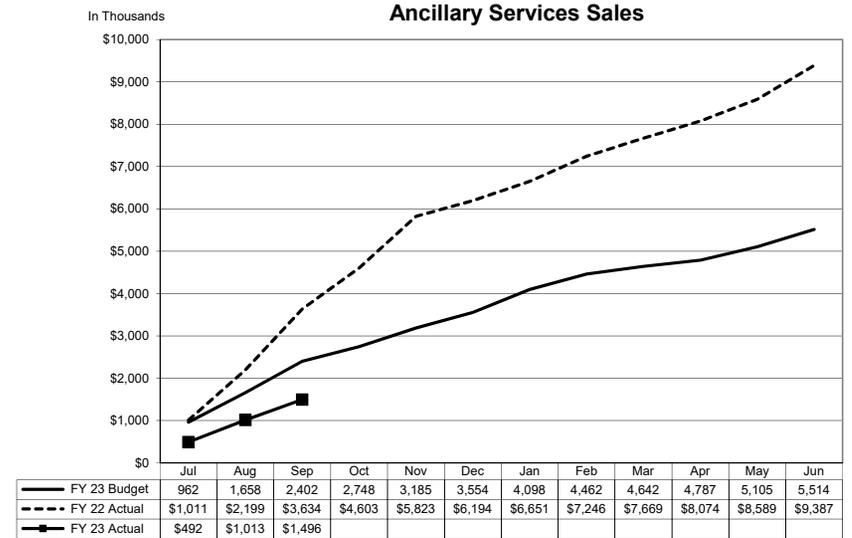
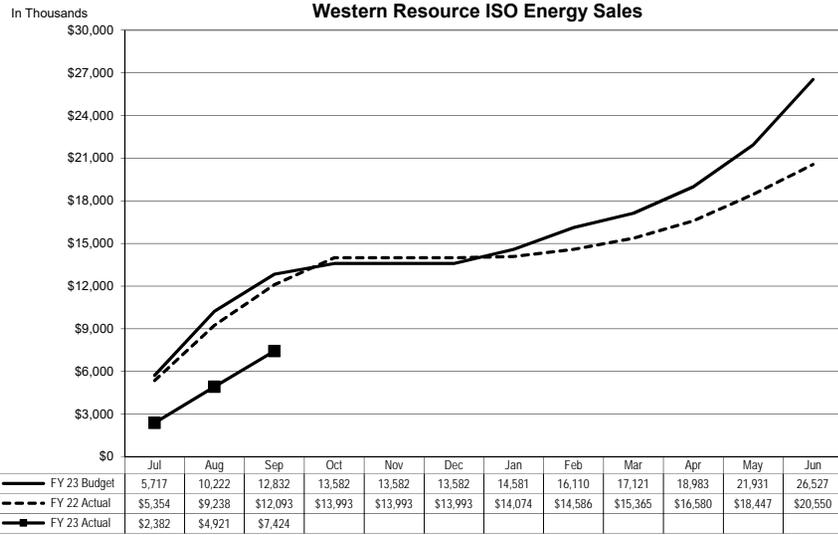
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 23 Budget	\$84	\$169	\$253	\$337	\$422	\$506	\$590	\$675	\$759	\$843	\$928	\$1,012
FY 22 Actual	\$90	\$153	\$228	\$279	\$340	\$408	\$488	\$551	\$605	\$650	\$704	\$809
FY 23 Actual	\$63	\$110	\$161									

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 23 Budget	\$34	\$68	\$101	\$135	\$169	\$203	\$236	\$270	\$304	\$338	\$371	\$405
FY 22 Actual	\$75	\$97	\$113	\$159	\$210	\$220	\$223	\$228	\$232	\$235	\$483	\$493
FY 23 Actual	\$81	\$100	\$104									

