A PUBLIC AGENCY
NCPA
NORTHERN CALIFORNIA POWER AGENCY

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

BUSINESS PROGRESS REPORT

2022

April

Table of Contents

Generation Costs & Reliability

Combustion Turbine Project

Unit Operation for March 2022

Unit	Availability		Production			Reason for Run
CT1 Alameda	Unit 1	Unit 2	Unit 1	0.0	MWh	CAISO / CAISO
	0.0%	55.1%	Unit 2	1,814.9	MWh	
Curtailments, Outages, and Comments: Unit 1: 3/01 @ 00:00 - 3/31 @ 23:59; Oil Fire and Repair, OMS 11417957 Unit 2: 3/01 @ 00:00 - 3/08 @ 23:59; Generator AVR Failed. Requires staff on site for startup. Unit available for Day Ahead bidding; not available for Real Time Dispatch. 3/23 @ 18:25 - 3/29 @ 15:43; Oil Leak, OMS 11532900 3/31 @ 10:48 - 3/31 @ 13:55; Alameda Municipal Power line work						
Unit	**Availability**		**Production**			**Reason for Run**
CT1 Lodi	99.97%		0.0	MWh		CAISO
Curtailments, Outages, and Comments: 3/12 @ 07:21 - 3/12 @ 07:35; Line Circuit Breaker 52L SF6 Breaker trouble						
Unit	**Availability**		**Production**			**Reason for Run**
CT2 STIG	100.0%		0.0	MWh		CAISO
Curtailments, Outages, and Comments: Normal operation.						
Unit	**Availability**		**Production**			**Reason for Run**
LEC	0.0%		0	MWh		CAISO
Curtailments, Outages, and Comments: 3/1 @ 00:00 - 5/31 @ 23:59; CT ULN and ST Generator Major Maintenance Outage, OMS 11341152						

Maintenance Summary – Specific per asset above.

Geothermal Facilities

Availability/Production for March 2022

Unit	Availability		Net Electricity Generated/Water Delivered		Out-of-Service/Descriptors
Unit 1	61.29	%	12,854	MWh	U1 was offline 0001 3/20/22 through 3/31/22 for Main Transformer refurbishment, annual stretford maint.
Unit 2	62.70	%	*12,768	MWh	U2 was offline 0001 3/20/22 until 1319 3/31/22 for U1 Main Transformer refurbishment, annual stretford maint.
Unit 3	N/A	%	N/A	-	Unit 3 remains out of service.
Unit 4	100	%	32,602	MWh	U4 had no outages for the month
Southeast Geysers Effluent Pipeline	40	%	42.12	mgallons	Average flow rate: 1,000 gpm
Southeast Solar Plant	N/A		121,229	KWh	Year-to-date KWh: 1,249,462
Bear Canyon Pump Station Zero Solar	N/A		92,754	KWh	Year-to-date KWh: 1,570,973

* Accounts for an additional 121 MWh of house load for the 21KV power supply to the effluent pipeline supplied from Unit #2.

Hydroelectric Project

Availability/Production for March 2022

Units	Availability	Net Electricity Generated	Out-of-Service
Collierville Unit 1	99.88%	21138 MWh	CV Unit 1 – Out 4/16/22 from 1440 to 1535 for Brush Replacement.
Collierville Unit 2	99.29%	15342 MWh	CV Unit 2 – Out 4/26/22 from 0928 to 1448 for Unit trip.
Spicer Unit 1	99.26%	0 MWh	NSM1- Out 3/23/22 from 0815 to 1344 for PG&E distribution work- log number 22-933
Spicer Unit 2	99.26%	0 MWh	NSM2- Out 3/23/22 from 0815 to 1344 for PG&E distribution work- log number 22-933
Spicer Unit 3	99.14%	135 MWh	NSM3- Out 3/23/22 from 0757 to 1419 for PG&E distribution work- log number 22-933

Operations & Maintenance Activities:

- CMMS work orders
- Repaired BC Fish Screen
- Annual water rights filings
- Filed QCIP for Union, Alpine, Utica maintenance
- Issued RFPs for Camp 9 road patch paving and EAP development for OES compliance

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

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

- 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 March 26, 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.

March 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	531	155	2,546	3,530
Work Hours Since Last Recordable	44,904	30,881	384,391	2,794,999
LTA's (this month)	0	0	0	0
LTA's (calendar year)	0	0	0	0
Days without LTA	5,280	2,409	10,450	6,543
Work Hours without LTA	477,474	195,091	794,935	2,417,017
Vehicle Incident (month)	0	0	0	0
Vehicle Incident (calendar year)	0	0	0	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 March 26, 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

	March 2022		Calendar Year 2022	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	299.91 3/3 @ 1900	180,190	322.82 1/3 @ 1800	540,769
SVP	555.71 3/22 @ 1700	368,925	555.71 3/22 @ 1700	1,069,298
MSSA	843.17 3/22 @ 1800	549,115	843.17 3/22 @ 1800	1,610,067

Last Year 2021 Data*

	March 2021		Calendar Year 2021	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	303.35 3/9 @ 1900	181,259	440.56 6/17 @ 1700	539,899
SVP	501.56 3/31 @ 1700	332,380	591.96 8/27 @ 1500	960,089
MSSA	778.67 3/31 @ 1800	513,639	1025.46 6/17 @ 1700	1,499,988

*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	322.82 1/3 @ 1800
SVP	591.96 MW on 8/27/21 @ 1500	555.71 3/22 @ 1700
MSSA	1070.79 MW on 9/1/17 @ 1700	843.17 3/22 @ 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.

NCPA Deviation Band Performance		
	March 2022	Calendar Year 2022
MSSA % Within the Band	98.58%	98.21%

- There were no PG&E PSPS events.

- CAISO Oversupply Potential Notifications:
    - 3/6/22, HE10-16
    - 3/7/22, HE11-15
    - 3/9/22, HE11-16
    - 3/11/22, HE11-14
    - 3/13/22, HE12-16
    - 3/20/22, HE11-16

- CAISO Real-time Contingency Dispatches (RTCD):
    - HE16, 3/5/22, 15:50:53 hours
    - HE19, 3/27/22, 18:35:50 hours
    - HE9, 3/28/22, 08:18:25 hours
    - HE4, 3/30/22, 03:18:51 hours

Pooling, Portfolio Planning & Forecasting

- NCPA Pool load during March 2022 was 180,190 MWh versus the budget forecast of 185,616 MWh, resulting in a forecast error of 3.01%. The forecast error this month was mainly due to lack of heating load and cloudy days. The current weather outlook for April 2022 is for normal temperatures and average rainfall. The Pool's April load forecast is 178,707 MWh compared with extrapolated actuals of 170,001 MWh as of April 19, 2022.

- Lodi Energy Center (LEC) ran 0 hours out of a possible 743 producing 0 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 is on outage through June.

- During March 2022, 0.88" of rain was recorded at the Big Trees gauge. March average rainfall at Big Trees is 6.93". New Spicer Meadows storage increased by just under 14,000 acre feet in March, mainly due increased melt and maintaining minimum reservoir releases under 20cfs.

- The Value of Storage (VOS) of New Spicer Meadow Reservoir (NSMR) has remained at $300/MWh. Releases from NSMR are just enough to maintain the November 1st winter minimum Big Trees flows of 100 CFS.

- New Spicer Meadows storage as of March 31, 2022 was 88,185 acre feet. The historical average storage at the end of March is 78,719 acre feet. As of April 20th, storage was 102,770 acre feet.

- Combined Calaveras Project generation for the Pool in March 2022 totaled 18,744 MWh, up from 10,730 MWh in February 2022. The Pool's 18,744 MWh in March 2022 was above its forecast due to increased Avery flows (ranging from 185cfs to 850cfs in March) caused by increased snow melt below New Spicer reservoir.

- Western Base Resource (BR) deliveries for the Pool during March 2022 were 10,930 MWh. Displacement program energy totaled 0 MWh. The Pool's share of expected total delivery from the Western Base Resource for April 2022 is 12,500 MWh.

- The PG&E Citygate gas index averaged $5.45 / MMBtu during the month of March as compared to an average of $5.10 for February. March's current average price is $7.13. Both NYMEX gas and basis prices increased due to the cold spells in the eastern half of the United States and below average storage volumes. The May 2022 PG&E Citygate forward price is $7.92 / MMBtu.

- Day-Ahead PG&E DLAP electricity prices for March averaged $49.83 / MWh On-Peak and $46.65 Off-Peak, with a high of $112.62. For the dates of April 1st through the 20th, 2022 prices have averaged $66.69 On-Peak and $62.56 Off-Peak. The forward prices for May are $63.09 On-Peak and $63.17 Off-Peak. These forwards are unique in that the Off-Peak price is higher than On-Peak due to the supply of renewables in the daylight hours.

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 June 2022:
  - Monthly System Resource Adequacy Demonstration (filed April 17, 2022)
  - Monthly Supply Plan (filed April 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:

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. CAISO has held working group meetings to better understand concerns and take suggestions into consideration. CAISO insists the current Non-Generator Resource model (NGR) sufficiently dispatches and accurately represents marginal costs but proposed a new model regardless. The new model is the Energy Storage Resource (ESR) model and it will dispatch resources based on state of charge. CAISO also proposed exceptional dispatch compensation.
- NCPA submitted comments requesting a more detailed comparison of the two models and expressed that maintaining two storage models may pose a challenge to CAISO. NCPA also expressed concern that Exceptional Dispatches issued to storage resources could result in overcompensation due to the fact that CAISO admits it cannot rerun the market in order to accurately estimate what prices would have been had the resources not been withheld for the purposes of calculating lost opportunity coasts to make the units whole. NCPA also requested for further root cause analysis as to why CAISO ancillary services dispatches were frequently making the units unavailable during net peak hours thus resulting in the need for holding minimum states of charge.

- Next steps: May 19 web meeting, May 31st comments due, Aug 30, 2022 ISO Board of Governors and WEIM Governing Body joint meeting.

