



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



BUSINESS PROGRESS REPORT

2021

October

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Generation Costs & Reliability

Combustion Turbine Project

Unit Operation for September 2021

Unit	Availability		Production		Reason for Run
CT1 Alameda	Unit 1	Unit 2	Unit 1	536.0 MWh	CAISO / CAISO
	98.0%	95.4%	Unit 2	314.2 MWh	
Curtailements, Outages, and Comments:					
Unit 1: 9/17 @ 21:27 - 9/18 @ 12:00; Air Compressor Trouble, OMS 10734469					
Unit 2: 9/9 @ 13:15 - 9/10 @ 09:00 - Diesel Starting Engine Trouble 9/17 @ 21:27 - 9/18 @ 12:00; Air Compressor Trouble, OMS 10734475					
Unit	Availability		Production		Reason for Run
CT1 Lodi	100.0%		543.1 MWh		CAISO
Curtailements, Outages, and Comments:					
Normal Operation.					
Unit	Availability		Production		Reason for Run
CT2 STIG	84.9%		2,040.8 MWh		CAISO
Curtailements, Outages, and Comments:					
9/11 @ 00:00 - 9/15 @ 12:25; Generator Lube Oil Seal Repair, OMS 10674351					
Unit	Availability		Production		Reason for Run
LEC	100.0%		199,045 MWh		CAISO
Curtailements, Outages, and Comments:					
Normal Operation.					

Maintenance Summary – Specific per asset above.

Geothermal Facilities

Availability/Production for September 2021

Unit	Availability	Net Electricity Generated/Water Delivered	Out-of-Service/Descriptors
Unit 1	100 %	19,948 MWh	U1 had no outages for the month
Unit 2	100 %	*19,804 MWh	U2 had no outages for the month
Unit 3	N/A %	N/A	Unit 3 remains out of service.
Unit 4	100 %	28,219 MWh	U4 had no outages for the month
Southeast Geysers Effluent Pipeline	44 %	105.2 mgallons	Average flow rate: 2,399 gpm
Southeast Solar Plant	N/A	144,444 KWh	Year-to-date KWh: 4,188,41
Bear Canyon Pump Station Zero Solar	N/A	117,451 KWh	Year-to-date KWh: 6,131,570

* Accounts for an additional 910 MWh of house load for the 21KV power supply to the effluent pipeline supplied from Unit #2.

Hydroelectric Project

Availability/Production for September 2021

Units	Availability	Net Electricity Generated	Out-of-Service
Collierville Unit 1	100%	3504 MWh	CV Unit 1 – No Outages
Collierville Unit 2	100%	10003 MWh	CV Unit 2 – No Outages
Spicer Unit 1	80.36%	494 MWh	NSM1- Out of Service on 9/4/21 to 9/5/21 from 0701 to 1735 for 480 Volt Bus Maintenance and on 9/13/21 to 9/17/21 from 0800 to 1248 for Annual Maintenance Outage and on 9/27/21 from 0426 to 1025 for Salt Springs Trouble
Spicer Unit 2	80.74%	602 MWh	NSM2- Out of Service on 9/4/21 to 9/5/21 from 0701 to 1735 for 480 Volt Bus Maintenance and on 9/20/21 to 9/24/21 from 0800 to 1107 for Annual Maintenance Outage and on 9/27/21 from 0426 to 0928 for Salt Springs Trouble
Spicer Unit 3	80.51%	133 MWh	NSM3- Out of Service on 9/4/21 to 9/5/21 from 0701 to 1735 for 480 Volt Bus Maintenance and on 9/7/21 to 9/11/21 from 0928 to 1356 for Annual Maintenance Outage and on 9/27/21 from 0426 to 0943 for Salt Springs Trouble

Operations & Maintenance Activities:

- CMMS work orders
- Alpine Main Dam – Downstream Face Maintenance
- EAP Functional Exercise
- NSM Powerhouse Annual Maintenance Shutdowns
- Beaver Creek and North Fork Reservoir Annual Drawdowns
- FERC Part 12 inspections of Alpine and Utica.
- DSOD inspections of all dams
- EAP crew training
- Distributed EAP reprints
- USGS semiannual field measurements
- USFS meeting on McKays sediment relocation

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

- There were no vehicle, Cal OSHA Recordable, or Lost Time accidents in the month of September.
- Find below a Safety Report that highlights the following areas: recordable incidents and lost time accidents (LTAs) reported this period and this calendar year; the number of days since last recordable or LTA; the number of work hours since last recordable or LTA; and vehicle accidents reported this month and this calendar year. In September of 2012, Generation Services completed an internal audit of its records with the results reflected in this report and was updated through the payroll period ended September 25, 2021.
- The “CT Group” column reflects the combined safety numbers of all CT employees. Beginning with the November 2009 report, the CT Group Column also includes Lodi Energy Center staff.

