



Northern California Power Agency  
651 Commerce Drive | Roseville, California 95678  
(916) 781-3636 | [www.ncpa.com](http://www.ncpa.com)



# BUSINESS PROGRESS REPORT

---

2022  
August

---

---

# Table of Contents

---

---

Generation Costs & Reliability .....	1
Environmental, Health & Safety Projects .....	4
Power Management/NCPA Market Results.....	5
Debt & Financial Management .....	11
Schedule Coordination Goals.....	12
NCPA Bills & Settlements.....	13
Political Arena State/Federal/Western Programs .....	14
Human Resources.....	14
Annual Budget FY to Date.....	16
Budget vs. Actual by Major Area .....	17
Generation Resources Analysis by Source .....	18
Management Services Analysis by Source .....	19
Third Party Revenue Analysis by Source .....	21
Generation Detail Analysis by Plant .....	23

## Generation Costs & Reliability

### Combustion Turbine Project

#### Unit Operation for July 2022

Unit	Availability		Production			Reason for Run
CT1 Alameda	Unit 1	Unit 2	Unit 1	21.2	MWh	TESTING / TESTING
	84.8%	99.5%	Unit 2	0.1	MWh	
Curtailments, Outages, and Comments:						
Unit 1: 7/01 @ 00:00 - 7/05 @ 23:59; Oil Fire and Repair, OMS 11417957						
Unit 2: 7/27 @ 09:00 - 12:24; AVR Relay Replacement, OMS 12124698						
Unit	Availability		Production			Reason for Run
CT1 Lodi	94.99%		752.9 MWh			CAISO
Curtailments, Outages, and Comments:						
7/04 @ 00:00 - 7/5 @ 13:19; Oil leak repair, OMS 12012507						
Unit	Availability		Production			Reason for Run
CT2 STIG	100.0%		731.9 MWh			CAISO & TESTING
Curtailments, Outages, and Comments:						
Normal operation.						
Unit	Availability		Production			Reason for Run
LEC	70.5%		50,616 MWh			CAISO & TESTING
Curtailments, Outages, and Comments:						
7/02 @ 17:32 - 19:03; Low drum level trip on startup, OMS 11417957						
7/07 @ 16:00 - 16:41; CT fail to fire w/ OST valve issue						
7/07 @ 17:21 - 18:10; LP bypass valve trouble						
7/08 @ 16:00 - 16:21; CT fail to fire w/ OST valve issue						
7/10 @ 00:00 - 7/29 @ 23:59; LEC Derate to 225MW for high HP turbine vibrations						
7/20 @ 00:00 - 7/29 @ 23:59; HP turbine vibration inspection, OMS 12088076						

**Maintenance Summary – Specific per asset above.**

## Geothermal Facilities

### Availability/Production for July 2022

Unit	Availability	Net Electricity Generated/Water Delivered	Out-of-Service/Descriptors
Unit 1	94.76 %	19,051 MWh	U1 was off line 7/22/22 0200 until 7/23/22 1702 for 230kv line work
Unit 2	95.09 %	*19,098 MWh	U2 was off line 7/22/22 0200 until 7/23/22 1423 for 230kv line work
Unit 3	N/A %	N/A -	Unit 3 remains out of service.
Unit 4	100 %	29,159 MWh	Unit 4 had not outages for the month
Southeast Geysers Effluent Pipeline	87 %	61.5 mgallons	Average flow rate: 1,331 gpm
Southeast Solar Plant	N/A	DATA NOT AVAILABLE KWh	Year-to-date KWh: 1,422,579
Bear Canyon Pump Station Zero Solar	N/A	DATA NOT AVAILABLE KWh	Year-to-date KWh: 1,401,224

\* Accounts for an additional 505 MWh of house load for the 21KV power supply to the effluent pipeline supplied from Unit #2.

## Hydroelectric Project

### Availability/Production for July 2022

Units	Availability	Net Electricity Generated	Out-of-Service
<b>Collierville Unit 1</b>	97.57%	655 MWh	CV Unit 1 – Out of Service on 7/7/22 from 0920 to 1053 for collector ring work and on 7/11/22 from 1226 to 1456 for collector ring work and on 7/26/22 from 0746 to 2143 for collector ring work.
<b>Collierville Unit 2</b>	100%	10738 MWh	CV Unit 2 – No Outages.
<b>Spicer Unit 1</b>	90.38%	439 MWh	NSM1- Out of Service on 7/4/22 to 7/7/22 from 1821 to 1801 for TIGO due to Electra Fire.
<b>Spicer Unit 2</b>	91.24%	757 MWh	NSM2- Out of Service on 7/4/22 to 7/7/22 from 1821 to 1134 for TIGO due to Electra Fire.
<b>Spicer Unit 3</b>	90.9%	195 MWh	NSM3- Out of Service on 7/4/22 to 7/7/22 from 1821 to 1406 for TIGO due to Electra Fire.

### Operations & Maintenance Activities:

- CMMS work orders
- CV Unit 1 Collector Ring Replacement

## 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 July.
- 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 July 30, 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.

### July 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	657	281	2,672	3,656
Work Hours Since Last Recordable	55,280	57,986	406,019	2,841,957
LTA's (this month)	0	0	0	0
LTA's (calendar year)	0	0	0	0
Days without LTA	5,406	2,535	10,576	6,669
Work Hours without LTA	487,849	222,196	816,563	2,463,975
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 July 30, 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**

	<b>July 2022</b>		<b>Calendar Year 2022</b>	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	412.02 7/11 @ 1800	206,308	440.09 6/21 @ 1800	1,299,071
SVP	623.99 7/18 @ 1500	393,294	647.57 6/21 @ 1700	2,581,782
MSSA	1021.19 7/11 @ 1700	599,602	1086.35 6/21 @ 1800	3,880,853

#### **Last Year 2021 Data\***

	<b>July 2021</b>		<b>Calendar Year 2021</b>	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	415.77 7/9 @ 1700	209,867	440.56 6/17 @ 1700	1,302,236
SVP	569.18 7/9 @ 1600	360,958	591.96 8/27 @ 1500	2,321,687
MSSA	983.57 7/9 @ 1600	570,825	1025.46 6/17 @ 1700	3,623,923

\*Last year's data added for comparison purposes only

#### **System Peak Data**

	<b>All Time Peak Demand</b>	<b>2022 Peak Demand</b>
NCPA Pool	517.83 MW on 7/24/06 @ 1500	440.09 6/21 @ 1800
SVP	647.57 MW on 6/21/22 @ 1700	647.57 6/21 @ 1700
MSSA	1086.35 MW on 6/21/22 @ 1800	1086.35 6/21 @ 1800

- 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.

<b>NCPA Deviation Band Performance</b>		
	<b>July 2022</b>	<b>Calendar Year 2022</b>
MSSA % Within the Band	99.65%	98.34%

- There were no PG&E PSPS events.
- CAISO System Alerts, Warnings, and Emergencies:
  - None
- There were no CAISO Oversupply Potential Notifications.
- CAISO Real-time Contingency Dispatches (RTCD):
  - RTCD event 0110 hours 7/1/22
  - RTCD event 0942 hours 7/1/22
  - RTCD event 2241 hours 7/21/22

### **Pooling, Portfolio Planning & Forecasting**

- NCPA Pool loads during July 2022 were 206,309 MWh versus the budget forecast of 211,199 MWh, resulting in a forecast error of 2.37%. The current weather outlook for August 2022 is for above normal temperatures and little rainfall. The Pool's August load forecast is 211,149 MWh compared with extrapolated actuals of 221,409 MWh as of August 16, 2022.
- Lodi Energy Center (LEC) ran 263 hours out of a possible 744 producing 50,618 MWh. Natural gas and power prices are significantly higher than a year ago due to the low reservoir levels throughout the state and the situation in Ukraine. LEC was forced out from July 20<sup>th</sup> through July 29<sup>th</sup> but has been available since August 1<sup>st</sup>.
- During July 2022, 0.00" of rain was recorded at the Big Trees gauge. July average rainfall at Big Trees is 0.18". New Spicer Meadows storage decreased by just over 8,600 acre feet in July.
- The Value of Storage (VOS) of New Spicer Meadow Reservoir (NSMR) has been reduced from \$300/MWh to \$250/MWh. Releases from NSMR have been ramped up to meet and maintain the June 1<sup>st</sup> summer minimum Big Trees flows of 150 cfs.
- New Spicer Meadows storage as of July 31, 2022 was 116,653 acre feet. The historical average storage at the end of July is 134,173 acre feet. As of August 16<sup>th</sup>, storage was 110,981 acre feet.
- Combined Calaveras Project generation for the Pool in July 2022 totaled 6,218MWh, down slightly from 6,515 MWh in June 2022.
- Western Base Resource (BR) deliveries for the Pool during July 2022 were 26,663 MWh. Displacement program energy totaled 0 MWh. The Pool's share of expected total delivery from the Western Base Resource for August 2022 is 18,293 MWh.
- The PG&E Citygate gas index averaged \$7.86 / MMBtu during the month of July as compared to an average of \$8.76 for June. August's current average price is \$9.33 through the 16<sup>th</sup>. Both NYMEX gas and basis prices increased due to the current heat wave across the U.S. and below average storage volumes. The September 2022 PG&E Citygate forward price is \$8.97 / MMBtu, up \$1.35 from the August forward.