Western Energy Imbalance Market Resource Sufficiency Evaluation Enhancements

- This initiative is being developed in two phases.
  - Phase 1 received ISO Board of Governors approval on February 9 and is pending implementation in early summer. It included minor clarifications to roles and responsibilities as well as well as recognition of storage resources' state of charge. During this phase of the proposal, stakeholders expressed concern over bilateral real time market illiquidity now that most of the West participates in the EIM. After Phase 1 was approved, a subset of stakeholders requested for CAISO to develop and implement a Phase 1B that would address certain insufficiencies that arose due to unexpected emergency conditions during the summer of 2022. NCPA submitted comments stating that was not feasible and needed further vetting in Phase 2.
  - Phase 2 will cover more controversial items such as consequence for failing evaluations and what exactly constitutes leaning. Phase two will begin to explore a paradigm shift in the WEIM with the original fundamental principle being that WEIM participants come to the market fully resourced evolving into a concept that allows for leaning in certain emergency conditions. NCPA is concerned that this new market component could result in awards inadvertently or otherwise unintentionally releasing reserved capacity and result in leaving a resourced BAA insufficient. Other concerns are that market participants could determine that it is more economic to rely on the new market instrument rather than invest in new capacity.
- Next steps: June 2022 Phase 1 go-live.

Extended Day-Ahead Market

- Next steps: Straw proposal due April 28, in-person and virtual meetings scheduled for May 25-26, June 9 comments due.

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 and EDAM. No schedule is currently available other than fall 2023 expansion.

Day-Ahead Market Enhancements

- Next steps: 3rd revised straw proposal due out April 22nd. ISO Board of Governors Decision scheduled for September 2022.

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

- CAISO's draft final proposal includes a hybrid billing determinant consisting of volumetric and peak demand functions at an approximately 50/50 split in order to address cost shifts as well as the full impact of high coincident peak demand, low load factor UCD areas that have relatively lower volumetric use compared to high load factor areas. The CAISO is working to align the TAC Board consideration with the Extended Day-Ahead Market (EDAM) process so they are aligned to the extent possible. The TAC proposal may possibly need to be updated if the EDAM proposal aspects related to transmission issues drive changes to the TAC initiative.
- NCPA performed an impact analysis and determined that NCPA Members would mostly benefit or be indifferent to the new billing determinant so long as certain LFMSS benefits remain in place.

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-21	90,622	64,857	(25,765)	$1,943,287	$ 29.96	$ 0.50	$ 48.51
Aug-21	67,967	54,903	(13,064)	$1,943,287	$ 35.39	$ (0.06)	$ 49.58
Sep-21	28,320	34,068	5,748	$1,849,800	$ 54.30	$ (0.13)	$ 50.66
Oct-21	22,710	25,992	3,282	$759,202	$ 29.21	$ 0.59	$ 49.01
Nov-21	8,712	-	(8,712)	$759,202	$ 87.14	$ -	$ 49.25
Dec-21	7,036	1,094	(5,942)	$759,202	$ 693.97	$ 0.78	$ 50.71
Jan-22	5,620	880	(4,740)	$759,202	$ 862.73	$ -	$ 51.22
Feb-22	14,806	6,343	(8,463)	$759,202	$ 119.69	$ 0.01	$ 50.12
Mar-22	21,003	10,930	(10,073)	$759,202	$ 69.46	$ 0.06	$ 50.44
Apr-22	55,270	-	0	$1,735,370	$ 31.40	$ -	$ 45.94
May-22	90,965	-	0	$1,735,370	$ 19.08	$ -	$ 39.06
Jun-22	86,068	-	0	$1,735,370	$ 20.16	$ -	$ 35.86

1/ As forecasted in NCPA 21/22 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 10,930 MWh of Base Resource (BR) energy in March 2022. There was zero MWh of Displacement Energy as the program is temporary suspended, from November 2021 through March 2022 due to limited base resource availability forecast. The displacement program resumed operations on April 1, 2022.

- Pool Members' total savings under Market Efficiency Enhancement Agreement (MEEA) was $650 in March 2022 as there were minimal differences between Captain Jack and MEEA for the BR generation days and hours. The cumulative MEEA savings for FY2022 is approximately $42,400 for July 2021 through March 2022.

Interconnection Affairs

PG&E Update

TO-18 Rate Case

- On March 24, 2022 FERC issued an order on PG&E's TO18 return on equity, reducing PG&E's base return on equity from 10.4% to 9.26%, and ordering PG&E to pay refunds by May 2022

- FERC ordered PG&E to combine the ROE and non-ROE refunds and pay them, with interest, within 60 days of the order. PG&E's TO19 settlement is tied to the TO18 outcome, PG&E will have to pay refunds in TO19 after a final, non-appealable decision is made in the TO18 proceeding

Permanent Inter-Tie Switch Between Geo Plants 1 and 2

- The permanent no-load intertie switch has been approved by the CAISO. The switch can be used when either the Fulton or Lakeville line is out of service to combine the outputs of Geo Plant 1 and Plant 2.

- NCPA and PG&E operating procedure is complete.

- Use of the intertie switch is still pending CEC approval. CEC application submission is complete and CEC has also issued initial data request. Interim solution if necessary will be to use the temporary jumpers as in Jan of 2020.

Cotenancy Agreement

- PG&E with support from NCPA and SVP filed an amendment that acknowledged CDWR's request for termination. The amendment rejected CDWR's request, pending resolution of the Cost of Removal dispute. All other matters have been delayed until this issue is resolved.

- On September 27, 2019 FERC rejected PG&E's amendment stating PG&E cannot unilaterally extend the term of the Agreement. FERC did not address the cost of removal aspect and the calculation methodology. NCPA has initiated discussions with Members as to how much capacity from CDWR's share should NCPA take.

- In Feb 2021, PG&E came across an opportunity to engage in mediation with CDWR to address the cost of removal issue. NCPA has agreed to join the mediation with PG&E.

2021-2022 Transmission Planning Process

- ISO Board approved final 2021-2022 transmission plan in March 2022

- ISO found the need for 24 projects totaling ~$2.9B
  - 16 reliability driven projects totaling $1.4B
  - 7 policy driven project totaling $1.5B

- 1 Economic project totaling $40M

- TPP total capital cost comparison:

Transmission Planning Cycle	Approved Capital Project Cost (Up to)	Purpose
2018-2019	$608M	Reliability
2019-2020	$142M	Reliability
2020-2021	$3.6M	Reliability
2021-2022	$2.9B	Reliability, Policy, Economic

- Major contributing factors to the substantial increase this year:
  - Escalating need to decarbonize the grid because of emerging climate change impacts
  - Expected electrification of transportation, this is also driving higher electricity forecasts
  - Concerns regarding reduced access to imports as neighboring systems also decarbonize
  - Greater than anticipated impacts of peak loads shifting to later-in-the-day hours when solar resources are unavailable
  - The need to maintain system reliability while retiring the Diablo Canyon Power Plant and gas-fired generation
- Four (4) projects were found to be eligible for competitive bid:
  - 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)

- CAISO estimates a $2.70/MWh HV TAC increase to the 2021 projection due the 2021-22 project approvals

Debt and Financial Management

- The consumer price index, which measures a wide-ranging basket of goods and services, jumped 8.5% from a year ago on an unadjusted basis, above even the already elevated Dow Jones estimate for 8.4%. Excluding food and energy, so-called core CPI increased 6.5% on a 12-month basis, in line with the expectation.

- The report showed signs that core inflation appeared to be ebbing, as it rose just 0.3% for the month, less than the 0.5% estimate. That in turn sparked some hope that inflation overall was easing and that March might represent the peak. Markets reacted positively to the report as stocks rose and government bond yields declined.

- To combat inflation, the Federal Reserve has begun raising interest rates and is expected to continue doing so through the remainder of the year and into 2023. The last time prices were this high, the Fed raised its benchmark rate to nearly 20%, pulling the economy into a recession that finally defeated inflation. Economists generally don't expect a recession this time around, though many on Wall Street are raising the probability of a downturn.

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 test environment to test the Oracle 2019 database and testing is on-going
- Customer and Resource Integration
  - Work continues on the Settlements-related configurations for the South Feather Water and Power Agency Resources.
  - Systems customizations for third-party resource data being processed for the CCA customers. EBCE's Tulare Resource is slated for 04/26/2022 Operating Date.
  - Palo-Alto Bundled REC Sale to Orange County Power Agency configured and begun delivery as of April 20, 2022 Operating Date
  - Camp Far West configured and ready for April 21, 2022 Prescheduling

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 continues to work with NID and SSWD on integrating this hydro resource into our SCADA Dispatch operations.

  - 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 first of June.

- Operations and Support had a kick-off meeting with Integration Partners to discuss the roll out of a new VoIP enterprise solution. Will be starting with HQ and DRC locations first and then expected to roll out to the rest of the plants over the coming months.

- Operations and Support continue working on preparations necessary for CIP-012 Control Protection requirement that will be enforced by July 1, 2022. This includes creating procedures and implementing new technologies that will help us comply with the standard.

- New servers have been purchased to replace old outdated hardware for the HQ and DRC Control Centers. These servers will be provisioned in preparation for NERC CIP Medium impact.

- Oracle 2019 is currently being 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 late spring of 2022.