September 2021 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	349	1,159	2,364	3,348
Work Hours Since Last Recordable	28,940	241,429	355,414	2,728,090
LTA's (this month)	0	0	0	0
LTA's (calendar year)	0	0	0	0
Days without LTA	5,098	2,227	10,268	6,361
Work Hours without LTA	461,510	158,404	765,958	2,350,108
Vehicle Incident (month)	0	0	0	0
Vehicle Incident (calendar year)	0	1	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 September 25, 2021.

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 2021 Data

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

Last Year 2020 Data*

	September 2020		Calendar Year 2020	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	431.79 9/7 @ 1700	195,912	467.45 8/14 @ 1700	1,708,827
SVP	573.82 9/28 @ 1600	333,874	586.3 8/14 @ 1700	2,865,850
MSSA	991.13 9/7 @ 1700	529,786	1053.75 8/14 @ 1700	4,574,677

* Last year's data added for comparison purposes only

System Peak Data

	All Time Peak Demand	2021 Peak Demand
NCPA Pool	517.83 MW on 7/24/06 @ 1500	440.56 6/17 @ 1700
SVP	591.96 MW on 8/27/21 @ 1500	591.96 8/27 @ 1500
MSSA	1070.79 MW on 9/1/17 @ 1700	1025.46 6/17 @ 1700

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

NCPA Deviation Band Performance		
	September 2021	Calendar Year 2021
MSSA % Within the Band	98.88%	98.15%

- CAISO issued a Flex Alert notification for the following dates:
 - 9/08/21: 1600-2100 hours
 - 9/09/21: 1600-2100 hours
- CAISO issued a Restricted Maintenance Operations notification for the following dates:
 - 9/08/21: 1200-2100 hours
 - 9/09/21: 1200-2100 hours
 - 9/10/21: 1200-2100 hours
- CAISO issued a generation Over Supply notification for the following date:
 - 9/19/21: 1000-1300 hours
- There was a PG&E Public Safety Power Shutoff (PSPS) event September 20-21, 2021. No NCPA members or facilities were affected.

Pooling, Portfolio Planning & Forecasting

- NCPA Pool load during September 2021 was 189,036 MWh versus the budget forecast of 188,233 MWh, resulting in a forecast error of -0.43%. The forecast error was small as the Pool's actual temperatures were close to average during the month of September. The current weather outlook for October 2021 is for cooler than normal temperatures for the Bay Area and slightly below normal temperatures for the inland Valley. The Pool October load forecast is 183,440 MWh compared with extrapolated actuals of 179,503 MWh as of September 19, 2021.
- Lodi Energy Center (LEC) ran 720 hours out of a possible 720 producing 199,052 MWh. Natural gas and power prices are significantly higher than a year ago due to the low reservoir levels throughout the state. Fall gas-fired generation will likely continued to be strong due to lack of hydro generation.
- During September 2021, very little rain was recorded at the Big Trees gauge. October rainfall at Big Trees could be above average due to a couple of anticipated storms the weekend of October 22, 2021.
- The Value of Storage (VOS) of New Spicer Meadow Reservoir (NSMR) has remained at \$300/MWh. But for the most part releases from NSMR are just enough to maintain the summer minimum Big Trees flow of 150 CFS.
- NSMR storage as of September 30, 2021 was at 61,530-acre feet. The historical average NSMR storage at the end of September is 102,740 acre feet. As of October 19, 2021 NSMR storage was 54,893 acre feet.
- Combined Calaveras Project generation for the Pool in September 2021 totaled 6.81 GWh, up from 6.67 GWh in August 2021. The Pool's 6.81 GWh in September 2021 was very close to its revised forecast of 5.30 GWh.
- Western Base Resource (BR) deliveries for the Pool during September 2021 were 29,206 MWh. Displacement program energy totaled 4,862 MWh. The Pool's share of expected total delivery from the Western Base Resource for October 2021 is 35,612 MWh, of which 21,827 MWh has already been delivered.

- The PG&E Citygate gas index averaged \$6.64 / MMBtu during the month of September as compared to an average of \$5.35 for August. October's current average price is \$7.05. Both NYMEX gas and basis prices have been rising due to flat production, growing exports of natural gas and increased demand for electrical generation and refill of gas storage. Prices will remain high for the fall of 2021. The November 2021 PG&E Citygate forward price is \$6.60 / MMBtu.
- Day-Ahead PG&E DLAP electricity prices for September averaged \$74.18 / MWh On-Peak and \$61.87 Off-Peak, with a high of \$519.51. For the dates of October 1st through 19th, 2021 prices have averaged \$71.42 On-Peak and \$61.96 Off-Peak. The forward prices for November are \$74.61 On-Peak and \$63.38 Off-Peak.