- Day-Ahead PG&E DLAP electricity prices for July averaged \$84.08 / MWh On-Peak and \$71.33 Off-Peak, with a high of \$188.97. DLAP prices have averaged \$104.11 On-Peak and \$90.49 Off-Peak for the period August 1<sup>st</sup> through the 16<sup>th</sup>. The forward power prices for September are \$115.78 On-Peak and \$93.61 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 October 2022:
  - Monthly System Resource Adequacy Demonstration (filed August 17, 2022)
  - Monthly Supply Plan (filed August 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:

#### **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.
- NCPA submitted comments opposing real-time market scarcity pricing due to CAISO premise that some anomalous August 2020 market outcomes were due to price formation issues. NCPA reminded CAISO of the out of market dispatches to load and distributed generation that resulted in real time prices not aligning with emergency conditions. NCPA also reminded CAISO that enhancements to real time market prices were implemented in Summer 2021 Market Enhancements release. NCPA requested for CAISO to offer other examples of where price formation could have improved market results as well as evaluate performance of real time price and reliability demand response resource enhancements from the Summer 2021 initiative. NCPA also discouraged changes to bid cost recovery rules for energy storage resources at this time.
- Next steps:
  - Nov 3, 2022 Post straw proposal
  - Nov 10, 2022 Web meeting
  - Dec12, 2022 Comments due

### Energy Storage Enhancements

- Next steps:
  - Aug. 2022: Posting paper
  - Oct. 2022: Meeting

### Extended Day-Ahead Market

- EDAM Next steps:
  - Aug 16, 2022 Revised straw proposal posting
  - Aug 29, 2022 Meeting
  - Sep 7-8, 2022 Meeting
  - Sep 20, 2022 Comments due on revised straw proposal
  - Sep 2022 Draft tariff framework posting
  - 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

### Resource Adequacy Enhancements

- 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

- Next steps
  - Sep 12, 2022 Workshop
  - Oct 6, 2022 Revised straw proposal posting
  - Oct 14, 2022 Meeting
  - Oct 28, 2022 Comments due

### Transmission Access Charge Structure Enhancements

- Initiative draft final proposal is complete and the initiative is currently on hold pending developments from Extend Day Ahead Market to EIM initiative.

## Western

### Western Base Resource Tracking (NCPA Pool)

Western Base Resource Tracking - NCPA Pool							
	Actual			Costs & Rates			
	BR Forecast <sup>1</sup> (MWh)	BR Delivered (MWh)	Difference (MWh)	Base Resource & Restoration Fund (\$)	Monthly Cost of BR <sup>2</sup> (\$/MWh)	CAISO LMP Differential <sup>3</sup> (\$/MWh)	12-Mo Rolling Avg. Cost of BR <sup>4</sup> (\$/MWh)
Jul-22	51,082	26,633	(24,449)	\$1,733,503	\$ 65.09	\$ (0.41)	\$ 68.38
Aug-22	33,542	-	0	\$1,733,503	\$ 51.68	\$ -	\$ 74.70
Sep-22	20,613	-	0	\$1,761,188	\$ 85.44	\$ -	\$ 79.64
Oct-22	8,931	-	0	\$811,693	\$ 90.88	\$ -	\$ 87.74
Nov-22	-	-	0	\$811,693	\$ -	\$ -	\$ 92.65
Dec-22	-	-	0	\$811,693	\$ -	\$ -	\$ 93.59
Jan-23	12,388	-	0	\$811,693	\$ 65.52	\$ -	\$ 87.80
Feb-23	18,712	-	0	\$811,693	\$ 43.38	\$ -	\$ 82.39
Mar-23	12,955	-	0	\$811,693	\$ 62.65	\$ -	\$ 81.85
Apr-23	41,280	-	0	\$1,835,495	\$ 44.46	\$ -	\$ 72.11
May-23	74,195	-	0	\$1,835,495	\$ 24.74	\$ -	\$ 58.43
Jun-23	78,807	-	0	\$1,835,495	\$ 23.29	\$ -	\$ 48.45

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 26,633 MWh of Base Resource (BR) energy in July 2022 with an estimated MEEA savings of \$(10,810). There was zero MWh displaced energy in July.

### Integrated Resource Plan (IRP)

- Pursuant to the Western Base Resource Contract, NCPA, on behalf of the assignment Members is required to file a structured Integrated Resource Plan with Western every five calendar years, and is subsequently required to file an update to the IRP each year. NCPA filed the 2022 Annual Progress report to WAPA on June 28, 2022 for the July 1, 2022 deadline. WAPA approved and accepted the report on July 28, 2022.

## Interconnection Affairs

### PG&E Update

#### **CAISO Initiative – Interconnection Process Enhancements Phase 2**

CAISO is exploring opportunities for more viable projects to move forward toward COD, make more interconnection related data available to the public, and explore different cost allocation methodologies.

## **Notable Proposed Changes**

1. Should the allocation of TPD require a PPA that procures the project's RA capacity for some minimum term?  
NCPA Comment: NCPA supports efforts to ensure more viable projects will move forward, however where the Interconnection Customer (IC) is also the off taker for a projects output, the IC should be allowed to provide supporting information to satisfy such requirements without a formal PPA .
2. Should the ISO re-consider an alternative cost allocation treatment for network upgrades to local (below 200 KV) systems where the associated generation benefits more than, or other than, the customers within the service area of the Participating TO owning the facilities?  
NCPA Comment: NCPA supports the allocation methodologies of costs to those that receive the benefits. We request PG&E provide data showing available investment before the 15 percent cap is reached. NCPA further supports LV facilities to be competitively bid, which can also reduce the overall cost to ratepayers.

## **CAISO Initiative – 2022-2023 Transmission Planning Process Final Study Plan**

### **Notable Proposed Changes**

1. Inter-Agency High Electrification Project  
CPUC and CEC leadership began discussing higher electrification forecasts even as the 2021 IEPR was winding down.

As a result of inter-agency discussions, the lead staff of the Energy Agencies (CEC, CPUC) and CAISO agreed to collectively develop an assessment of the transmission system impacts of a scenario with higher electrification than expected to be included in the original 2021 IEPR adopted demand forecast.

This analysis was initially considered to be a sensitivity to supplement the regular inputs to the 2022-23 TPP.

As the initial Inter Agency High Electrification (IAHE) scenario was being finalized agency leadership directed development of a second scenario focused on transportation.

Eventually, agency and CAISO leadership determined that the Additional Transportation Electrification grid planning scenario, and complementary generation resource portfolio should be the “base case” for this TPP cycle.

### **NCPA Comments**

1. The base case should not be updated and load forecast in the original study plan should be used for the base case. NCPA supports studying the high electrification scenario as a sensitivity.
2. NCPA cautions the CAISO of cost containment in case the high electrification scenarios do not materialize.

3. NCPA encourages the CAISO to consider all potentially lower cost alternative methods including non-wires solutions, dynamic line ratings, and the use of the existing transmission.
4. NCPA further notes: Existing resources are evaluating the uses, economics, and feasibility of converting existing gas fired generators to green hydrogen as highlighted by CEC's. [IEPR Commissioner Workshop on Role of Hydrogen in California's Clean Energy](#)

## **CAISO Initiative – Transmission Planning Process Enhancements**

### **Three (3) Enhancements**

1. Adjust the timeline for the release of the draft transmission plans from the end of January to the end of March, targeting approval in each year's May Board of Governors meetings.
2. Enable approvals for major long lead time transmission projects needed beyond the current 10 year planning horizon.
3. Retaining policy-driven transmission upgrade capacity for the specific policy purpose for which it was developed.

### **Potential NCPA Comments (Due August 5, 2022)**

1. Market conditions and resources availability can change over time, ISO should reassess policy capacity allocation in each planning cycle.

## **Debt and Financial Management**

- At the July 27<sup>th</sup> meeting, the Federal Open Market Committee (FOMC) raised the federal funds target rate by 75 basis points (bps) to a range of 2.25% to 2.50%. This was the second Fed meeting in a row that ended in a 75 bps rate hike. The markets largely expected the move after Fed officials telegraphed the increase in a series of statements since the June meeting. Fed Chair Jerome Powell left the door open about its next move saying it would depend on the data.
- The Consumer Price Index for all items increased 8.5% for the 12 months ending July, a smaller figure than the 9.1% increase for the period ending June, but still near a 40-year high. Lower gas prices helped reduce the year-over-year inflation rate as of the end of July, while inflation-adjusted earnings still trail rising prices by a wide margin.
- CalPERS released the Agency's Actuarial Valuation for the period ending June 30, 2021, following the reported 21.3% net return on investments last year. To no surprise, the report reflected a significant jump in the funding ratio to 75.7% compared to 63.1% last 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 deploying apps in the dev environment to test the Oracle 2019 database and testing is on-going. Q4 2022 rollout into production is anticipated.
  - Deal Manager App for Palo Alto's use rolled out in production. On-going training provided to Palo-Alto Staff.
- IS will be working in collaboration with Accounting and the consultants to streamline the agency's Budgeting Process and Accounting Reports. More updates to follow on the project timeline.