NCPA Bills & Settlements

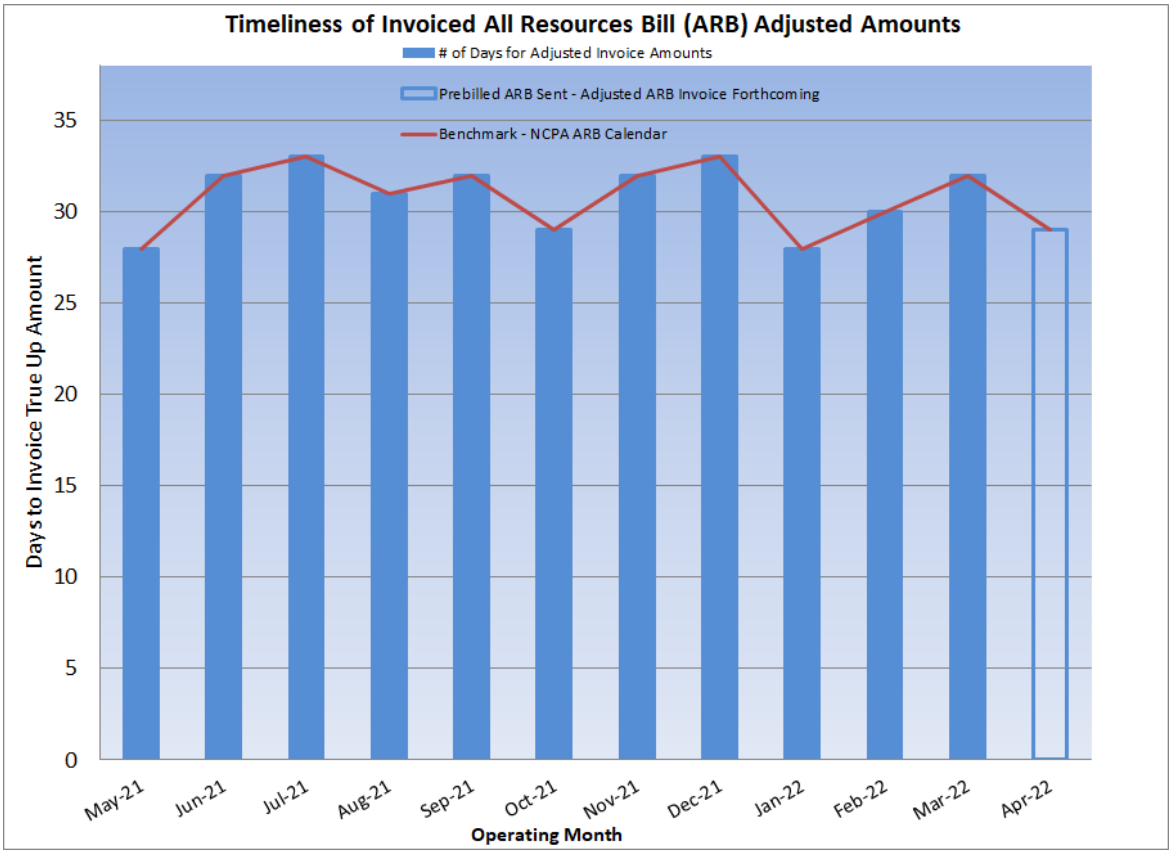
Progress Against the Strategic Plan

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 April 2022 NCPA All Resources Bill (ARB) monthly invoice sent to members on March 26, 2022 contains:

- April 2022 monthly pre-billed budget/forecast amounts;

- February 2022 (1st Adjustment) NCPA Project and CAISO Initial settlement true-ups;
- January 2022 (2nd Adjustment) NCPA Project settlement true-up and T+20 business day recalculated CAISO settlement true-up allocations;
- November 2021 (3rd Adjustment) T+70 business day recalculated CAISO settlement true-up allocations and NCPA Projects true-up;
- March 2021 (4th Adjustment) T+11 month recalculated CAISO settlement true-up allocations;
- July 2020 (5th Adjustment) T+18 month recalculated CAISO settlement true-up allocations;
- April 2019 (6th Adjustment) T+33 month recalculated CAISO settlement true-up;
- January 2019 (7th Adjustment) T+36 month CAISO settlement true-up;



Legislative & Regulatory

Federal Legislative Update

- Members of the Northern California Power Agency and Northwest Public Power Association convened at the Mayflower Hotel in Washington, DC, for the first time in over two years for the 18th Annual Federal Policy Conference. The conference spanned four days and included a full conference program featuring high-level speakers on topics of importance to both organizations, followed by three days of in-person meetings with members of our congressional delegation, federal regulatory staff, agency officials, and key stakeholders. Thanks to the active engagement and hard work by members of both NCPA and NWPPA who carried our messages from the West to DC, our advocacy efforts throughout the week were highly effective and we gained valuable strategic insights with regard to our priority issue areas.

Human Resources

Hires:

Seth Hiatt joined the Geothermal Maintenance team as a Mechanic Operator IV, effective March 21, 2022. Seth joins us from Calpine Corporation in Middletown, CA. There he was a Mechanical Technician III where he was responsible for planning, scheduling, and performing maintenance and repair on various pieces of equipment related to the steam field & power plant generation. Seth brings over 20 years of experience in the power plant generation industry.

Anthony Borg the Geothermal Maintenance team as an Operator Technician III, effective March 21, 2022. Anthony joins us from Calpine Corporation in Middletown, CA. There he was a Power Plant Operator where he was responsible for performing routine checks on turbines, generators, and auxiliary equipment. Using data collected to trend equipment and prevent malfunctions or incidents and perform routine startups and shutdowns. Before Calpine, Anthony was a Power Plant Trainee at BHI Energy. Anthony brings over five years of experience in the power plant generation industry.

Joshua Rugh joined the Agency's Headquarters office as a Schedule Coordinator II, effective March 28, 2022. Joshua joins us from Frito Lay in Bakersfield, CA. There he was a Cogen Operator where he operated a 6-megawatt facility, adjusted power output based on on-site and grid needs, and coordinated plant outages with Pacific Gas and Electric. Previously, he worked for Terra-Gen Operating LCC as a Lead Wind Technician. Joshua holds an Associate's degree in Psychology from Bakersfield Community College.

Jaime Gomez transferred to the Agency's Headquarters office as a Schedule Coordinator III, effective March 28, 2022. Jaime joins us from NCPA's Lodi Energy Center! There he was a Combustion Turbine Specialist III where he operated, controlled, and accurately and reliably maintained mechanical and electrical equipment at the Combustion Turbine Facilities. Previously, Jaime worked at Calpine and brings over 15 years of experience in the power plant industry.

William Newman joined the Agency's Headquarters office as a Computer Technology Analyst IV (SCADA), effective April 25, 2022. William joins us from Placer County Water Agency (PCWA), where he was an electrical Hydro Engineer II. In this role, William was responsible for providing electrical engineering expertise while serving in a lead capacity over projects for the maintenance, repair, modification, and replacement of electrical and electronic controls and communication equipment. William has been with PCWA since 2015 and brings over ten years of experience in the electric utility operations industry. William has a Bachelor's degree in Engineering Physics from the University of California, Berkeley, and served in the United States Marine Corps Reserve as a Sergeant from 2000 to 2009.

Intern Hires:

None.

Promotions:

Jake Eymann was promoted to Plant Manager at our hydroelectric facilities, effective April 24, 2022. Jake brings a wealth of experience to the position, as demonstrated through his many accomplishments during the last six years at NCPA's hydro facilities. As the Hydroelectric Engineer V, Jake's responsibilities included successfully managing capital improvement projects, building strong relationships with numerous regulatory compliance agencies, maintaining regulatory compliance, and overseeing improvements and maintenance for all dams. In his role, he has been a champion for the NCPA on safety. In this new role, Jake's expertise and leadership will be vital in furthering NCPA's strategic goals related to FERC relicensing and the McKay's Point Sediment Removal Project. Jake has a Bachelor of Science degree in Civil Engineering from California State University, Sacramento.

Separations:

None.

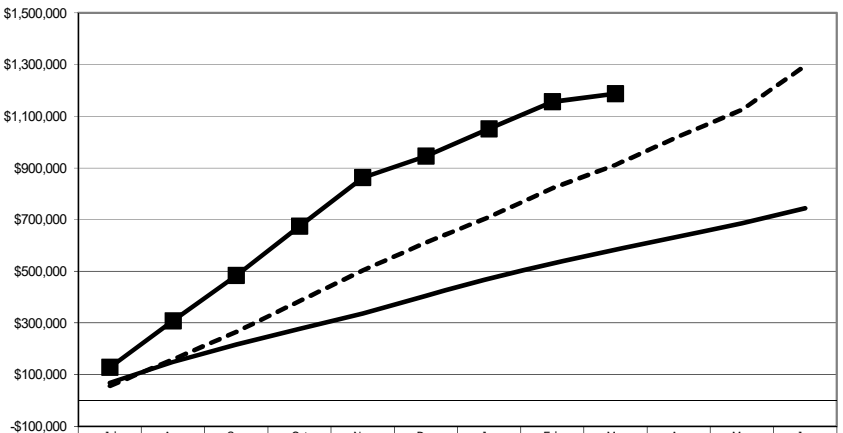
Annual Budget
2021-2022 Fiscal Year To Date
As of March 31, 2022

In Thousands

	Program			
	Annual Budget	Actual	Under(Ovr) Budget	YTD % Remaining
GENERATION RESOURCES				
NCPA Plants				
Hydroelectric	54,081	40,693	$ 13,389	25%
Geothermal Plant	40,662	29,856	10,806	27%
Combustion Turbine No. 1	7,055	8,211	(1,157)	-16%
Combustion Turbine No. 2 (STIG)	8,962	6,831	2,131	24%
Lodi Energy Center	88,813	112,123	(23,309)	-26%
	199,574	197,713	1,861	1%
Member Resources - Energy	67,417	61,752	5,664	8%
Member Resources - Natural Gas	2,981	4,881	(1,899)	-64%
Western Resource	27,302	16,329	10,973	40%
Market Power Purchases	17,225	37,243	(20,018)	-116%
Load Aggregation Costs - ISO	282,244	756,050	(473,806)	-168%
Net GHG Obligations	1,277	2,355	(1,078)	
	598,020	1,076,324	(478,304)	-80%
TRANSMISSION				
Independent System Operator	126,573	95,828	30,744	24%
MANAGEMENT SERVICES				
Legislative & Regulatory				
Legislative Representation	2,101	1,248	853	41%
Regulatory Representation	634	466	168	27%
Western Representation	694	413	281	40%
Customer Programs	481	352	130	27%
	3,911	2,478	1,432	37%
Judicial Action	300	905	(605)	-202%
Power Management				
System Control & Load Dispatch	7,427	5,113	2,315	31%
Forecasting & Prescheduling	2,811	2,058	753	27%
Industry Restructuring	423	295	128	30%
Contract Admin, Interconnection Svcs & Ext. Affairs	975	718	256	26%
Gas Purchase Program	81	42	39	48%
Market Purchase Project	116	69	47	40%
	11,833	8,295	3,537	30%
Energy Risk Management	198	149	49	25%
Settlements	975	605	371	38%
Integrated System Support	307	232	75	25%
Participant Pass Through Costs	1,718	1,036	682	40%
Support Services	-	1,723	(1,723)	
	19,242	15,422	3,820	20%
TOTAL ANNUAL BUDGET COST	743,834	1,187,574	(443,740)	-60%
LESS: THIRD PARTY REVENUE				
Plant ISO Energy Sales	101,640	142,216	(40,576)	-40%
Member Resource ISO Energy Sales	34,353	40,825	(6,473)	-19%
Member Owned Generation ISO Energy Sales	83,030	98,253	(15,223)	-18%
Revenue from Customers	-	85,358	(85,358)	
Customer Owned Generation ISO Energy Sales	-	156	(156)	
NCPA Contracts ISO Energy Sales	12,615	31,580	(18,965)	-150%
Western Resource ISO Energy Sales	19,297	15,365	3,932	20%
Load Aggregation Energy Sales	-	376,578	(376,578)	
Ancillary Services Sales	4,317	7,669	(3,352)	-78%
Transmission Sales	110	83	28	25%
Western Credits, Interest & Other Income	41,469	47,983	(6,514)	-16%
	296,831	846,066	(549,235)	-185%
NET ANNUAL BUDGET COST TO PARTICIPANTS	447,003	341,509	$ 105,495	24%