**Annual Budget Cost
Third Party Revenue Analysis By Source
As of September 30, 2022**



**Annual Budget Cost
Third Party Revenue Analysis By Source
As of September 30, 2022**



**Annual Budget
NCPA Generation Detail Analysis By Plant
As of September 30, 2022**

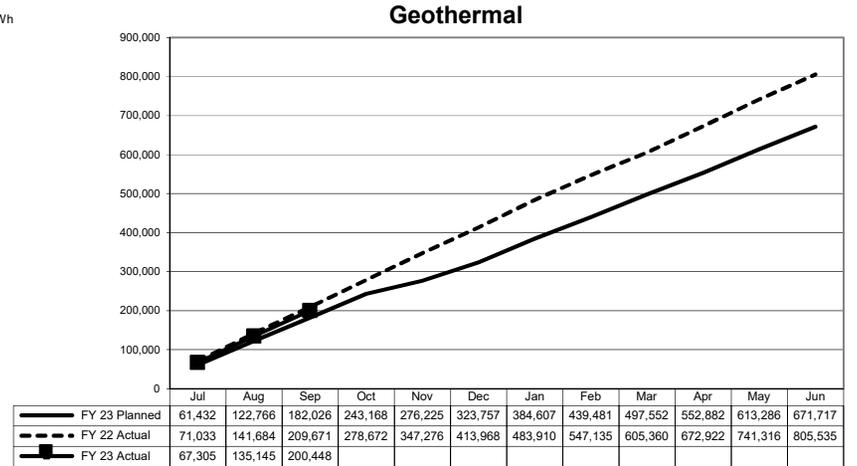
Generation Cost Analysis

\$ in thousands

	Geothermal				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
	Routine O & M	\$ 17,798	\$ 4,601	\$ 22.95	\$ 13,197
Capital Assets/Spare Parts Inventories	7,401	1,427	7.12	5,974	81%
Other Costs	12,357	3,441	17.17	8,916	72%
CA ISO Charges	604	283	1.41	321	53%
Debt Service	3,473	868	4.33	2,605	75%
Annual Budget	41,633	10,621	52.99	31,012	74%
Less: Third Party Revenue					
Interest Income	150	38	0.19	112	75%
ISO Energy Sales	42,271	19,583	97.70	22,688	54%
Ancillary Services Sales	-	-	-	-	0%
Effluent Revenues	750	87	0.44	663	88%
Misc	113	28	0.14	85	75%
	43,284	19,737	98.46	23,547	54%
Net Annual Budget Cost to Participants	\$ (1,651)	\$ (9,116)	\$ (45.48)	\$ 7,464	-452%
Net Generation--MWh @ Meter	671,717	200,448			
\$/MWh (A)	\$ (7.63)	\$ (49.81)			

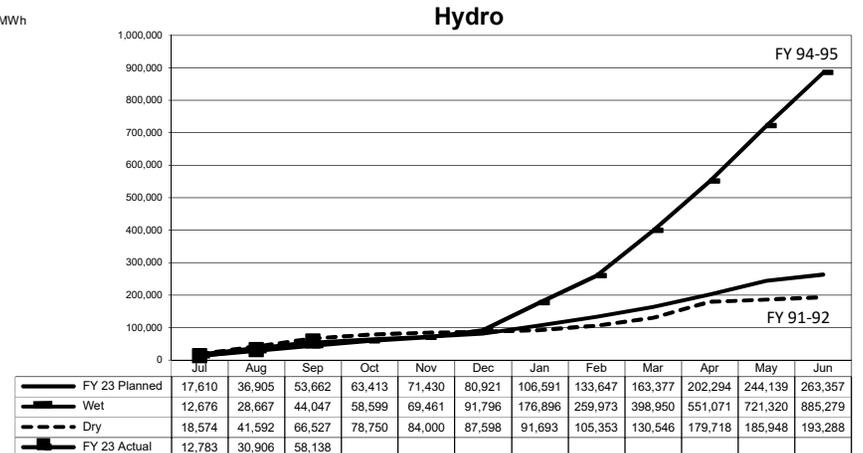
MWhs Generated

In MWh



	Hydroelectric				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
	Routine O & M	\$ 10,203	\$ 1,623	\$ 27.92	\$ 8,580
Capital Assets/Spare Parts Inventories	4,270	941	16.18	3,329	78%
Other Costs	3,993	1,087	18.70	2,906	73%
CA ISO Charges	1,237	1,776	30.55	(539)	-44%
Debt Service	35,811	8,953	153.99	26,858	75%
Annual Budget	55,514	14,380	247.34	41,134	74%
Less: Third Party Revenue					
Interest Income	150	23	0.40	127	84%
ISO Energy Sales	22,182	14,082	242.21	8,101	37%
Ancillary Services Sales	1,224	1,264	21.74	(41)	-3%
Misc	-	-	-	-	0%
	23,556	15,369	264.35	8,187	35%
Net Annual Budget Cost to Participants	\$ 31,958	\$ (989)	\$ (17.01)	\$ 32,947	
Net Generation--MWh @ Meter	263,357	58,138			
\$/MWh (A)	\$ (14.63)	\$ (171.00)			