### **Network**

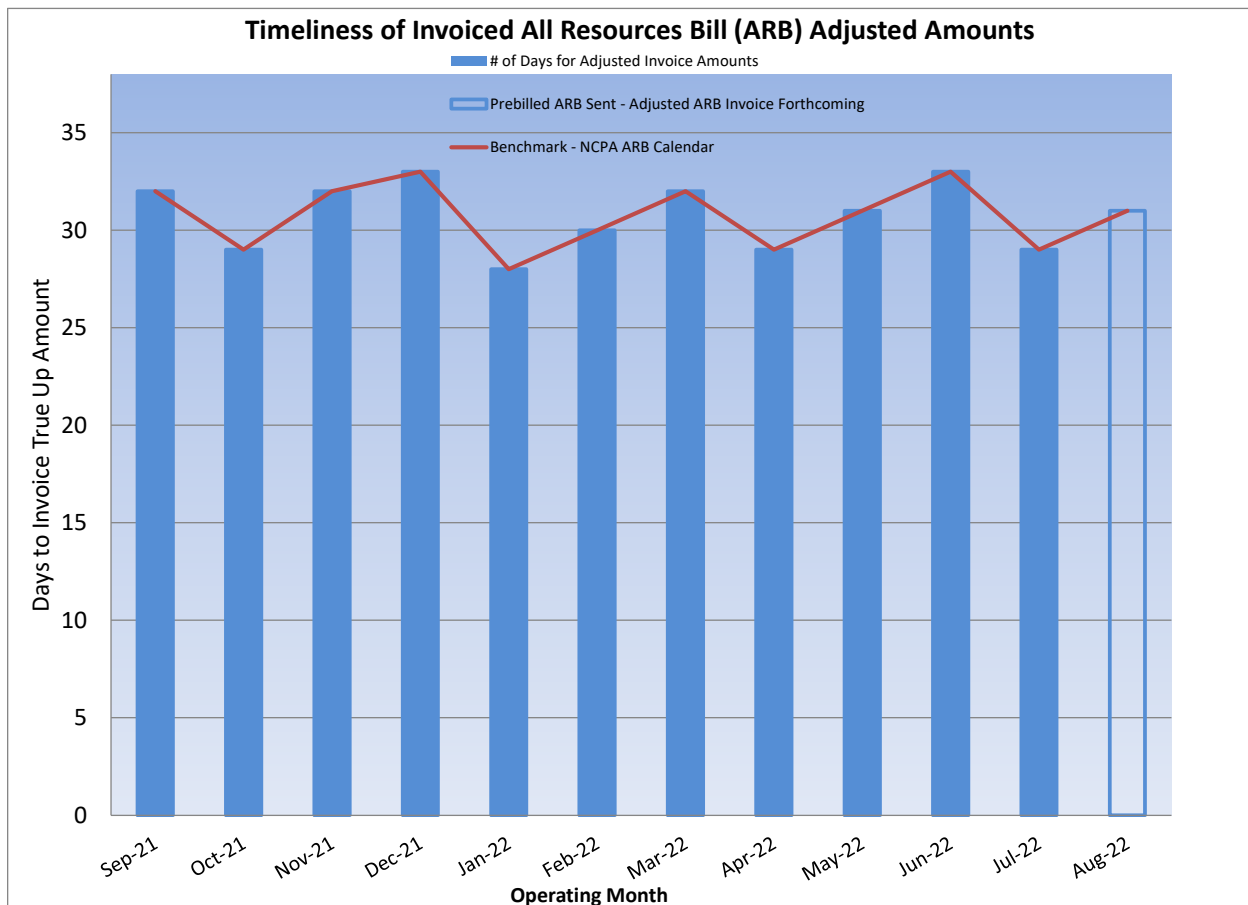
- SCADA and Networking team continue to work with a variety of customers in an effort to integrate several new wind, solar and hydro resources,
  - Camp Far West – IS team completed the integration of Camp Far West at the end of April and are currently monitoring and controlling this resource.
  - Deer Creek – IS team is currently working with NID staff to collect the required information needed to perform a successful integration of the Deer Creek hydro resource by end of 2022.
  - Luciana Solar – IS is coordinating with the necessary technical teams to setup communications to the resource. Network telemetry has been established with an expectation to test curtailment logic in the coming weeks. We anticipate Dispatch to have full monitoring and control capabilities by end of the summer.
- IS has begun 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. Cutover is expected to be completed this summer.
- Oracle 2019 continues to be tested with the anticipation of it replacing the current Oracle 11 and 12 versions in production. Application testing has started and staff is preparing for a full upgrade in early fall of 2022.
- 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 before end of summer.

## 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 August 2022 NCPA All Resources Bill (ARB) monthly invoice sent to members on July 26, 2022 contains:

- August 2022 monthly pre-billed budget/forecast amounts;
- June 2022 (1st Adjustment) NCPA Project and CAISO Initial settlement true-ups;
- May 2022 (2nd Adjustment) NCPA Project settlement true-up and T+20 business day recalculated CAISO settlement true-up allocations;
- March 2022 (3rd Adjustment) T+70 business day recalculated CAISO settlement true-up allocations and NCPA Projects true-up;
- July 2021 (4th Adjustment) T+11-month recalculated CAISO settlement true-up allocations;
- November 2020 (5th Adjustment) T+18-month recalculated CAISO settlement true-up allocations;
- August 2019 (6th Adjustment) T+33-month recalculated CAISO settlement true-up;
- May 2019 (7th Adjustment) T+36-month CAISO settlement true-up;



## **Legislative & Regulatory**

### **Customer Programs Update**

- NCPA and the other Clean Fuel Reward (CFR) Steering Committee members have been working closely with CARB Staff and CARB Vice Chair Sandy Berg to address a significant shortfall in the LCFS credit proceeds needed to fund the CFR. In response, the Steering Committee recently voted to reduce the point-of-purchase electric vehicle (EV) rebate to \$0 effective September 1, 2022. This change was a necessary response to ongoing lower-than-expected low carbon fuel standard (LCFS) credit prices and higher-than-expected EV sales. The CFR is funded entirely by a percentage of IOU and POU LCFS credit proceeds resulting from residential EV charging, and utilities are required to continue transferring funds to the CFR program (even while it is paused). The future of the CFR and potential changes to the program structure will be evaluated during the upcoming update of the LCFS regulations, expected to be effective January 1, 2024. NCPA's Emily Lemei represents Northern Californian POUs on the CFR Steering Committee, and has been serving as Chair since the program's creation.

### **State Update**

- NCPA submitted a grant application to receive \$100,000 from APPA's DEED program to fund a portion of a Hydrogen Development Plan NCPA is preparing to implement at the Lodi Energy Center. The project is the second part of a broader, multi-year effort to demonstrate that hydrogen can serve as a cost-effective and environmentally clean resource to meet the needs of the transportation and power sectors. NCPA has previously studied the feasibility of developing and building a hydrogen production facility at LEC, work that was also partially funded by the DEED program. APPA will make its funding decision on the current grant application in the Fall.

## **Human Resources**

### **Hires:**

- Craig Merry joined NCPA Headquarters as a Computer Technology Analyst III effective August 1, 2022. Craig joins us from the California Earthquake Authority where he was a Cloud Implementation Specialist. He was the lead application administrator where he deployed code to sensitive server environments, optimized server environments, processes tickets, and user issues, developed PowerShell and scripts for automating tasks, and built automated deployments. Craig brings over 14 years of experience. Craig holds a Bachelor of Science degree in Political Science from the University of California, Davis.
- Elham Tajik joined NCPA Headquarters as an Energy Resource Analyst IV effective August 8, 2022. Elham joins us from CAISO where she was a Power Systems Engineer Specialist. In this role, she was responsible for performing all functional testing of existing applications and new features added in the domain of Day-Ahead markets, Real-Time markets, and Market Quality Solutions. Elham holds a Bachelor of Science degree in Electrical Engineering from Sharif University of Science and Technology, a Master of Science degree in Electrical Engineering from Iran University of Science and Technology, and a Ph.D. in Electrical Engineering from the University of Oklahoma.



**Intern Hires:**

None.

**Promotions:**

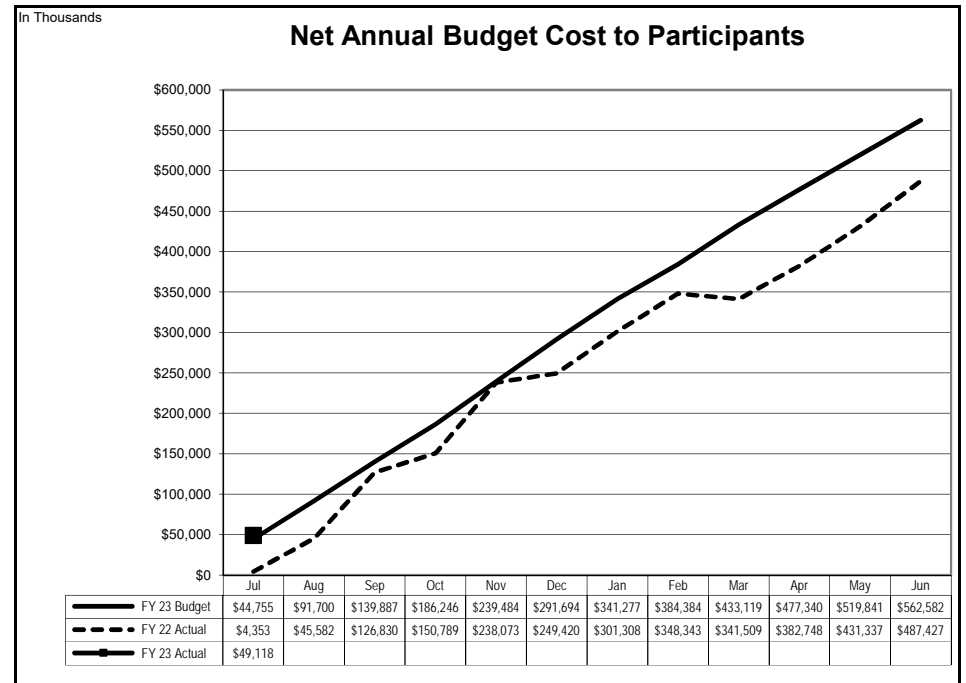
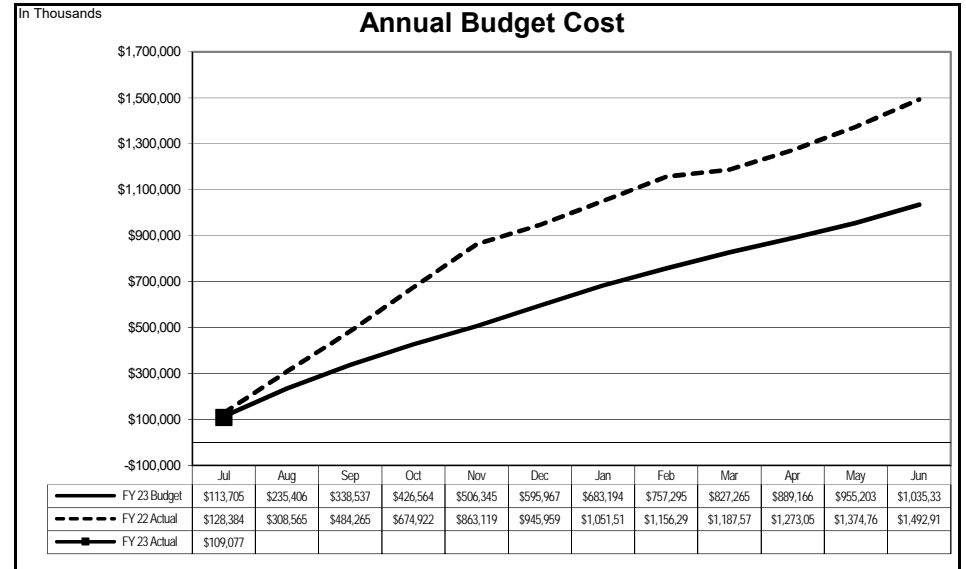
- Chelsea McNealy was promoted to Human Resources Analyst II, effective July 31, 2022. Chelsea joined NCPA in 2017 as a Human Resources Student Intern and was later promoted in 2018 to the Human Resources Technician position. Chelsea has proven to be an exceptional and dedicated employee throughout her time at the Agency and has developed excellent relationships with employees and Members. In addition, Chelsea has been instrumental in implementing and providing support for Human Resources' enhancement and modernization projects and continues to find new and innovative ways to meet HR's strategic goals. Chelsea holds a Bachelor of Arts degree in Communication Studies from California State University, Sacramento, a Professional in Human Resources certification from the Human Resource Standards Institute (HRCI), and a certificate from the International Public Management Association as a Certified Professional in Human Resources.