In Thousands

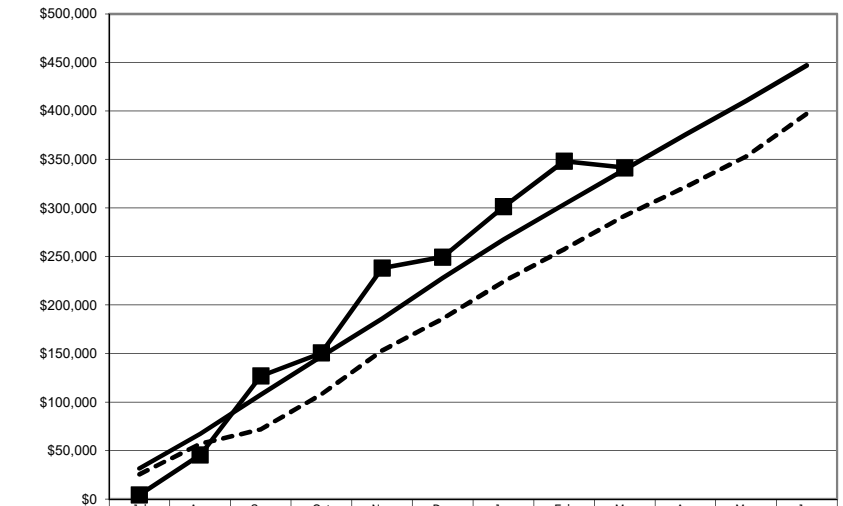
Annual Budget Cost



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$68,949	$149,592	$215,857	$277,470	$336,050	$404,698	$470,541	$530,771	$583,802	$633,922	$685,004	$743,834
FY 21 Actual	$56,898	$158,748	$265,214	$384,546	$503,238	$611,749	$710,406	$822,114	$912,664	$1,021,79	$1,124,60	$1,295,09
FY 22 Actual	$128,384	$308,565	$484,265	$674,922	$863,119	$945,959	$1,051,51	$1,156,29	$1,187,57			

In Thousands

Net Annual Budget Cost to Participants

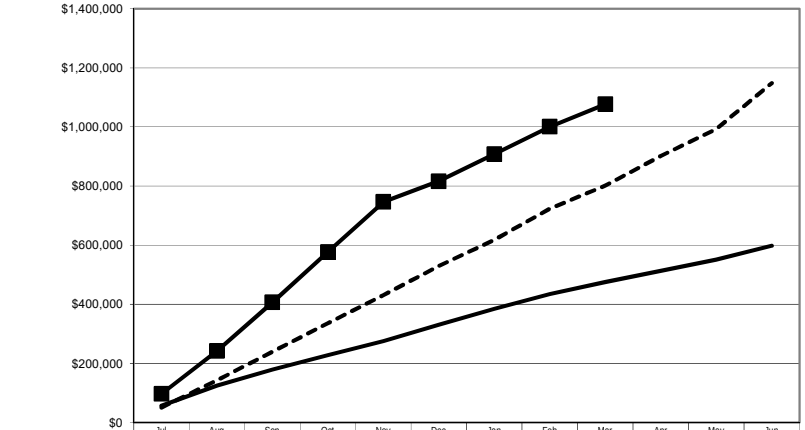


	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$31,664	$67,282	$107,267	$147,007	$185,825	$227,816	$267,281	$303,553	$340,052	$375,791	$410,367	$447,003
FY 21 Actual	$25,509	$56,960	$71,833	$108,175	$153,153	$185,983	$224,090	$257,338	$292,179	$321,626	$353,163	$397,254
FY 22 Actual	$4,353	$45,582	$126,830	$150,789	$238,073	$249,420	$301,308	$348,343	$341,509			

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

In Thousands

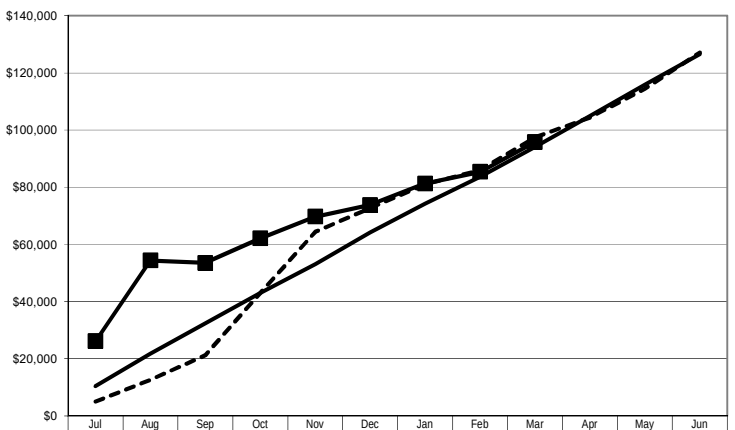
Generation Resources



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$56,919	$124,549	$178,613	$228,045	$274,884	$330,918	$384,988	$434,222	$475,225	$512,914	$551,496	$598,020
FY 21 Actual	$50,617	$143,129	$239,798	$335,451	$431,016	$529,743	$618,062	$723,310	$800,956	$901,580	$992,802	$1,148,374
FY 22 Actual	$96,996	$241,917	$406,377	$576,840	$746,237	$816,199	$908,271	$1,000,957	$1,076,324			

In Thousands

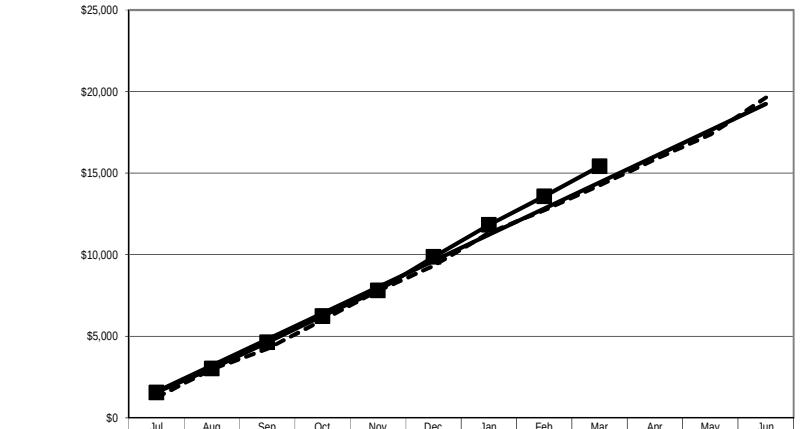
Transmission-ISO



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$10,426	$21,835	$32,433	$43,011	$53,149	$64,159	$74,328	$83,721	$94,146	$104,973	$115,870	$126,573
FY 21 Actual	$5,029	$12,641	$21,191	$43,102	$64,431	$72,696	$81,017	$86,071	$97,453	$104,374	$114,430	$127,090
FY 22 Actual	$26,141	$54,411	$53,559	$62,084	$69,687	$73,800	$81,291	$85,410	$95,828			

In Thousands

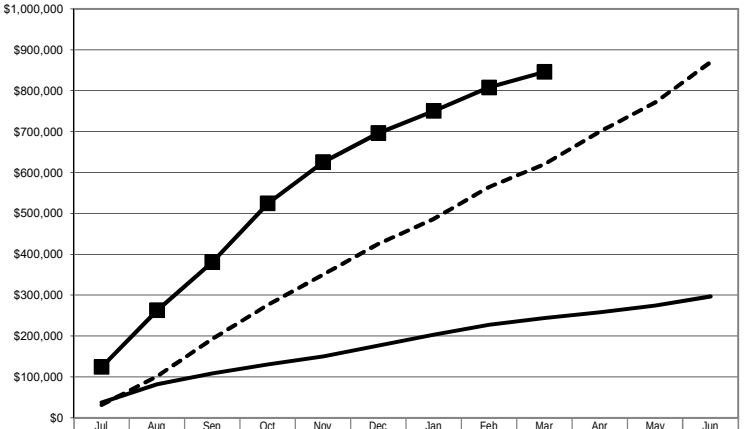
Management Services



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$1,604	$3,207	$4,811	$6,414	$8,018	$9,621	$11,225	$12,828	$14,432	$16,035	$17,639	$19,242
FY 21 Actual	$1,251	$2,977	$4,225	$5,994	$7,791	$9,310	$11,327	$12,733	$14,255	$15,839	$17,375	$19,632
FY 22 Actual	$1,556	$3,021	$4,633	$6,246	$7,807	$9,864	$11,825	$13,574	$15,422			