In MWh



Footnotes:

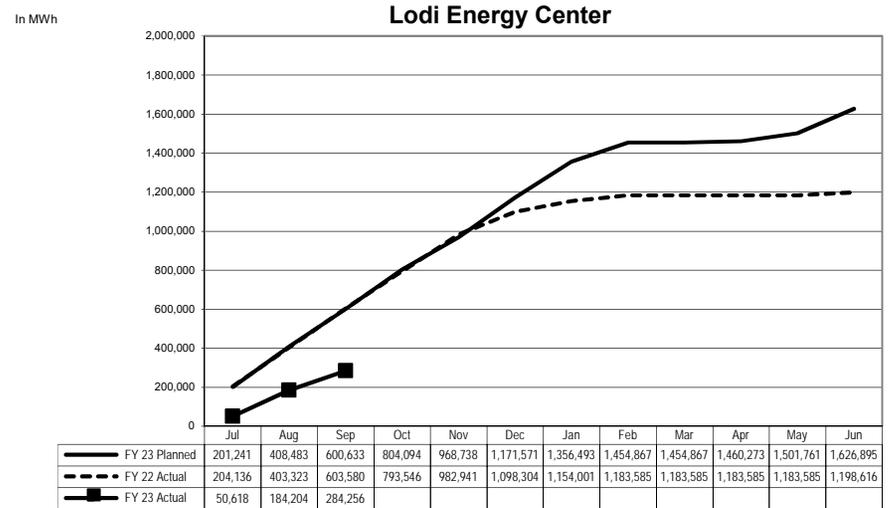
(A) Aggregate fiscal year generation in \$/MWh (excluding debt service)

**Annual Budget
NCPA Generation Detail Analysis By Plant
As of September 30, 2022**

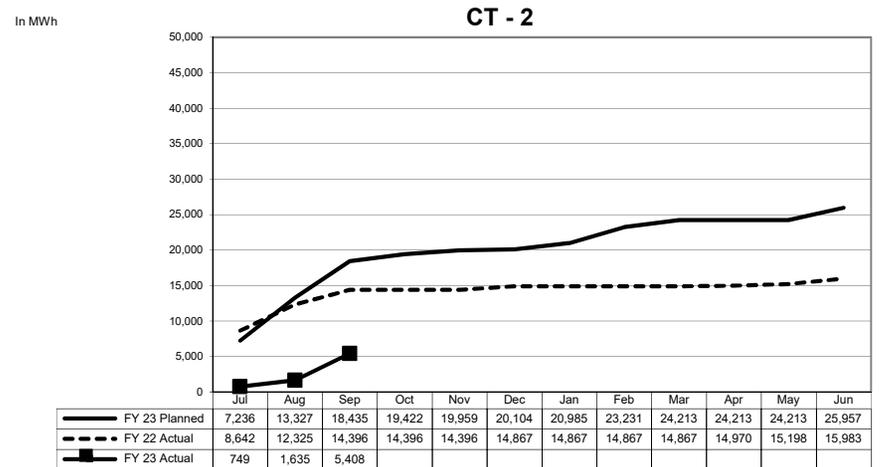
Generation Cost Analysis

	Lodi Energy Center				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 9,826	\$ 2,179	\$ 7.67	\$ 7,647	78%
Fuel	64,819	20,708	72.85	44,111	68%
GHG Allowance Costs	20,250	-	-	20,250	100%
CA ISO Charges and Energy Purchases	2,970	3,088	10.87	(118)	-4%
Capital Assets/Spare Parts Inventories	3,631	392	1.38	3,240	89%
Other Costs	10,244	2,774	9.76	7,470	73%
Debt Service	25,996	6,499	22.86	19,497	75%
Annual Budget	137,737	35,641	125.38	102,096	74%
Less: Third Party Revenue					
Interest Income	250	129	0.45	121	48%
ISO Energy Sales	121,620	35,464	124.76	86,155	71%
Ancillary Services Sales	2,318	99	0.35	2,218	96%
Transfer Gas Credit	-	-	-	-	0%
GHG Allowance Credits	19,710	960	3.38	18,749	95%
Misc	-	1	0.00	(1)	0%
	143,897	36,653	128.94	107,244	75%
Net Annual Budget Cost to Participants	\$ (6,160)	\$ (1,012)	\$ (3.56)	\$ (5,148)	84%
Net Generation--MWh @ Meter	1,626,895	284,256			
\$/MWh (A)	\$ (19.77)	\$ (26.42)			