**Separations:**

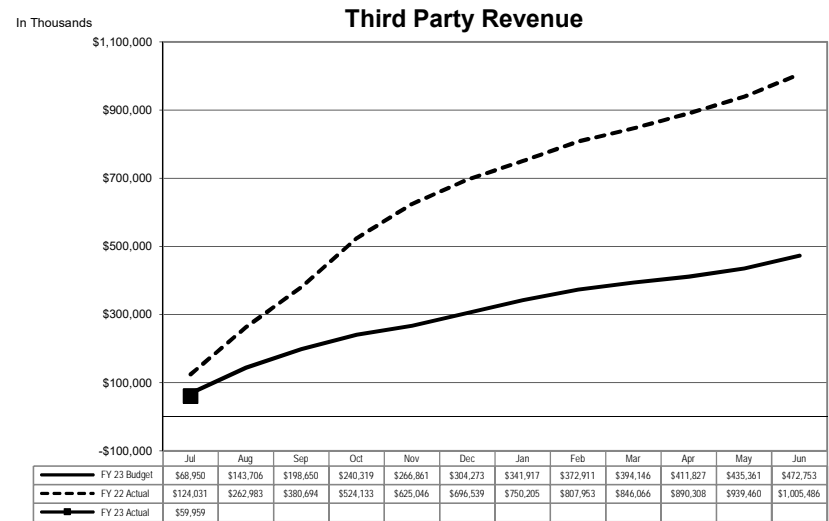
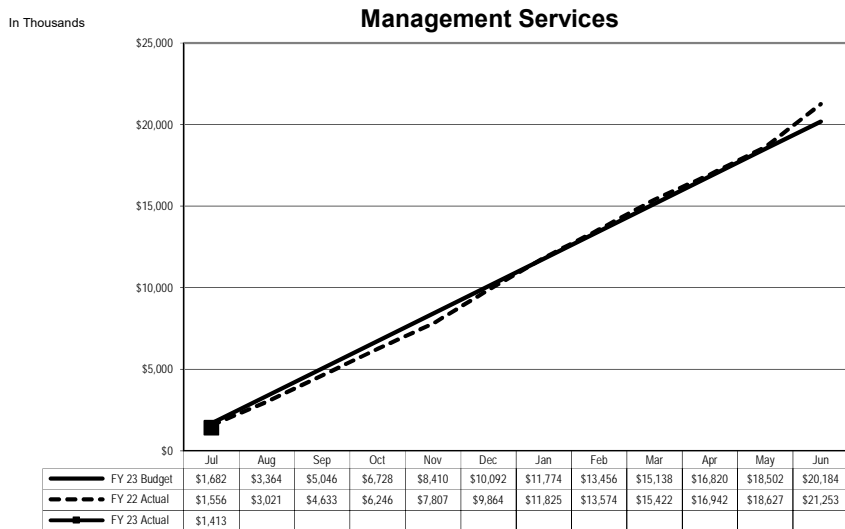
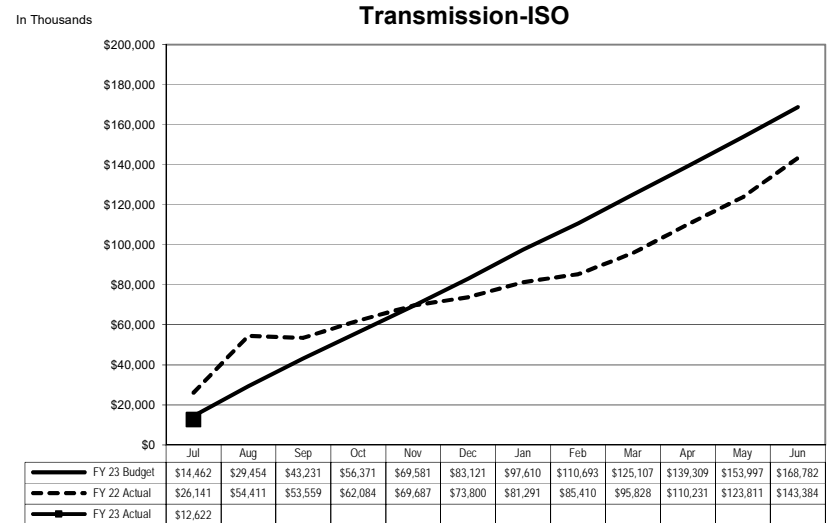
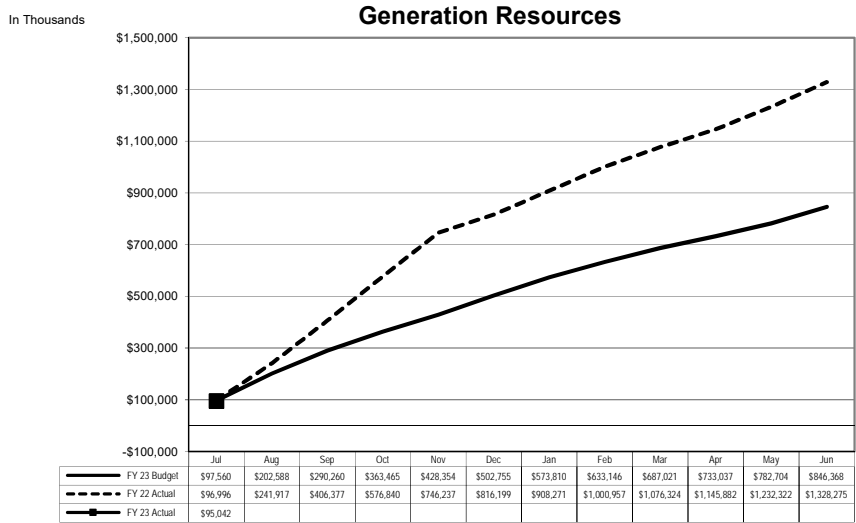
None.