In Thousands

Third Party Revenue



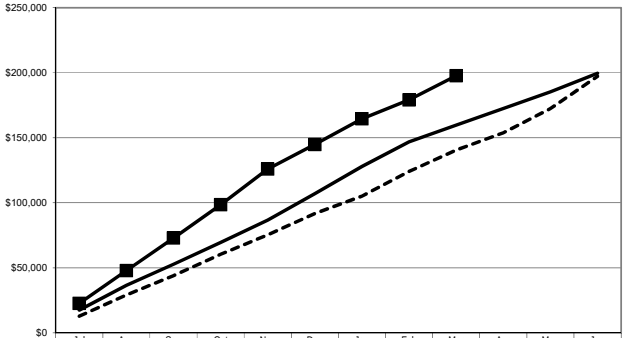
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$37,285	$82,309	$108,590	$130,463	$150,225	$176,882	$203,260	$227,219	$243,751	$258,130	$274,637	$296,831
FY 21 Actual	$31,389	$101,788	$193,382	$276,371	$350,085	$425,766	$486,317	$564,776	$620,484	$700,168	$771,444	$870,007
FY 22 Actual	$124,031	$262,983	$380,694	$524,133	$625,046	$696,539	$750,205	$807,953	$846,066			

Footnote: Transmission is solely reflective of Independent System Operator (ISO) costs
Transmission-ISO, July 2021 through February 2022, restated to include Other ISO Revenue

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

NCPA Plants

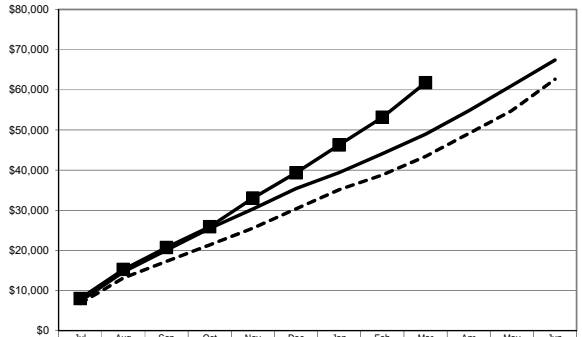
In Thousands



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$17,558	$36,535	$52,729	$69,496	$86,779	$107,065	$127,870	$146,823	$159,736	$172,532	$185,400	$199,574
FY 21 Actual	$12,856	$29,237	$44,056	$60,409	$75,360	$91,764	$105,204	$124,145	$140,646	$153,874	$172,399	$197,286
FY 22 Actual	$22,727	$47,879	$72,980	$98,522	$125,943	$144,873	$164,629	$179,168	$197,713			

Member Resources - Energy

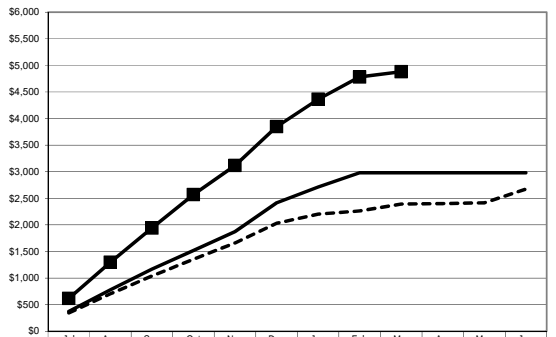
In Thousands



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$7,348	$14,650	$20,055	$25,481	$30,319	$35,419	$39,377	$44,093	$48,954	$54,769	$61,043	$67,417
FY 21 Actual	$6,788	$13,157	$17,274	$21,395	$25,517	$30,345	$35,133	$38,790	$43,406	$49,124	$54,787	$62,620
FY 22 Actual	$8,021	$15,248	$20,735	$25,887	$33,019	$39,304	$46,271	$53,131	$61,752			

Member Resources - Natural Gas

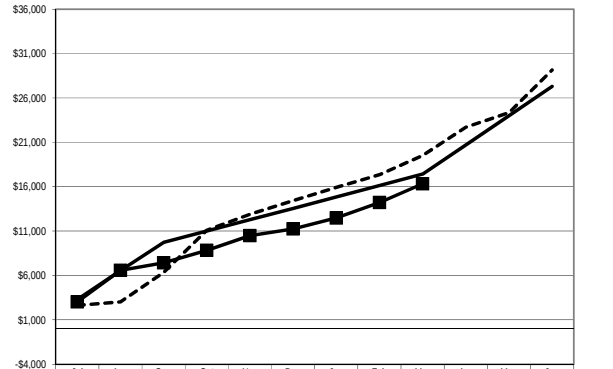
In Thousands



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$374	$779	$1,168	$1,518	$1,873	$2,415	$2,715	$2,981	$2,981	$2,981	$2,981	$2,981
FY 21 Actual	$345	$704	$1,038	$1,355	$1,662	$2,030	$2,202	$2,263	$2,391	$2,401	$2,417	$2,673
FY 22 Actual	$617	$1,296	$1,942	$2,571	$3,118	$3,848	$4,363	$4,783	$4,881			

Western Resources

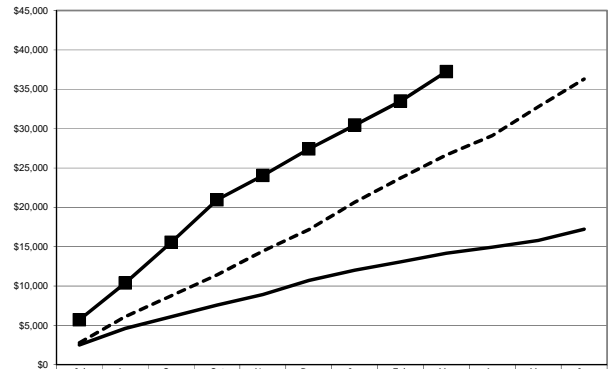
In Thousands



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$3,280	$6,550	$9,730	$11,008	$12,281	$13,553	$14,836	$16,124	$17,415	$20,701	$24,003	$27,302
FY 21 Actual	$2,625	$3,020	$6,332	$11,093	$12,894	$14,422	$15,926	$17,350	$19,508	$22,704	$24,344	$29,151
FY 22 Actual	$3,027	$6,581	$7,423	$8,833	$10,484	$11,239	$12,480	$14,215	$16,329			

Market Power Purchases

In Thousands



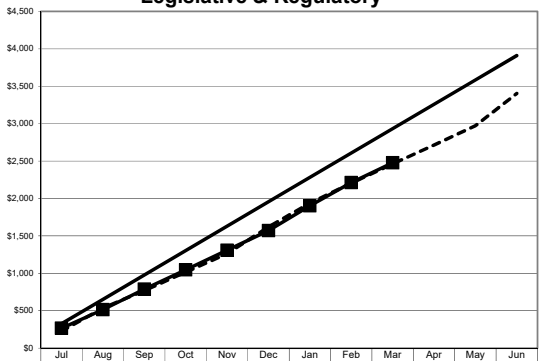
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$2,522	$4,620	$6,086	$7,587	$8,922	$10,714	$12,002	$13,069	$14,169	$14,943	$15,785	$17,225
FY 21 Actual	$2,788	$6,113	$8,763	$11,430	$14,448	$17,172	$20,646	$23,709	$26,651	$29,125	$32,779	$36,293
FY 22 Actual	$5,713	$10,387	$15,550	$20,956	$24,045	$27,420	$30,440	$33,489	$37,243			

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

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

In Thousands

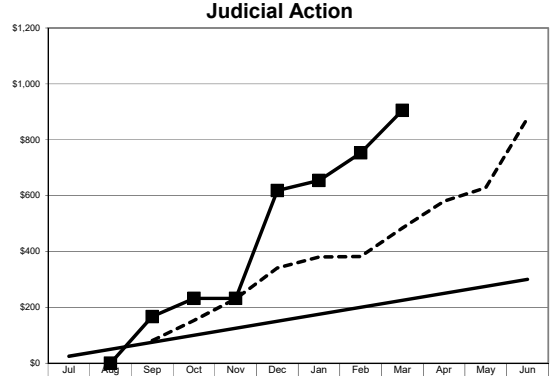
Legislative & Regulatory



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$326	$652	$978	$1,304	$1,630	$1,956	$2,281	$2,607	$2,933	$3,259	$3,585	$3,911
FY 21 Actual	$227	$535	$768	$1,017	$1,262	$1,619	$1,938	$2,205	$2,462	$2,715	$2,973	$3,404
FY 22 Actual	$266	$515	$788	$1,047	$1,309	$1,570	$1,902	$2,212	$2,478			

In Thousands

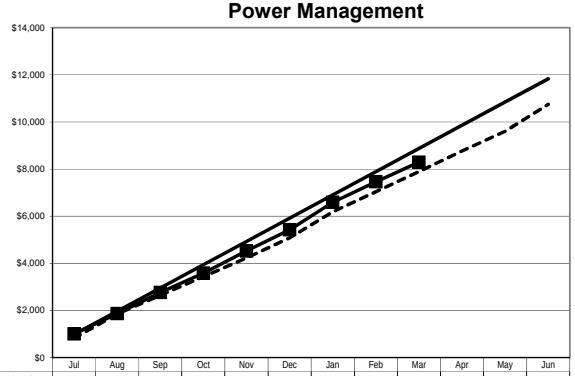
Judicial Action



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$25	$50	$75	$100	$125	$150	$175	$200	$225	$250	$275	$300
FY 21 Actual			$81	$153	$231	$341	$380	$382	$484	$580	$628	$877
FY 22 Actual		$-	$167	$232	$232	$618	$654	$753	$905			

In Thousands

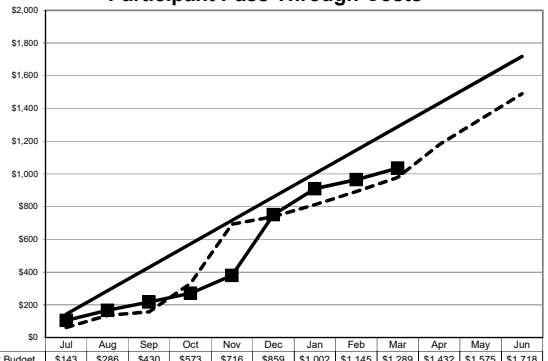
Power Management



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$986	$1,972	$2,958	$3,944	$4,930	$5,917	$6,903	$7,889	$8,875	$9,861	$10,847	$11,833
FY 21 Actual	$826	$1,856	$2,647	$3,439	$4,228	$5,085	$6,185	$7,040	$7,895	$8,774	$9,604	$10,749
FY 22 Actual	$1,008	$1,870	$2,767	$3,587	$4,527	$5,424	$6,594	$7,464	$8,295			