Industry Restructuring, Contracts and Interconnection Affairs

Resource Adequacy Compliance Filings

- NCPA made the following Resource Adequacy compliance filings with the CAISO for the compliance period of December 2021:
 - Monthly System Resource Adequacy Demonstration (filed October 17, 2021)
 - Monthly Supply Plan (filed October 17, 2021)

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:

Extended Day-Ahead Market

- CAISO announced revival of the EDAM initiative at an online forum on 10/13/2021. The forum featured panels consisting of executive officers, technical staff that have participated in closed door working groups over the past year, various western stakeholders, and CAISO stakeholder initiative representatives.
 - The executives all acknowledged the incremental economic and environmental benefits that could be realized by EDAM. They also acknowledged that there were significant hurdles as well as potentially other quasi-regionalization options.
 - The technical panel reviewed common EDAM design principles but did not appear to have made significant progress sorting out the details for controversial topics of transmission, congestion, and state policy since the initiative was tabled in 2020. This somewhat implied that, similar to EIM, these issues would not be fully addressed until a future regional structure is formed. EDAM participation is "voluntary" but a six month commitment is required. EIM entities may remain EIM only but EDAM participation requires EIM participation.
 - The perspectives from around the west panel was more focused on the unresolved nature of controversial issues around transmission, state policy, and the understanding that a new Regional Transmission Operator will present its own set of new unique challenges.
 - The implementation panel announced that the initiative will officially resume with a November 12, 2021 workshop. This will be followed by a series of additional workshops where stakeholders will hammer out the details. Subsequent targets are: "briefing" the CAISO Board and EIM Governing Body in Q4 2022, implementing in 2023, and going live in 2024. The panel listed parallel initiatives

that will impact EDAM policy design such as Day Ahead Market Enhancements, External Load Forward Scheduling Rights, and potential price formation updates.

Resource Adequacy Enhancements

- CAISO released a narrowly scoped straw proposal for Phase 2 of the RAE initiative that only contained two high level, relatively uncontroversial proposals:
 - Must offer obligation and bid insertion
 - CAISO confirmed that it is not proposing to change how load-following metered subsystems are treated under the existing tariff section 40.2.4.
 - Storage resources with RA obligations must bid in full range of charge and discharge capability and report availability by utilizing the dynamic limit tool and outage management system cards.
 - Flexible RA: CAISO will evaluate the Flex RA program after Day Ahead Market Enhancements implementation and determine by 2025 if the program must be either redesigned or cancelled.
 - CAISO stated that further refinements, such as import requirements and adjusting capacity qualifying for RA based on forced outage history, are pending further discussion at the CPUC.
 - CAISO is targeting Q3 2022 implementation
- Phase 1 is nearly complete. CAISO implemented outage reporting and energy storage state of charge requirements in the summer of 2021. The final phase 1 proposal to seek CPM authority to designate local collective deficiencies is still under development.

Day-Ahead Market Enhancements

- Q4 2021 stakeholder meeting TBD
- Includes new Imbalance Reserve Product to address forecast uncertainty as well as reliability capacity down.
- In latest proposal, CAISO determined it necessary to implement a fixed reliability capacity requirement which necessitates a return to the sequential IFM-RUC approach because the reliability capacity requirement cannot be known until after the integrated forward market has run.
 - Proposed RUC enhancements:
 - Procure reliability capacity down
 - Establish the binding configuration for multi-stage generating resources
 - Include market power mitigation to address potential market power in providing reliability capacity.
 - Procure 100 percent of the imbalance reserve requirement as opposed to scaling with demand curve
 - Introduces a deviation settlement for ramping procured as either forecasted movement or imbalance reserves in the integrated forward market with forecasted movement and flexible ramping product procured in the real-time market.
 - Variable energy resources will be eligible to provide reliability capacity down and imbalance reserve down whether or not their bids are consistent with the CAISO's variable energy resource forecast.
 - Make resources ineligible for reliability capacity up/imbalance reserve up awards on any capacity segment with an associated energy bid that exceeds the calculated P97.5 net load price.
 - Removed "corrective capacity".

- Implementation date is to be determined. Draft final proposal was due September 2021 but it was determined that additional workshops are necessary.