**Annual Budget  
2022-2023 Fiscal Year To Date  
As of July 31, 2022**

In Thousands	Program			
	Annual Budget	Actual	Under(Ovr) Budget	YTD % Remaining
<b>GENERATION RESOURCES</b>				
<b>NCPA Plants</b>				
Hydroelectric	55,514	4,674	\$ 50,840	92%
Geothermal Plant	41,633	3,372	38,261	92%
Combustion Turbine No. 1	5,602	369	5,232	93%
Combustion Turbine No. 2 (STIG)	10,361	643	9,719	94%
Lodi Energy Center	137,737	7,472	130,265	95%
	250,847	16,530	234,317	93%
<b>Member Resources - Energy</b>	63,024	7,988	55,036	87%
<b>Member Resources - Natural Gas</b>	2,474	388	2,086	84%
<b>Western Resource</b>	26,100	3,198	22,902	88%
<b>Market Power Purchases</b>	35,533	5,252	30,281	85%
<b>Load Aggregation Costs - ISO</b>	467,469	61,686	405,783	87%
<b>Net GHG Obligations</b>	921	-	921	
	846,368	95,042	751,326	89%
<b>TRANSMISSION</b>				
<b>Independent System Operator</b>	168,782	12,622	156,160	93%
<b>MANAGEMENT SERVICES</b>				
<b>Legislative &amp; Regulatory</b>				
Legislative Representation	2,231	34	2,198	98%
Regulatory Representation	715	63	652	91%
Western Representation	723	11	712	99%
Customer Programs	615	40	575	94%
	4,284	148	4,136	97%
<b>Judicial Action</b>	460	-	460	100%
<b>Power Management</b>				
System Control & Load Dispatch	7,504	678	6,826	91%
Forecasting & Prescheduling	3,044	223	2,821	93%
Industry Restructuring	438	42	397	90%
Contract Admin, Interconnection Svcs & Ext. Affairs	1,032	72	960	93%
Gas Purchase Program	77	4	72	94%
Market Purchase Project	112	7	105	94%
	12,208	1,026	11,182	92%
<b>Energy Risk Management</b>	150	12	137	92%
<b>Settlements</b>	1,012	63	949	94%
<b>Integrated System Support</b>	405	81	324	80%
<b>Participant Pass Through Costs</b>	1,666	76	1,590	95%
<b>Support Services</b>	-	7	(7)	
	20,184	1,413	18,770	93%
<b>TOTAL ANNUAL BUDGET COST</b>	1,035,334	109,077	926,257	89%
<b>LESS: THIRD PARTY REVENUE</b>				
<b>Plant ISO Energy Sales</b>	193,457	11,193	182,264	94%
<b>Member Resource ISO Energy Sales</b>	49,954	9,959	39,996	80%
<b>Member Owned Generation ISO Energy Sales</b>	118,709	14,212	104,497	88%
<b>Revenue from Customers</b>	-	5,761	(5,761)	
<b>Customer Owned Generation ISO Energy Sales</b>	-	111	(111)	
<b>NCPA Contracts ISO Energy Sales</b>	34,944	3,439	31,505	90%
<b>Western Resource ISO Energy Sales</b>	26,527	2,382	24,144	91%
<b>Load Aggregation Energy Sales</b>	-	7,903	(7,903)	
<b>Ancillary Services Sales</b>	5,514	492	5,021	91%
<b>Transmission Sales</b>	110	9	101	92%
<b>Western Credits, Interest &amp; Other Income</b>	43,537	4,499	39,039	90%
	472,753	59,959	412,794	87%
<b>NET ANNUAL BUDGET COST TO PARTICIPANTS</b>	562,582	49,118	\$ 513,463	91%

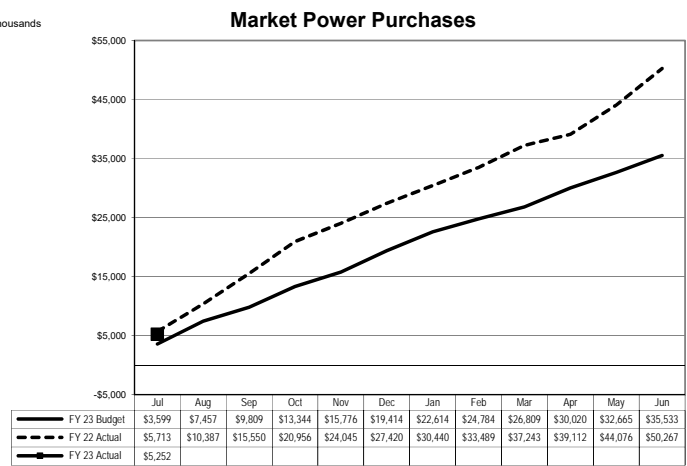
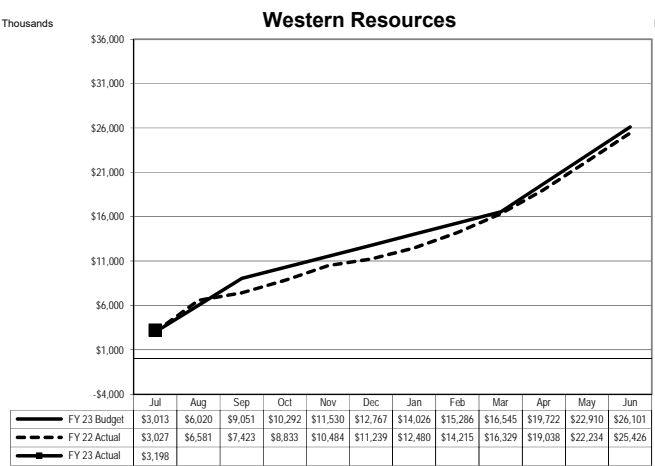
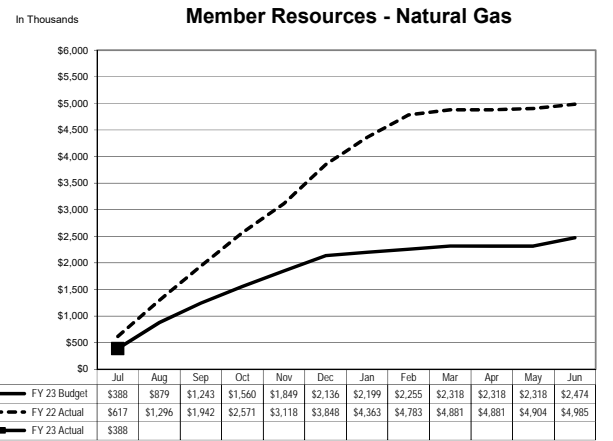
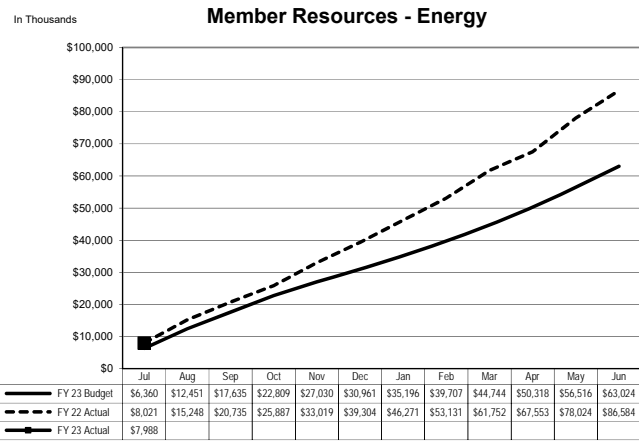
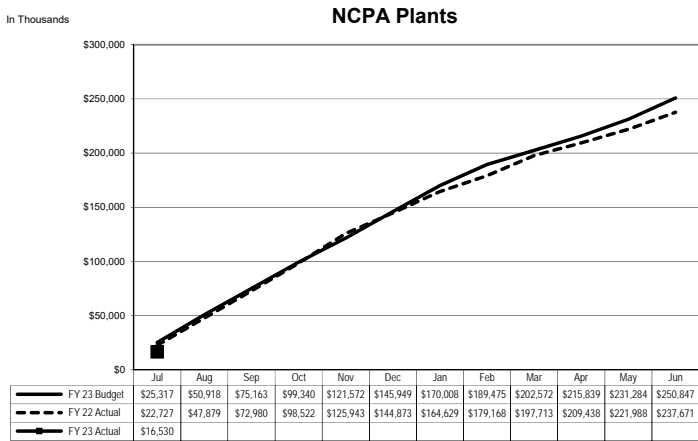


**Annual Budget  
Budget vs. Actual By Major Area  
As of July 31, 2022**



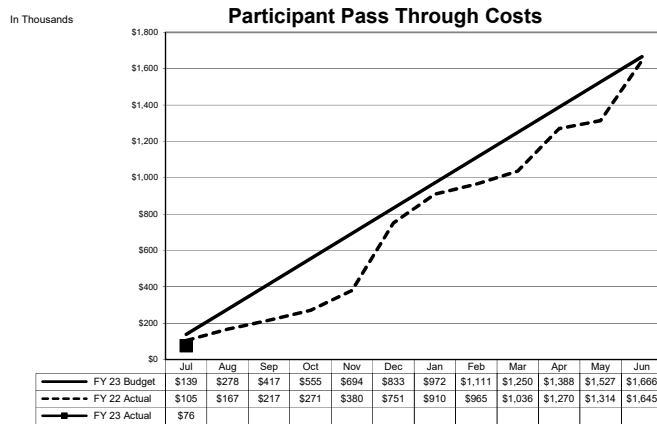
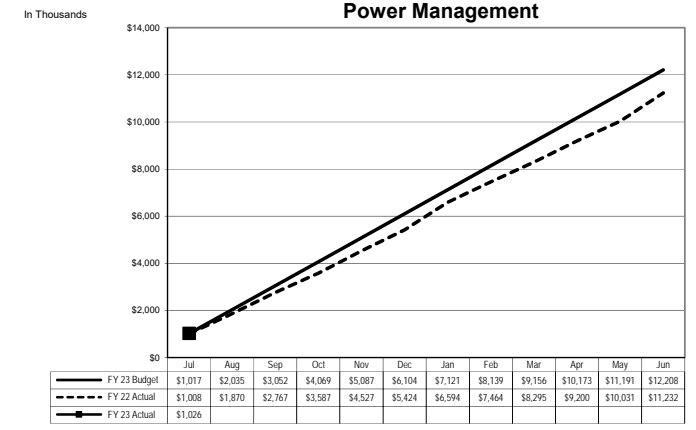
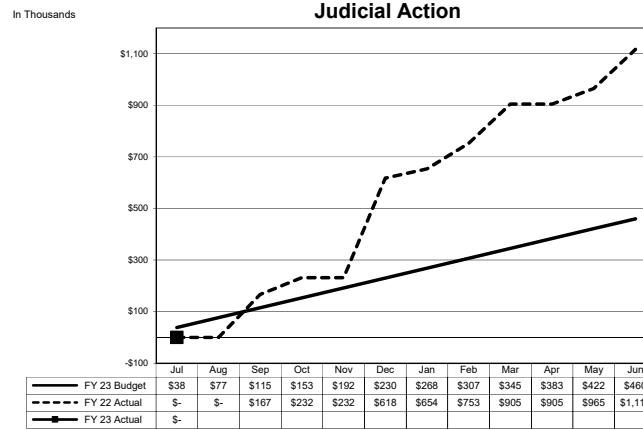
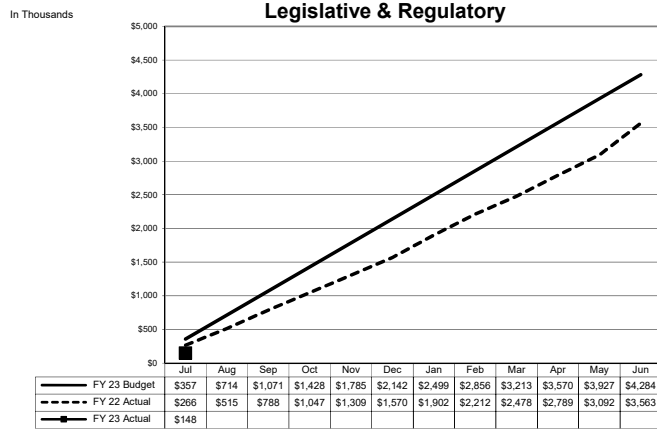
Footnote: Transmission is solely reflective of Independent System Operator (ISO) costs