In Thousands

Participant Pass Through Costs

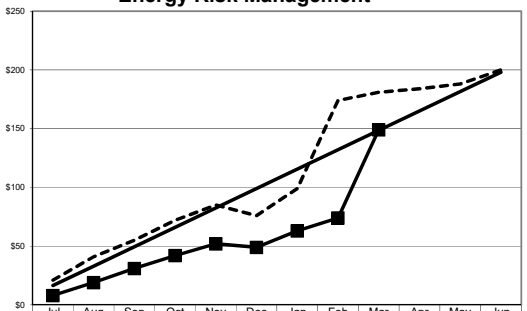


	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$143	$286	$430	$573	$716	$859	$1,002	$1,145	$1,289	$1,432	$1,575	$1,718
FY 21 Actual	$62	$136	$158	$332	$693	$739	$812	$893	$979	$1,179	$1,334	$1,490
FY 22 Actual	$105	$167	$217	$271	$380	$751	$910	$965	$1,036			

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

Energy Risk Management

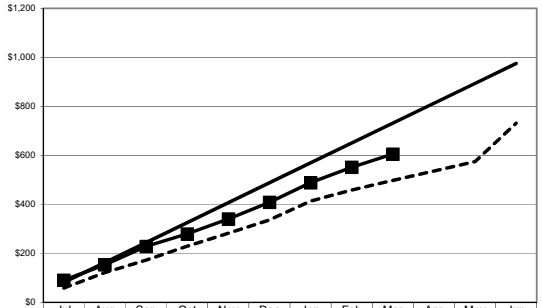
In Thousands



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$17	$33	$50	$66	$83	$99	$116	$132	$149	$165	$182	$198
FY 21 Actual	$21	$41	$55	$72	$85	$76	$99	$174	$181	$184	$188	$200
FY 22 Actual	$8	$19	$31	$42	$52	$49	$63	$74	$149			

Settlements

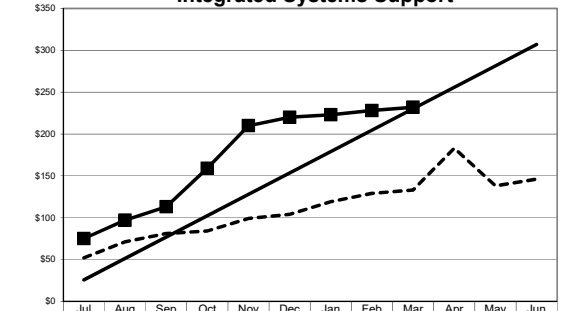
In Thousands



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$81	$163	$244	$325	$406	$488	$569	$650	$731	$813	$894	$975
FY 21 Actual	$58	$121	$172	$229	$282	$336	$413	$458	$497	$536	$574	$731
FY 22 Actual	$90	$153	$228	$279	$340	$408	$488	$551	$605			

Integrated Systems Support

In Thousands

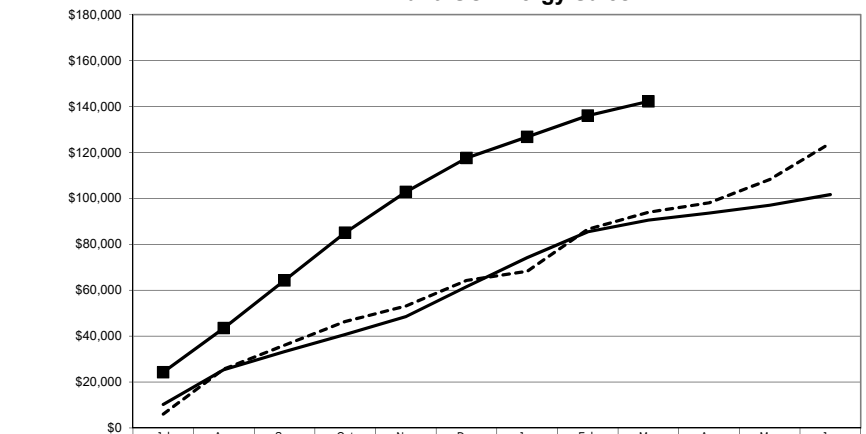


	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$26	$51	$77	$102	$128	$154	$179	$205	$230	$256	$281	$307
FY 21 Actual	$52	$71	$81	$84	$99	$104	$119	$129	$133	$183	$138	$146
FY 22 Actual	$75	$97	$113	$159	$210	$220	$223	$228	$232			

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

Plant ISO Energy Sales

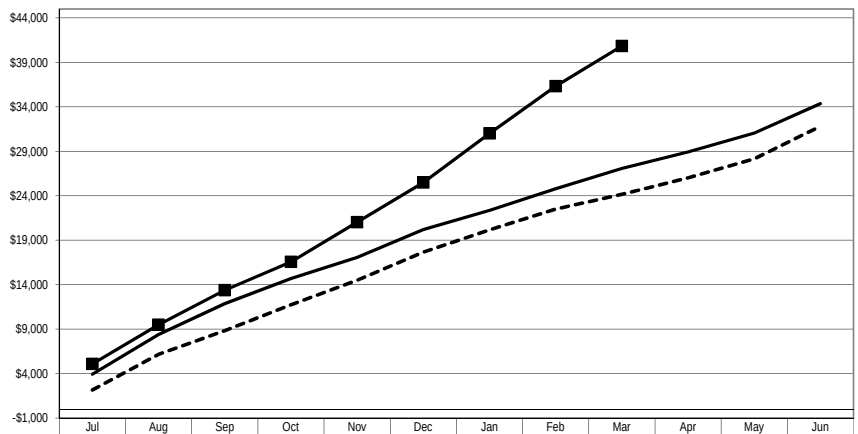
In Thousands



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	10,259	25,385	33,224	40,717	48,530	61,560	74,119	85,438	90,496	93,579	97,030	101,640
FY 21 Actual	$6,038	$25,666	$36,007	$46,364	$53,097	$64,251	$68,228	$86,552	$93,953	$98,014	$108,209	$124,016
FY 22 Actual	$24,279	$43,507	$64,273	$85,028	$102,756	$117,565	$126,765	$136,004	$142,216			

Member Resource ISO Energy Sales

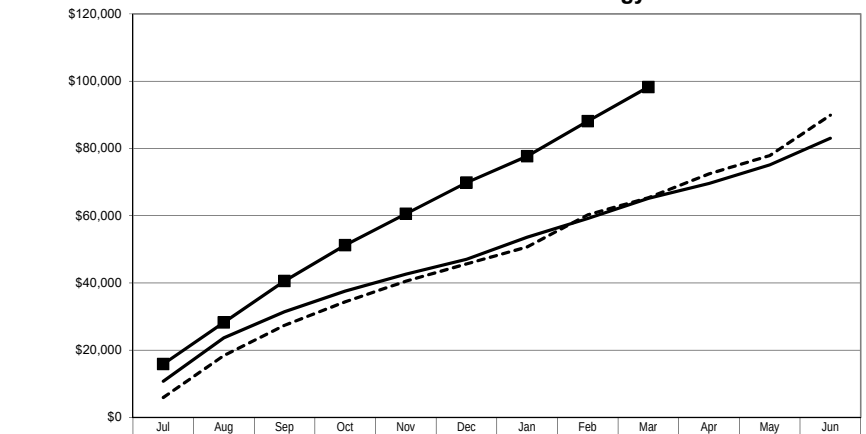
In Thousands



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	3,921	8,401	11,866	14,696	17,070	20,187	22,359	24,778	27,069	28,918	31,051	34,353
FY 21 Actual	$2,155	$6,160	$8,826	$11,744	$14,491	$17,658	$20,154	$22,494	$24,157	$26,002	$28,156	$31,809
FY 22 Actual	$5,075	$9,482	$13,381	$16,569	$21,029	$25,489	$31,009	$36,321	$40,825			

Member Owned Generation ISO Energy Sales

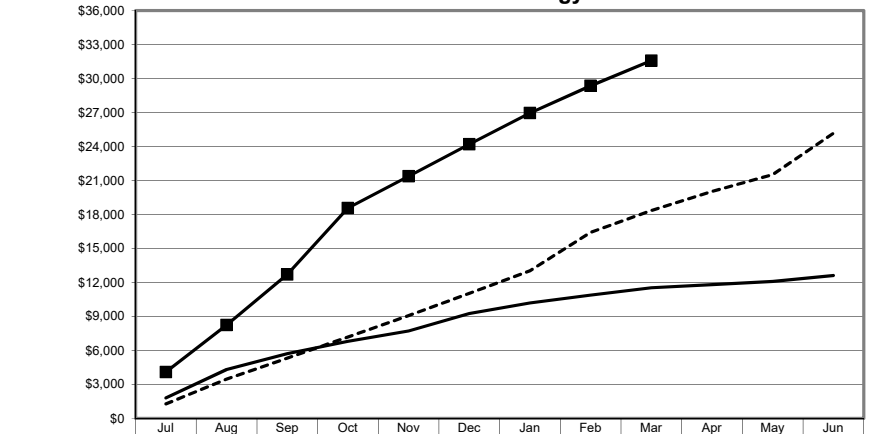
In Thousands



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	10,751	23,657	31,396	37,572	42,610	47,024	53,615	59,171	65,160	69,599	75,082	83,030
FY 21 Actual	$5,896	$18,375	$27,381	$34,347	$40,522	$45,628	$50,673	$60,259	$65,363	$72,454	$77,843	$89,884
FY 22 Actual	$15,831	$28,243	$40,567	$51,237	$60,522	$69,837	$77,659	$88,096	$98,253			