Transmission Access Charge Structure Enhancements

- CAISO has pushed the initiative back to Q4 2022 in the latest Policy Roadmap and Annual Plan.
- Initiative is currently on hold pending developments from EDAM 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 costs 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. It received general support from the market and will be presented to the CAISO Board in 2021 and will be implemented at a, to be determined point thereafter. 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	-	0	\$761,150	\$ 33.52	\$ -	\$ 49.51
Nov-21	8,712	-	0	\$761,150	\$ 87.37	\$ -	\$ 49.76
Dec-21	7,036	-	0	\$761,150	\$ 108.18	\$ -	\$ 50.36
Jan-22	5,620	-	0	\$761,150	\$ 135.44	\$ -	\$ 50.14
Feb-22	14,806	-	0	\$761,150	\$ 51.41	\$ -	\$ 47.92
Mar-22	21,003	-	0	\$761,150	\$ 36.24	\$ -	\$ 46.86
Apr-22	55,270	-	0	\$1,737,317	\$ 31.43	\$ -	\$ 42.94
May-22	90,965	-	0	\$1,737,317	\$ 19.10	\$ -	\$ 36.88
Jun-22	86,068	-	0	\$1,737,317	\$ 20.19	\$ -	\$ 34.02

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 34,068 MWh of Base Resource (BR) energy in September 2021. This includes Base Resource displacement energy of 4,862 MWh.
- Pool Members' total savings under Market Efficiency Enhancement Agreement (MEEA) was approximately \$(3,840) in September 2021. The cumulative MEEA savings for FY2022 is approximately \$25,540 for July 2021 through September 2021.

Interconnection Affairs

PG&E Update

TO-18 Rate Case

- On October 15, 2020 FERC issued a ruling on the PG&E Transmission Owner Tariff 18 Filing.
- The ruling came over four years after the initial filing and over two years from an initial favorable decision back in 2018.
- The ruling is not the end of TO-18 as FERC has requested further testimony and briefs on ROE matters. The initial decision reduced ROE from 10.40% to 9.13%.
- Once ROE is decided, TO-18 rates will be effective for a 12-month period from March 1, 2017 – Feb 28, 2018.
- TO-19, which was settled at a TRR of 98.85% of TO-18 will be effective for a 14-month period from March 1, 2018 – April 30, 2019.
- FERC denied all PG&E request for rehearing on non-ROE issues and directed further briefing on ROE. PG&E has appealed and NCPA has intervened in that appeal. Paper hearing on ROE awaiting FERC order. Appeal of non-ROE issues pending in DC Circuit Court.
- NCPA has requested more information on legal fees PG&E has spent to date on rate cases. PG&E objected to answer legal fee questions and held back on answering questions during a meet and confer meeting on Sept 20th. CPUC and NCPA will discuss next steps.

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. Interim solution if necessary will be to use the temporary jumpers as in Jan of 2020. CEC application is currently under legal review and submittal is tentatively scheduled for week of Sept 27th.

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 tentatively scheduled for Oct 4, 2021.

PG&E RY2022 Formula Rate Annual Update

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

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

Revenue requirement for RY2022 (Jan 1 – Dec 31, 2022) is as follows:

PG&E Wholesale Rates	Settled RY2021 (Current)	As Filed RY 2022	% Change
Revenue Requirement	\$2B	\$2.6B	30%
HV TAC (\$/MWH)	\$9.77	\$12.80	31%
LV TAC (\$/MWH)	\$13.34	\$17.76	33%

Major contributing factors to the increase are PG&E's:

- \$176M increase to A&G expenses
- \$143M increase to O&M expenses
- \$43M increase to Depreciation Expense

- \$30M increase to Income Taxes

Next Steps:

- TANC is now engaged in the 2022 TRR review process to negotiate with PG&E over amounts found to be excessive or unsupported
- A technical conference was held on August 16
- PG&E made significant changes to the rate model and work papers. As a result, the joint interveners have requested a second technical conference for the week of Sept 27th

STAR Process

To date, NCPA has identified eleven (11) projects totaling \$56.1M in estimated completion cost that are related to non-ISO controlled lines. PG&E has acknowledged the project's cost recovery does not belong in the transmission rate base and should be part of the CPUC's General Rate Case. NCPA will monitor for the removal of projects and costs in future transmission rate cases.

Debt and Financial Management

- At the September 22nd meeting, the Fed held its current target interest rate steady in a range of 0% to 0.25%. The Fed said it will likely begin reducing its monthly bond purchases as soon as November and signaled interest rate increases may follow more quickly than expected as the U.S. central bank's turn from pandemic crisis policies gains momentum.
- Inflation accelerated last month and remained at its highest rate in over a decade, with price increases from pandemic-related labor and materials shortages rippling through the economy. The Labor Department said last month's consumer-price index rose by 5.4% from a year earlier.
- At the October Finance Committee meeting, staff received direction to issue an RFP for Underwriting Services to refund the 2012A Hydroelectric bonds. The current estimates show NPV savings of \$16m or 21% of refunded par. Staff plans to return at the November meeting with a recommendation. The Committee also received a report from Baker Tilly regarding the results of the FY2021 audit. Baker Tilly reported the Agency received an unmodified, or 'clean' opinion, no material weaknesses or significant deficiencies in controls and no audit findings or concerns. The reports will be included in the October agenda package for review.