## Annual Budget Cost Generation Resources Analysis By Source As of July 31, 2022



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

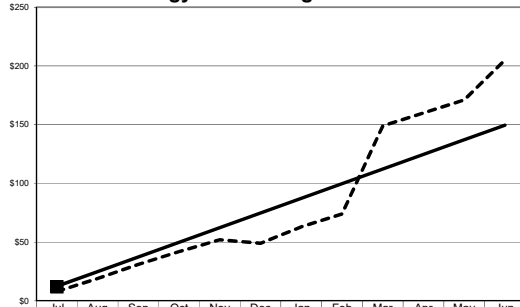
**Annual Budget Cost  
Management Services Analysis By Source  
As of July 31, 2022**



**Annual Budget Cost  
Management Services Analysis By Source  
As of July 31, 2022**

In Thousands

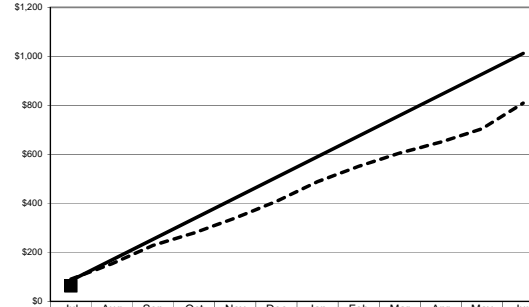
**Energy Risk Management**



	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											

In Thousands

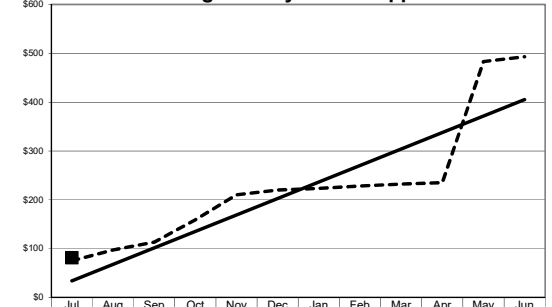
**Settlements**



	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	\$1,011
FY 22 Actual	\$90	\$153	\$228	\$279	\$340	\$408	\$488	\$551	\$605	\$650	\$704	\$809
FY 23 Actual	\$63											

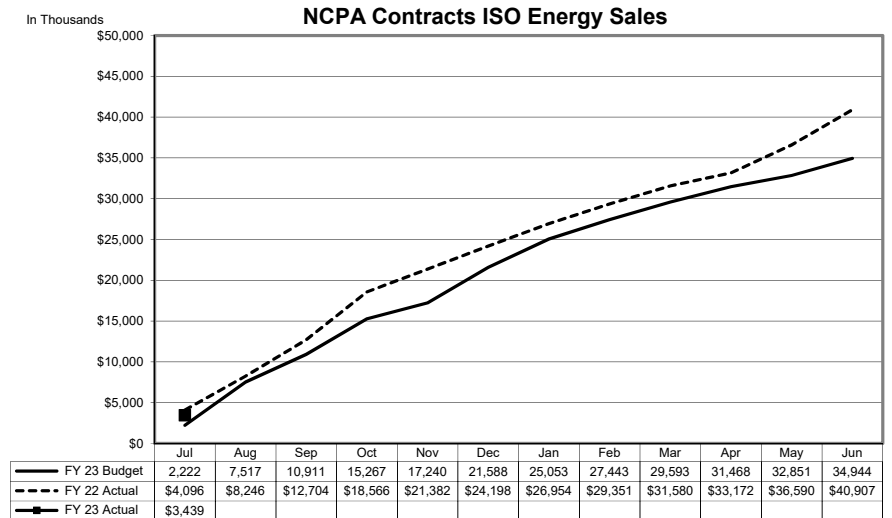
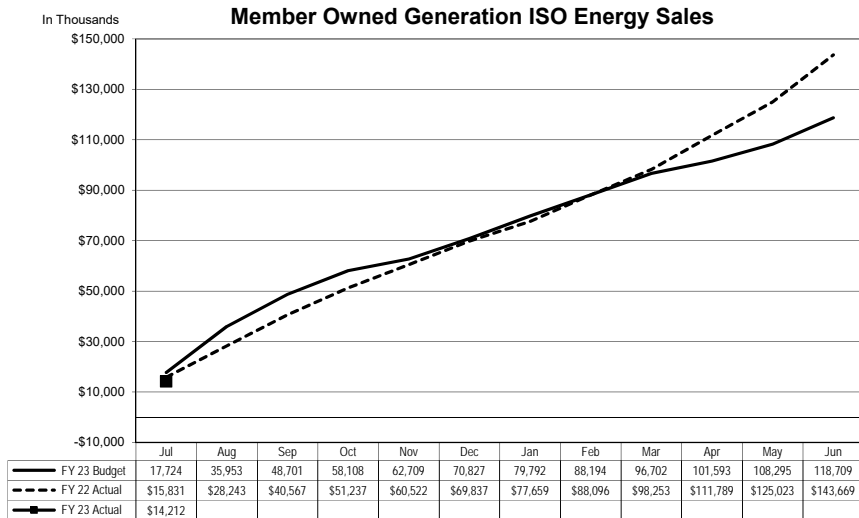
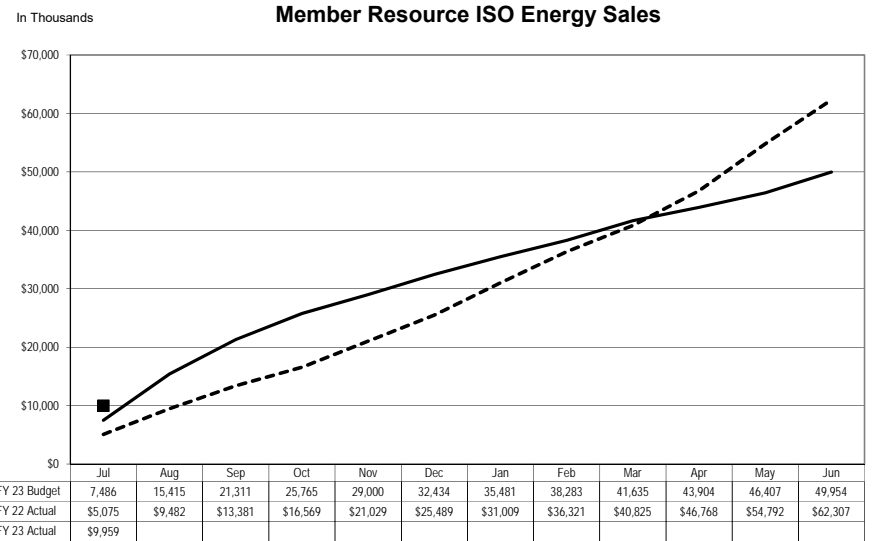
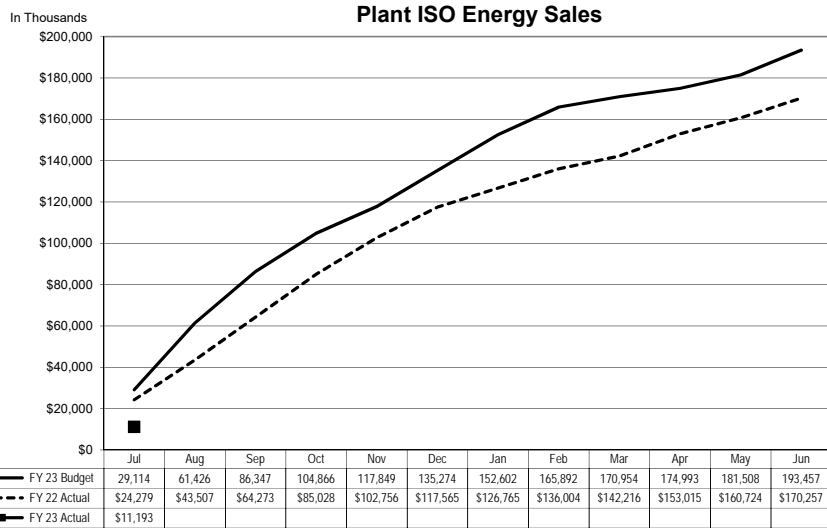
In Thousands