MWhs Generated



	Combustion Turbine No. 2 (STIG)				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 1,616	\$ 401	\$ 74.18	\$ 1,215	75%
Fuel and Pipeline Transport Charges	2,227	161	29.86	2,065	93%
GHG Allowance Costs	424	-	-	424	100%
Capital Assets/Spare Parts Inventories	220	9	1.66	211	96%
Other Costs	643	407	75.26	236	37%
CA ISO Charges	148	-	-	148	100%
Debt Service	5,084	1,271	235.03	3,813	75%
Annual Budget	10,361	2,250	415.99	8,112	78%
Less: Third Party Revenue					
Interest Income	42	11	2.10	31	73%
ISO Energy Sales	4,331	1,742	322.15	2,589	60%
Ancillary Service Sales	-	-	-	-	0%
Fuel and Pipeline Transport Credits	1,775	930	172.01	845	48%
GHG Allowance Credits	424	-	-	424	100%
Misc	-	-	-	-	0%
	6,572	2,684	496.26	3,888	59%
Net Annual Budget Cost to Participants	\$ 3,789	\$ (434)	\$ (80.27)	\$ 4,223	111%
Net Generation--MWh @ Meter	25,957	5,408			
\$/MWh (A)	\$ (49.88)	\$ (315.29)			



Footnotes:

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

**Annual Budget
NCPA Generation Detail Analysis By Plant
As of September 30, 2022**

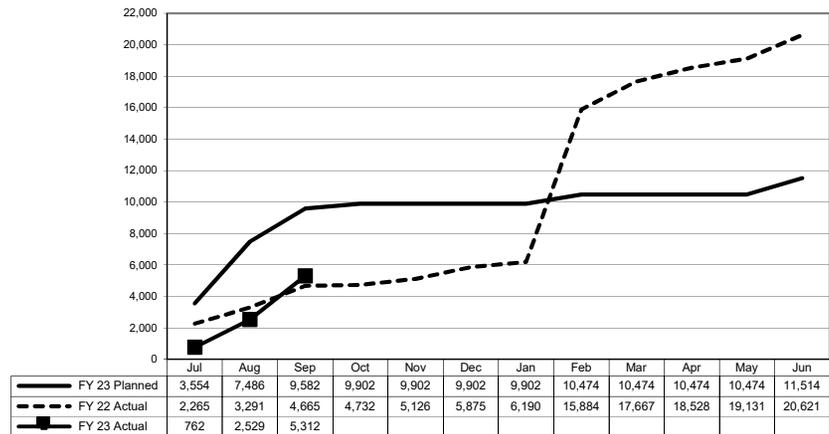
Generation Cost Analysis

	Combustion Turbine No. 1				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 2,530	\$ 552	\$ 103.84	\$ 1,978	78%
Fuel and Pipeline Transport Charges	1,214	472	88.91	741	61%
Capital Assets/Spare Parts Inventories	800	162	30.54	638	80%
Other Costs	882	212	39.93	670	76%
CA ISO Charges	176	400	75.25	(224)	-128%
Debt Service	-	-	-	-	-
Annual Budget	5,602	1,798	338.47	3,804	68%
Less: Third Party Revenue					
Interest Income	55	11		44	80%
ISO Energy Sales	3,053	3,396	639.23	(342)	-11%
Ancillary Services Sales	-	-	-	-	0%
Misc	-	-	-	-	0%
	3,108	3,407	639.23	(298)	-10%
Net Annual Budget Cost to Participants	\$ 2,493	\$ (1,609)	\$ (302.82)	\$ 4,102	165%
Net Generation--MWh @ Meter	11,514	5,312			
\$/MWh (A)	\$ 216.54	\$ (302.82)			

MWhs Generated

In MWh

CT - 1



Footnotes:

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