Schedule Coordination Goals

Software Development

- Applications and Enhancements under development
 - New Chromium-based Deal Manager app scheduled for release in the production mid-October
 - Development of the Renewable Portfolio Standards application continues and data validation is being performed. Anticipated rollout in November 2021
 - IS team deploying apps in the test environment to test the Oracle 2019 database and testing is on-going

- Customer and Resource Integration
 - EBCE's Henrietta D Battery Storage on-going integration and slated for operations on January 1, 2022. For this first ever Non-Generator Resource for NCPA, testing is on-going in the Market Simulation environment.

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,
 - Altamont Wind - successfully integrated and curtailment logic is in place and functioning.
 - Sky River Wind – telecommunication and WAN connectivity has been installed and tested. Initial point testing was completed successfully, however curtailment logic requires some changes from NextEra. Will schedule a follow-up point test.
 - Henrietta D –SCADA communications have been established to the site and point testing is successfully completed. Working to standup a new PI Web API server for scheduling optimization.
 - South Feather Water and Power – Point list has been gathered from SFWPA and has been reviewed by NCPA staff. Currently working to import points into NCPA SCADA system which is expected to be completed by end of October.
- Operations and Support continues to review the RFP for Enterprise VOIP system and has narrowed selections down to a few vendor solutions. Reaching out to vendors for further information before deciding.
- Operations and Support is planning for a Hard Failover to the Disaster Recovery Center (DRC) on October 15th – 17th to prepare for a complete HQ building power outage. The outage is required to finalize the Electric Vehicle Charging stations building's main panel. During the failover Dispatch and Scheduling will be working from the DRC.
- 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 early 2022.