**Integrated Systems Support**

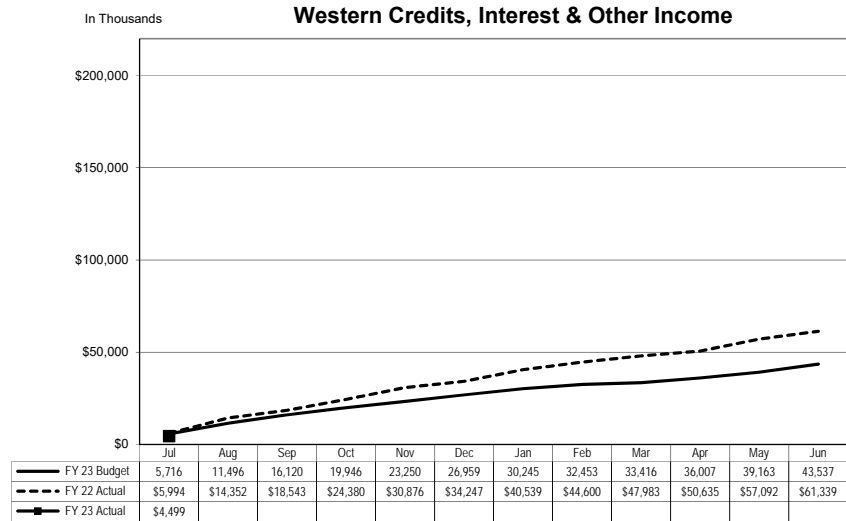
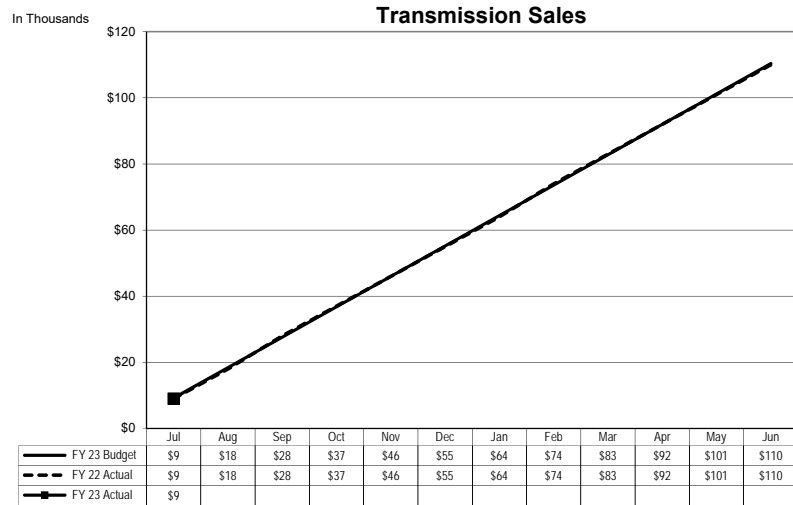
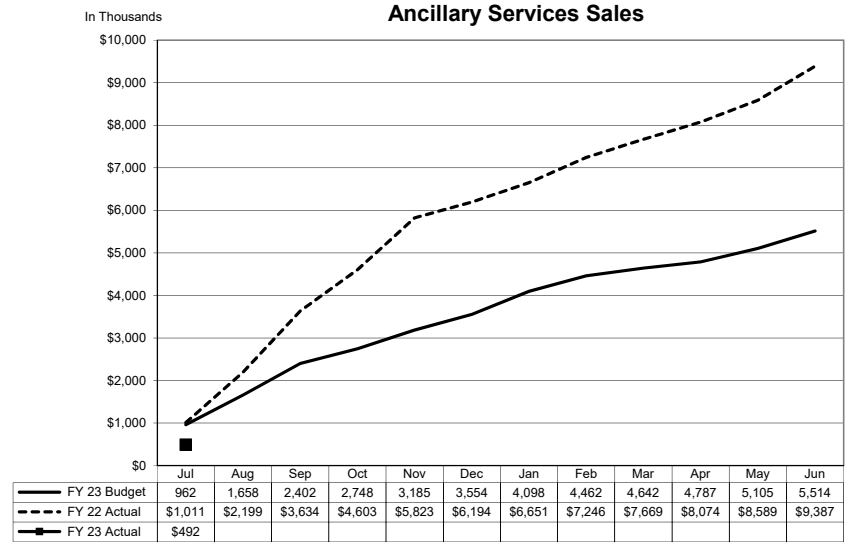
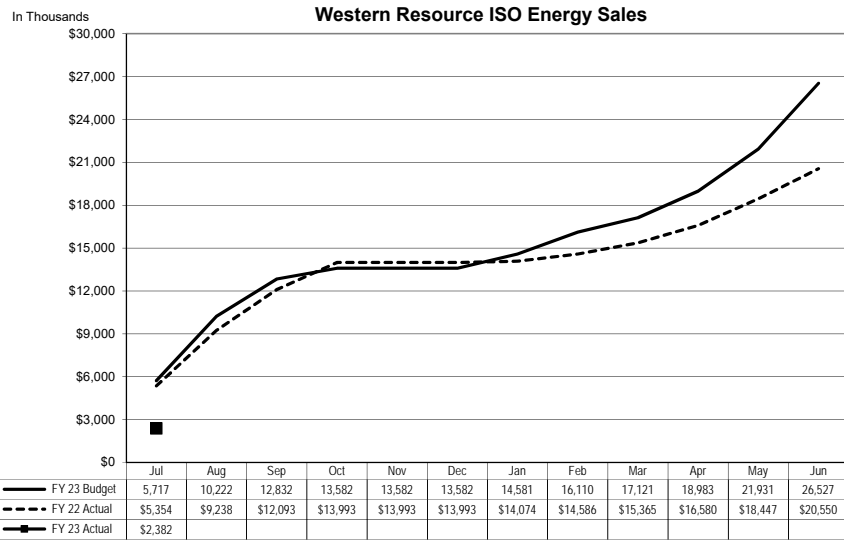


	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 23 Budget	\$34	\$68	\$101	\$135	\$169	\$203	\$236	\$270	\$304	\$338	\$371	\$405
FY 22 Actual	\$75	\$97	\$113	\$159	\$210	\$220	\$223	\$228	\$232	\$235	\$483	\$493
FY 23 Actual	\$81											

**Annual Budget Cost  
Third Party Revenue Analysis By Source  
As of July 31, 2022**



**Annual Budget Cost  
Third Party Revenue Analysis By Source  
As of July 31, 2022**





**Annual Budget  
NCPA Generation Detail Analysis By Plant  
As of July 31, 2022**

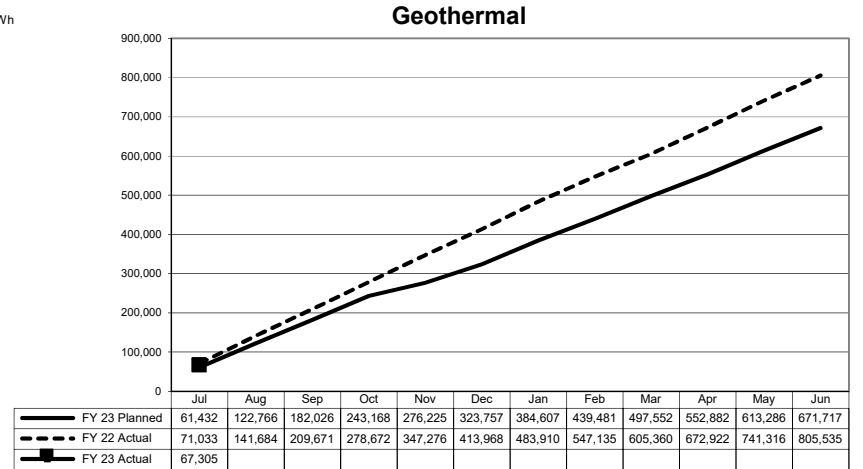
**Generation Cost Analysis**

\$ in thousands

	Geothermal				
	Budget	Actual	\$/MWh	Under(Over)	YTD %
			Actual	Budget	Remaining
Routine O & M	\$ 17,798	\$ 1,640	\$ 24.36	\$ 16,158	91%
Capital Assets/Spare Parts Inventories	7,401	359	5.33	7,042	95%
Other Costs	12,357	1,001	14.87	11,356	92%
CA ISO Charges	604	83	1.23	521	86%
Debt Service	3,473	299	4.30	3,184	92%
Annual Budget	41,633	3,372	50.10	38,261	92%
Less: Third Party Revenue					
Interest Income	150	9	0.13	141	94%
ISO Energy Sales	42,271	4,868	72.33	37,403	88%
Ancillary Services Sales	-	-	-	-	-
Effluent Revenues	750	-	-	750	100%
Misc	113	9	0.14	104	92%
	43,284	4,886	72.59	38,398	89%
Net Annual Budget Cost to Participants	\$ (1,651)	\$ (1,514)	\$ (22.49)	\$ (137)	8%
Net Generation--MWh @ Meter	671,717	67,305			
\$/MWh (A)	\$ (7.63)	\$ (26.79)			