NCPA Contracts ISO Energy Sales

In Thousands

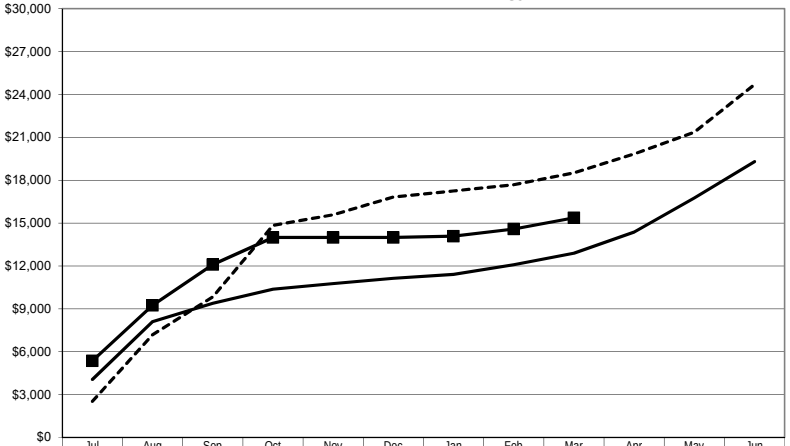


	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	1,806	4,322	5,708	6,796	7,720	9,264	10,197	10,880	11,532	11,805	12,078	12,615
FY 21 Actual	$1,279	$3,464	$5,317	$7,185	$9,078	$11,043	$13,035	$16,425	$18,350	$20,034	$21,517	$25,170
FY 22 Actual	$4,096	$8,246	$12,704	$18,566	$21,382	$24,198	$26,954	$29,351	$31,580			

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

Western Resource ISO Energy Sales

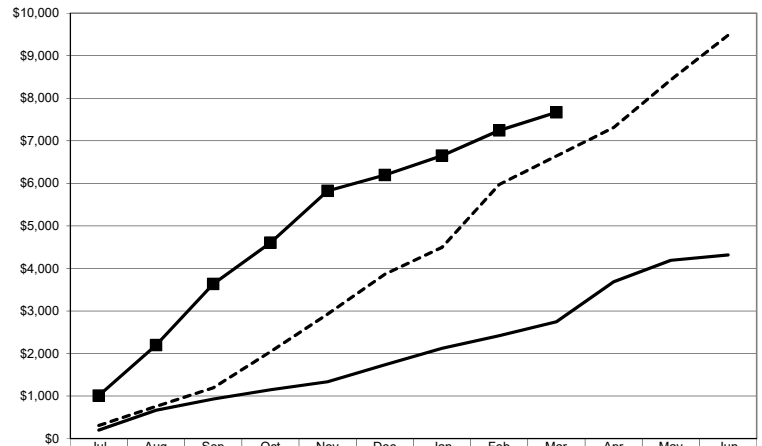
In Thousands



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	4,058	8,098	9,390	10,374	10,762	11,135	11,405	12,088	12,896	14,370	16,749	19,297
FY 21 Actual	$2,521	$7,186	$9,839	$14,839	$15,578	$16,824	$17,250	$17,687	$18,512	$19,828	$21,350	$24,692
FY 22 Actual	$5,354	$9,238	$12,093	$13,993	$13,993	$13,993	$14,074	$14,586	$15,365			

Ancillary Services Sales

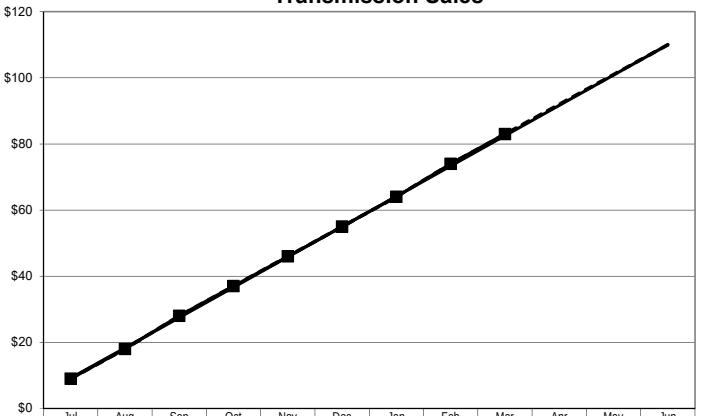
In Thousands



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	201	668	929	1,148	1,335	1,734	2,123	2,420	2,745	3,689	4,191	4,317
FY 21 Actual	$309	$757	$1,193	$2,042	$2,929	$3,862	$4,496	$5,974	$6,644	$7,314	$8,434	$9,481
FY 22 Actual	$1,011	$2,199	$3,634	$4,603	$5,823	$6,194	$6,651	$7,246	$7,669			

Transmission Sales

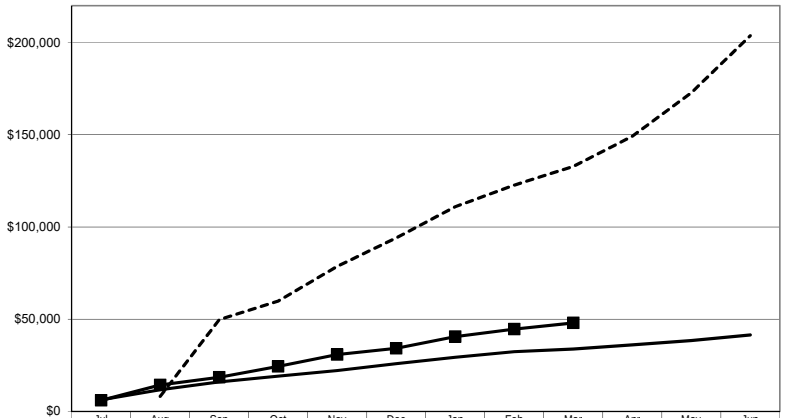
In Thousands



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	$9	$18	$28	$37	$46	$55	$64	$73	$83	$92	$101	$110
FY 21 Actual	$9	$18	$28	$37	$46	$55	$64	$74	$83	$92	$101	$110
FY 22 Actual	$9	$18	$28	$37	$46	$55	$64	$74	$83			

Western Credits, Interest & Other Income

In Thousands



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	6,281	11,761	16,048	19,124	22,152	25,924	29,378	32,370	33,771	36,079	38,356	41,469
FY 21 Actual		$8,178	$49,778	$59,845	$78,615	$94,097	$111,011	$122,688	$132,869	$149,138	$172,759	$203,674
FY 22 Actual	$5,994	$14,352	$18,543	$24,380	$30,876	$34,247	$40,539	$44,600	$47,983			

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

Generation Cost Analysis

$ in thousands

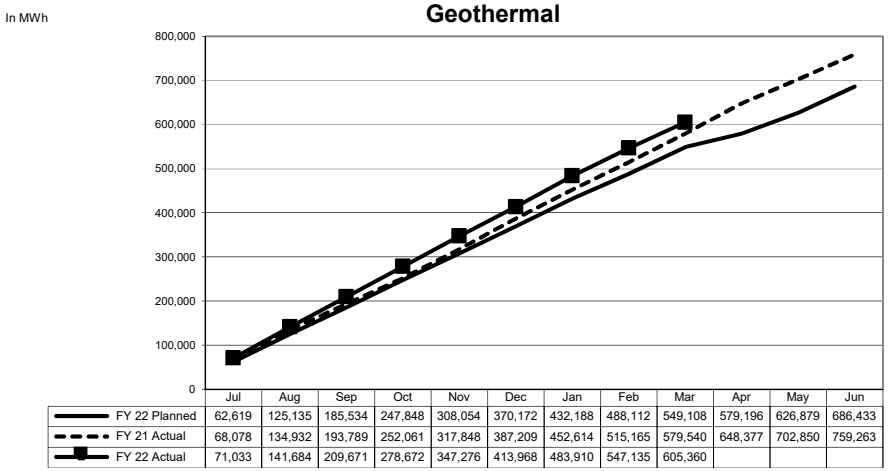
	Geothermal				
	Budget	Actual	$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	$ 17,803	$ 11,695	$ 19.32	$ 6,108	34%
Capital Assets/Spare Parts Inventories	6,205	4,901	8.10	1,304	21%
Other Costs	11,197	8,842	14.61	2,355	21%
CA ISO Charges	504	703	1.16	(199)	-40%
Debt Service	4,953	3,715	6.14	1,238	25%
Annual Budget	40,662	29,856	49.32	10,806	27%
Less: Third Party Revenue					
Interest Income	382	61	0.10	321	84%
ISO Energy Sales	27,578	37,081	61.25	(9,503)	-34%
Ancillary Services Sales	-	-	-	-	
Effluent Revenues	750	508	0.84	242	32%
Misc	113	87	0.14	26	23%
	28,823	37,736	62.34	(8,913)	-31%
Net Annual Budget Cost to Participants	$ 11,839	$ (7,880)	$ (13.02)	$ 19,719	167%
Net Generation--MWh @ Meter	686,433	605,360			
$/MWh (A)	$ 10.03	$ (19.15)			

	Hydroelectric				
	Budget	Actual	$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	$ 9,882	$ 5,621	$ 31.97	$ 4,261	43%
Capital Assets/Spare Parts Inventories	3,465	2,801	15.93	664	19%
Other Costs	4,677	3,632	20.66	1,045	22%
CA ISO Charges	2,635	3,572	20.32	(937)	-36%
Debt Service	33,422	25,066	142.58	8,355	25%
Annual Budget	54,081	40,693	231.46	13,389	25%
Less: Third Party Revenue					
Interest Income	670	58	0.33	612	91%
ISO Energy Sales	22,047	17,929	101.98	4,118	19%
Ancillary Services Sales	2,241	4,162	23.68	(1,921)	-86%
Misc	-	1	0.00	(1)	
	24,959	22,150	125.99	2,809	11%
Net Annual Budget Cost to Participants	$ 29,123	$ 18,543	$ 105.47	$ 10,580	
Net Generation--MWh @ Meter	477,404	175,808			
$/MWh (A)	$ (9.00)	$ (37.11)			

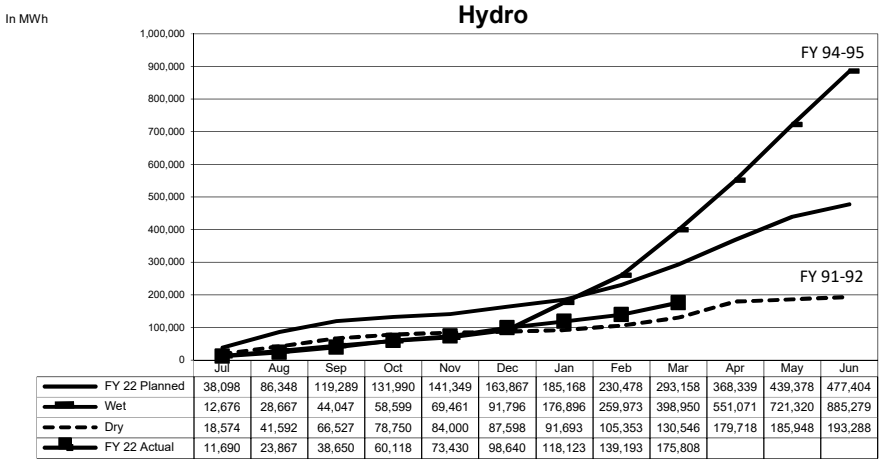
Footnotes:

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

MWhs Generated



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Planned	62,619	125,135	185,534	247,848	308,054	370,172	432,188	488,112	549,108	579,196	626,879	686,433
FY 21 Actual	68,078	134,932	193,789	252,061	317,848	387,209	452,614	515,165	579,540	648,377	702,850	759,263
FY 22 Actual	71,033	141,684	209,671	278,672	347,276	413,968	483,910	547,135	605,360			



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Planned	38,098	86,348	119,289	131,990	141,349	163,867	185,168	230,478	293,158	368,339	439,378	477,404
Wet	12,676	28,667	44,047	58,599	69,461	91,796	176,896	259,973	398,950	551,071	721,320	885,279
Dry	18,574	41,592	66,527	78,750	84,000	87,598	91,693	105,353	130,546	179,718	185,948	193,288
FY 22 Actual	11,690	23,867	38,650	60,118	73,430	98,640	118,123	139,193	175,808			

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

Generation Cost Analysis

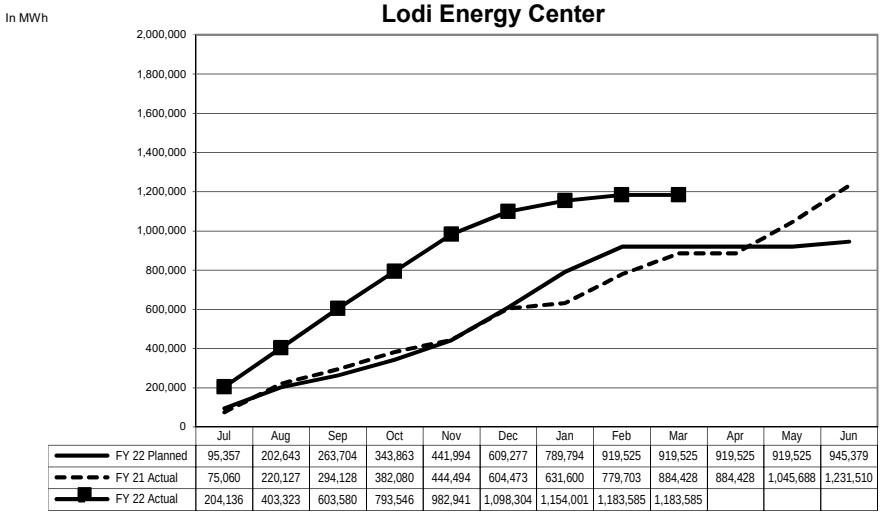
	Lodi Energy Center				
	Budget	Actual	$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	$ 9,558	$ 9,732	$ 8.22	$ (174)	-2%
Fuel	31,029	52,744	44.56	(21,715)	-70%
AB 32 GHG Offset	6,269	17,121	14.47	(10,852)	-173%
CA ISO Charges and Energy Purchases	3,137	3,301	2.79	(163)	-5%
Capital Assets/Spare Parts Inventories	5,007	2,587	2.19	2,420	48%
Other Costs	7,805	6,865	5.80	940	12%
Debt Service	26,008	19,773	16.71	6,235	24%
Annual Budget	88,813	112,123	94.73	(23,309)	-26%
Less: Third Party Revenue					
Interest Income	386	191	0.16	195	50%
ISO Energy Sales	49,394	80,917	68.37	(31,523)	-64%
Ancillary Services Sales	1,152	3,242	2.74	(2,090)	-181%
Transfer Gas Credit	-	-	-	-	0%
GHG Allowance Credits	6,102	16,043	13.55	(9,941)	-163%
Misc	-	2	0.00	(2)	0%
	57,034	100,394	84.82	(43,360)	-76%
Net Annual Budget Cost to Participants	$ 31,779	$ 11,728	$ 9.91	$ 20,051	63%
Net Generation--MWh @ Meter	945,379	1,183,585			
$/MWh (A)	$ 6.10	$ (6.80)			

	Combustion Turbine No. 2 (STIG)				
	Budget	Actual	$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	$ 1,627	$ 956	$ 64.28	$ 672	41%
Fuel and Pipeline Transport Charges	1,265	1,504	101.19	(239)	-19%
Capital Assets/Spare Parts Inventories	46	-	-	46	100%
Other Costs	735	469	31.53	267	36%
CA ISO Charges	136	116	7.82	20	14%
Debt Service	5,048	3,786	254.66	1,262	25%
Annual Budget	8,858	6,831	459.49	2,027	23%
Less: Third Party Revenue					
Interest Income	109	17	1.13	92	85%
ISO Energy Sales	1,321	1,814	122.00	(493)	-37%
Ancillary Service Sales	-	-	-	-	0%
Fuel and Pipeline Transport Credits	1,788	1,879	126.36	(90)	-5%
GHG Allowance Credits	104	-	-	104	100%
Misc	-	-	-	-	0%
	3,322	3,709	249.48	(387)	-12%
Net Annual Budget Cost to Participants	$ 5,536	$ 3,122	$ 210.00	$ 2,414	44%
Net Generation--MWh @ Meter	12,003	14,867			
$/MWh (A)	$ 40.69	$ (44.66)			

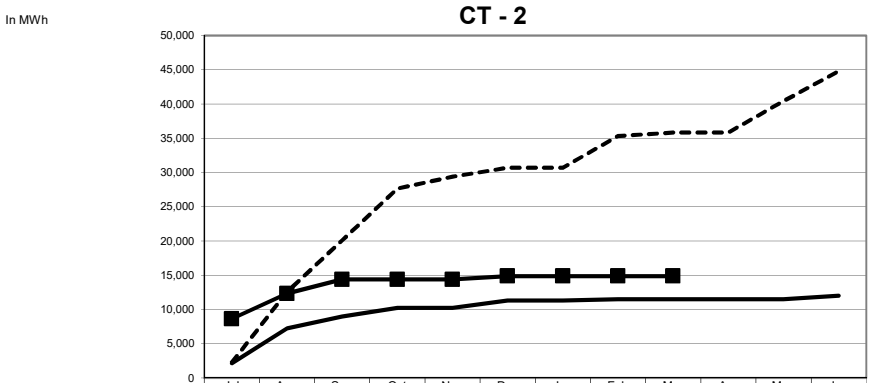
Footnotes:

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

MWhs Generated



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Planned	95,357	202,643	263,704	343,863	441,994	609,277	789,794	919,525	919,525	919,525	919,525	945,379
FY 21 Actual	75,060	220,127	294,128	382,080	444,494	604,473	631,600	779,703	884,428	884,428	1,045,688	1,231,510
FY 22 Actual	204,136	403,323	603,580	793,546	982,941	1,098,304	1,154,001	1,183,585	1,183,585			



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Planned	2,146	7,252	8,964	10,258	10,258	11,305	11,305	11,505	11,505	11,505	11,505	12,003
FY 21 Actual	2,289	12,590	20,096	27,647	29,406	30,692	30,692	35,338	35,827	35,827	40,400	44,799
FY 22 Actual	8,642	12,325	14,396	14,396	14,396	14,867	14,867	14,867	14,867			

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

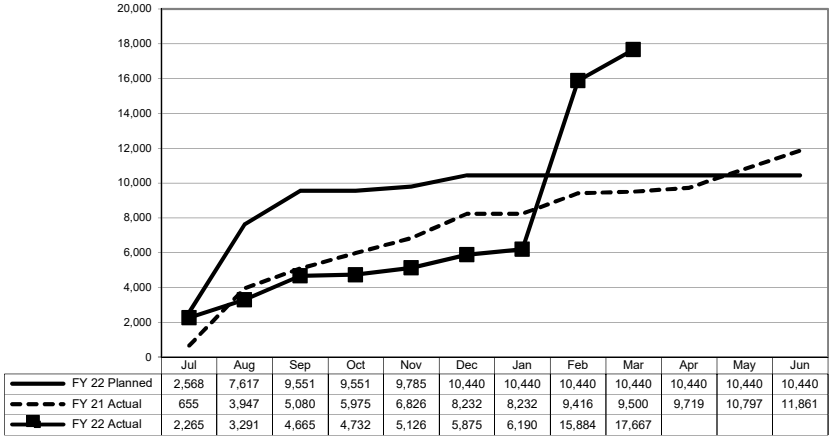
Generation Cost Analysis

	Combustion Turbine No. 1				
	Budget	Actual	$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	$ 2,497	$ 4,162	$ 235.58	$ (1,665)	-67%
Fuel and Pipeline Transport Charges	792	1,852	104.85	(1,061)	-134%
Capital Assets/Spare Parts Inventories	2,573	758	42.93	1,815	71%
Other Costs	1,104	803	45.43	301	27%
CA ISO Charges	90	636	35.97	(546)	-608%
Debt Service	-	-		-	
Annual Budget	7,055	8,211	464.76	(1,157)	-16%
Less: Third Party Revenue					
Interest Income	-	27		(27)	
ISO Energy Sales	1,300	4,475	253.30	(3,176)	-244%
Ancillary Services Sales	-	-	-	-	0%
Misc	-	-	-	-	0%
	1,300	4,502	253.30	(3,202)	-246%
Net Annual Budget Cost to Participants	$ 5,755	$ 3,709	$ 209.96	$ 2,046	36%
Net Generation--MWh @ Meter	10,440	17,667			
$/MWh (A)	$ 551.26	$ 209.96			

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

MWhs Generated

In MWh



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Planned	2,568	7,617	9,551	9,551	9,785	10,440	10,440	10,440	10,440	10,440	10,440	10,440
FY 21 Actual	655	3,947	5,080	5,975	6,826	8,232	8,232	9,416	9,500	9,719	10,797	11,861
FY 22 Actual	2,265	3,291	4,665	4,732	5,126	5,875	6,190	15,884	17,667			