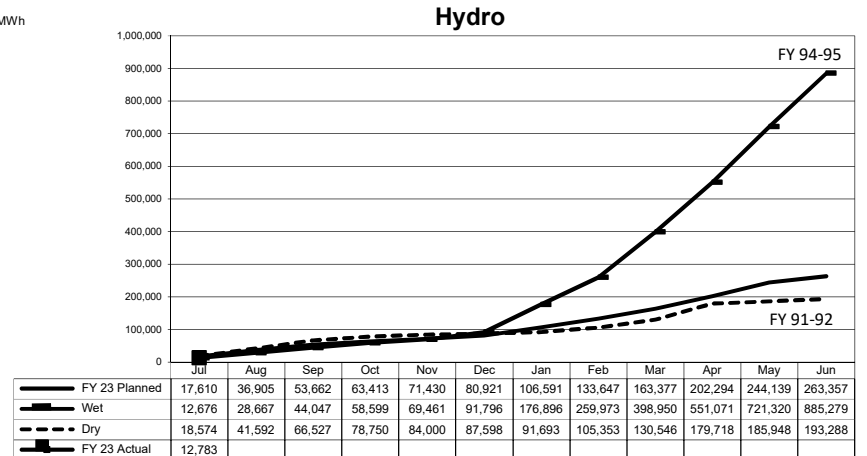
**MWhs Generated**

In MWh



	Hydroelectric				
	Budget	Actual	\$/MWh	Under(Over)	YTD %
			Actual	Budget	Remaining
Routine O & M	\$ 10,203	\$ 753	\$ 58.91	\$ 9,450	93%
Capital Assets/Spare Parts Inventories	4,270	285	22.33	3,985	93%
Other Costs	3,993	312	24.40	3,681	92%
CA ISO Charges	1,237	339	26.54	898	73%
Debt Service	35,811	2,984	233.45	32,827	92%
Annual Budget	55,514	4,674	365.62	50,840	92%
Less: Third Party Revenue					
Interest Income	150	5	0.40	145	97%
ISO Energy Sales	22,182	1,326	103.69	20,857	94%
Ancillary Services Sales	1,224	450	35.21	774	63%
Misc	-	-	-	-	-
	23,556	1,781	139.30	21,775	92%
Net Annual Budget Cost to Participants	\$ 31,958	\$ 2,893	\$ 226.32	\$ 29,065	
Net Generation--MWh @ Meter	263,357	12,783			
\$/MWh (A)	\$ (14.63)	\$ (7.13)			

In MWh



Footnotes:

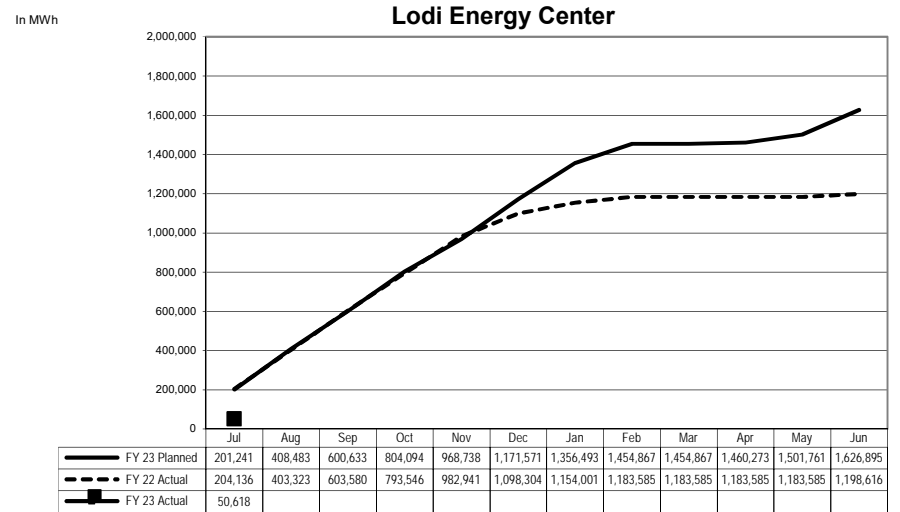
(A) Aggregate fiscal year generation in \$/MWh (excluding debt service)

**Annual Budget  
NCPA Generation Detail Analysis By Plant  
As of July 31, 2022**

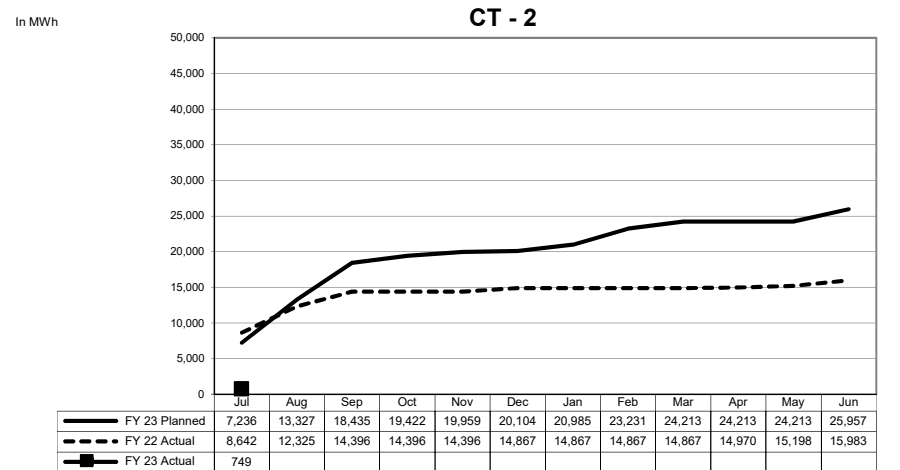
**Generation Cost Analysis**

	Lodi Energy Center				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 9,826	\$ 1,258	\$ 24.86	\$ 8,568	87%
Fuel	64,819	3,110	61.45	61,709	95%
GHG Allowance Costs	20,250	-	-	20,250	100%
CA ISO Charges and Energy Purchases	2,970	350	6.91	2,621	88%
Capital Assets/Spare Parts Inventories	3,631	193	3.80	3,439	95%
Other Costs	10,244	395	7.80	9,849	96%
Debt Service	25,996	2,166	42.80	23,830	92%
Annual Budget	137,737	7,472	147.61	130,265	95%
Less: Third Party Revenue					
Interest Income	250	25	0.50	225	90%
ISO Energy Sales	121,620	4,735	93.55	116,884	96%
Ancillary Services Sales	2,318	35	0.70	2,282	98%
Transfer Gas Credit	-	-	-	-	0%
GHG Allowance Credits	19,710	-	-	19,710	100%
Misc	-	-	-	-	0%
	143,897	4,796	94.75	139,101	97%
Net Annual Budget Cost to Participants	\$ (6,160)	\$ 2,676	\$ 52.87	\$ (8,836)	143%
Net Generation--MWh @ Meter	1,626,895	50,618			
\$/MWh (A)	\$ (19.77)	\$ 10.07			

**MWhs Generated**



	Combustion Turbine No. 2 (STIG)				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 1,616	\$ 115	\$ 153.08	\$ 1,501	93%
Fuel and Pipeline Transport Charges	2,227	56	74.48	2,171	97%
GHG Allowance Costs	424	-	-	424	100%
Capital Assets/Spare Parts Inventories	220	-	-	220	100%
Other Costs	643	49	64.86	594	92%
CA ISO Charges	148	-	-	148	100%
Debt Service	5,084	424	565.94	4,660	92%
Annual Budget	10,361	643	858.36	9,719	94%
Less: Third Party Revenue					
Interest Income	42	3	3.99	39	93%
ISO Energy Sales	4,331	86	114.36	4,246	98%
Ancillary Service Sales	-	-	-	-	0%
Fuel and Pipeline Transport Credits	1,775	298	397.83	1,477	83%
GHG Allowance Credits	424	-	-	424	100%
Misc	-	-	-	-	0%
	6,572	386	516.18	6,186	94%
Net Annual Budget Cost to Participants	\$ 3,789	\$ 256	\$ 342.18	\$ 3,533	93%
Net Generation--MWh @ Meter	25,957	749			
\$/MWh (A)	\$ (49.88)	\$ (223.76)			



Footnotes:

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

**Annual Budget  
NCPA Generation Detail Analysis By Plant  
As of July 31, 2022**

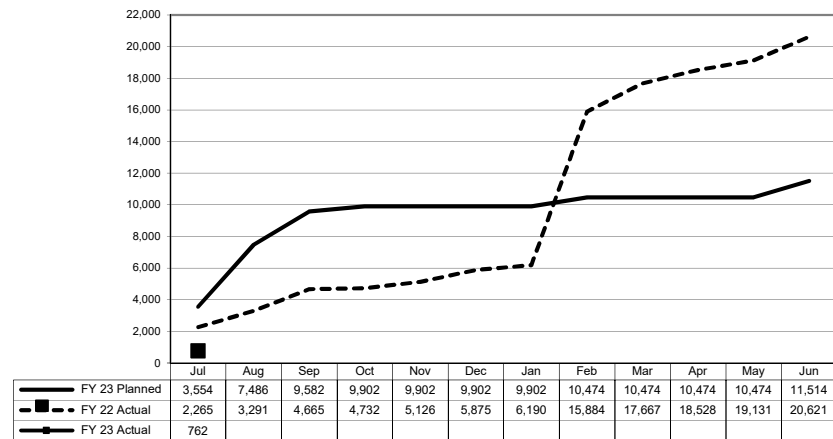
**Generation Cost Analysis**

	Combustion Turbine No. 1				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 2,530	\$ 237	\$ 311.74	\$ 2,293	91%
Fuel and Pipeline Transport Charges	1,214	2	3.24	1,211	100%
Capital Assets/Spare Parts Inventories	800	52	68.37	748	93%
Other Costs	882	70	92.07	812	92%
CA ISO Charges	176	7	9.48	168	96%
Debt Service	-	-	-	-	
Annual Budget	5,602	369	484.91	5,232	93%
Less: Third Party Revenue					
Interest Income	55	3		52	
ISO Energy Sales	3,053	179	234.63	2,875	94%
Ancillary Services Sales	-	-	-	-	0%
Misc	-	-	-	-	0%
	3,108	181	234.63	2,927	94%
Net Annual Budget Cost to Participants	\$ 2,493	\$ 188	\$ 247.00	\$ 2,305	92%
Net Generation--MWh @ Meter	11,514	762			
\$/MWh (A)	\$ 216.54	\$ 247.00			

**MWhs Generated**

In MWh

CT - 1



Footnotes:

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