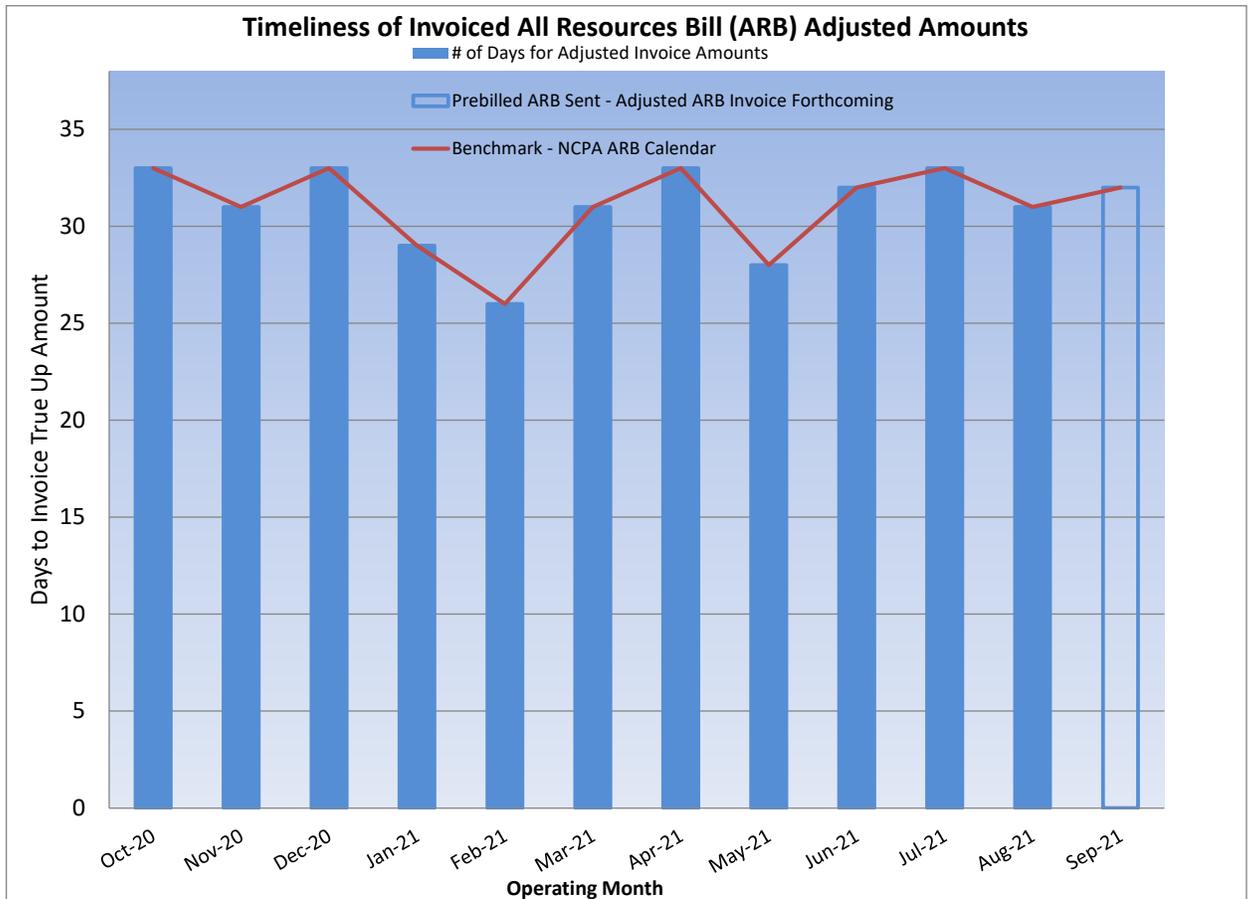
NCPA Bills & Settlements

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 September 2021 NCPA All Resources Bill (ARB) monthly invoice sent to members on August 24, 2021 contains:

- September 2021 monthly pre-billed budget/forecast amounts;
- July 2021 (1st Adjustment) NCPA Project and CAISO Initial settlement true-ups;
- June 2021 (2nd Adjustment) NCPA Project settlement true-up and T+12 business day recalculated CAISO settlement true-up allocations;
- April 2021 (3rd Adjustment) T+55 business day recalculated CAISO settlement true-up allocations and NCPA Projects true-up;
- October 2020 (4th Adjustment) T+9 month recalculated CAISO settlement true-up allocations;
- December 2019 (5th Adjustment) T+18 month recalculated CAISO settlement true-up allocations;
- September 2018 (6th Adjustment) T+33 month recalculated CAISO settlement true-up;
- June 2018 (7th Adjustment) T+36 month CAISO settlement true-up;



Legislative & Regulatory

Member Program Update

- NCPA held its 2021 Annual Conference from September 29 – October 1 at Silverado in Napa, California. Around 200 people, including NCPA members, staff, and industry partners attended the conference, which focused on the challenges and opportunities utilities face not only in a post-COVID-19 world, but in a policy environment shaped by discussions at the state, federal, and international level to decarbonize the electric utility industry at an increasingly rapid pace. Our esteemed speakers focused on reliability, affordability, innovative technologies, the transition of California’s electric grid, and managing risk, among other topics. During the conference, NCPA Commissioner and City of Lodi Mayor Pro Tempore Mark Chandler was honored with the Spirit of Public Power Award.

Customer Program Update

- NCPA issued two requests for proposals this past month. The first is to secure grant writing assistance services, which were requested by NCPA members as part of NCPA’s strategic plan. The second RFP is to secure conference and event planning services. Both RFPs have an October 29 submittal deadline. Contracts resulting from the solicitations will be available for use by NCPA and its members as well as SCPPA and its members.

Human Resources

Hires:

None.

Intern Hires:

None.

Promotions:

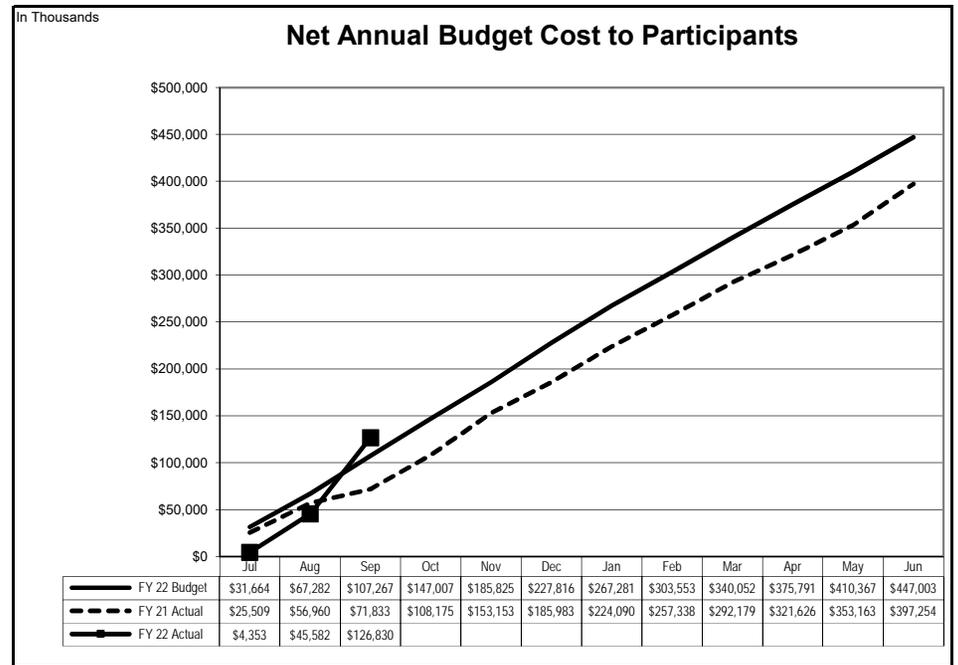
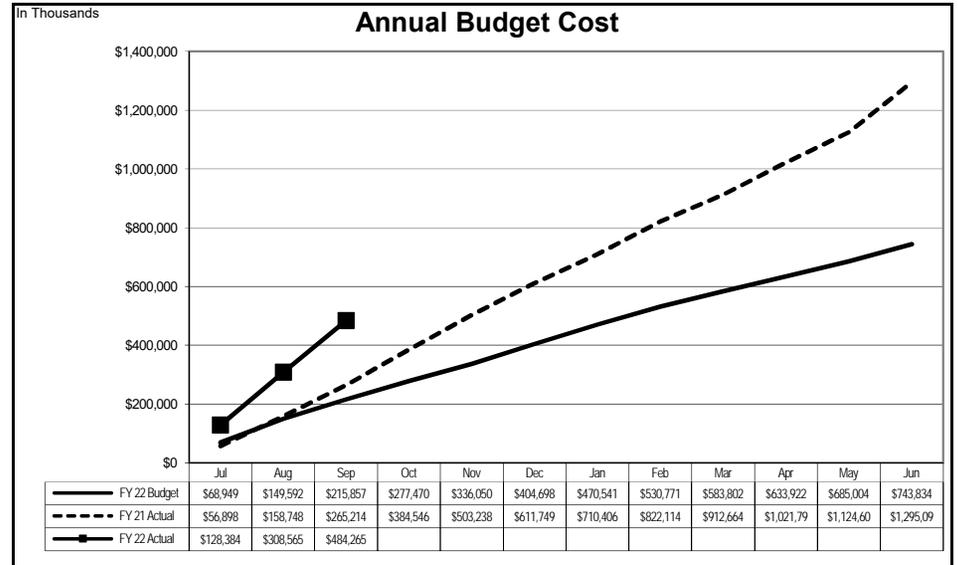
None.

Separations:

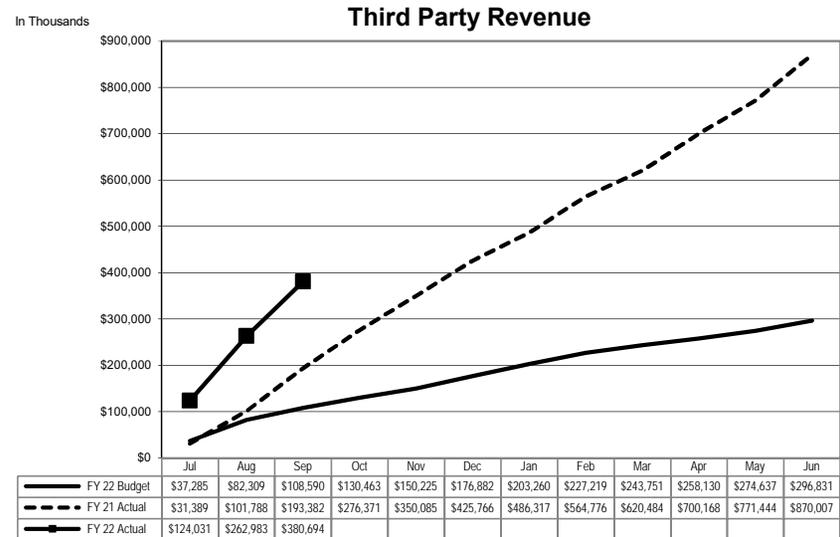
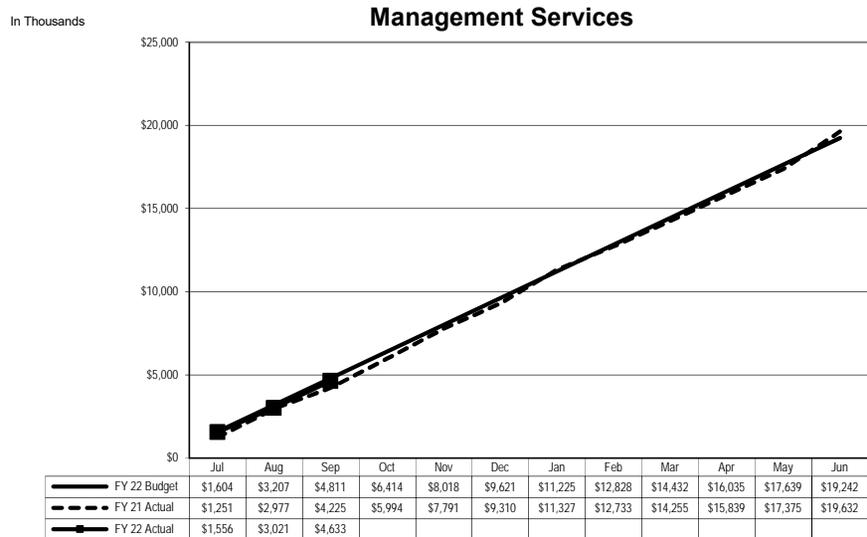
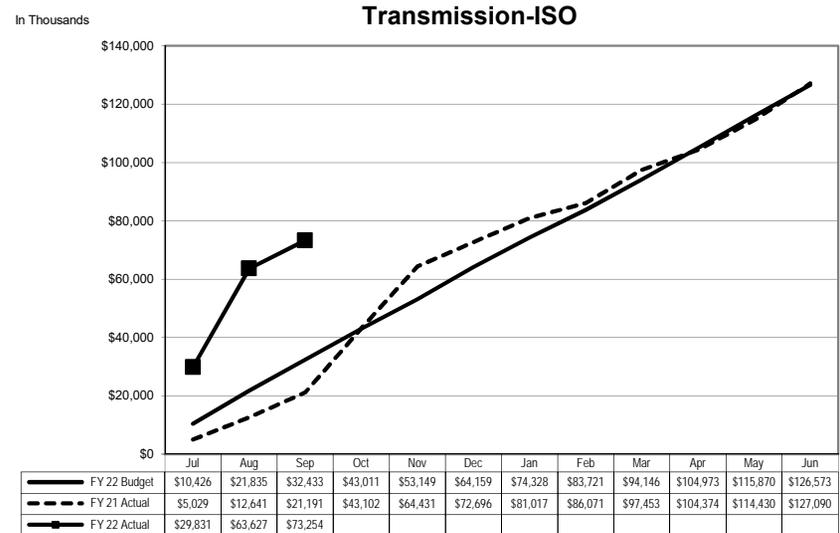
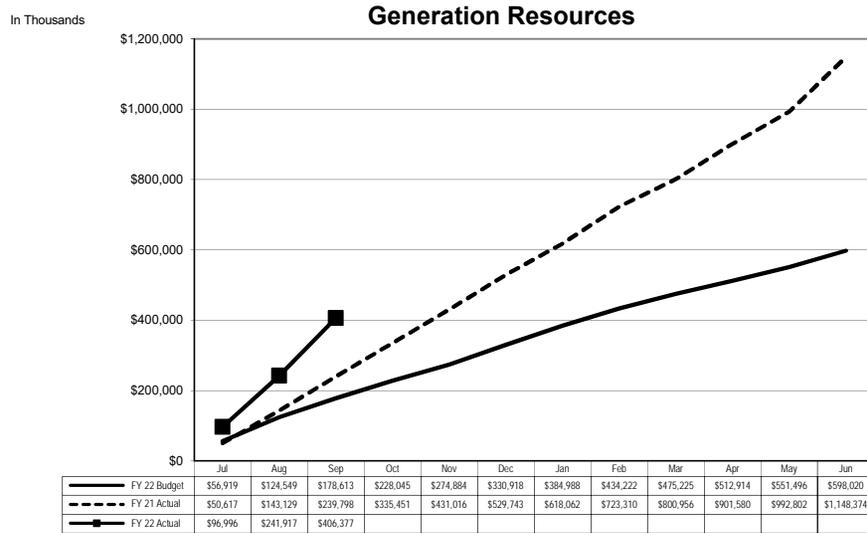
None.

**Annual Budget
2021-2022 Fiscal Year To Date
As of September 30, 2021**

In Thousands	Program			
	Annual Budget	Actual	Under(Ovr) Budget	YTD % Remaining
GENERATION RESOURCES				
NCPA Plants				
Hydroelectric	54,081	14,175	\$ 39,906	74%
Geothermal Plant	40,662	10,526	30,136	74%
Combustion Turbine No. 1	7,055	2,191	4,864	69%
Combustion Turbine No. 2 (STIG)	8,962	2,873	6,089	68%
Lodi Energy Center	88,813	43,215	45,599	51%
	199,574	72,980	126,594	63%
Member Resources - Energy	67,417	20,735	46,682	69%
Member Resources - Natural Gas	2,981	1,942	1,040	35%
Western Resource	27,302	7,423	19,879	73%
Market Power Purchases	17,225	15,550	1,675	10%
Load Aggregation Costs - ISO	282,244	287,142	(4,898)	-2%
Net GHG Obligations	1,277	606	671	
	598,020	406,377	191,643	32%
TRANSMISSION				
Independent System Operator	126,573	73,254	53,318	42%
MANAGEMENT SERVICES				
Legislative & Regulatory				
Legislative Representation	2,101	401	1,700	81%
Regulatory Representation	634	153	481	76%
Western Representation	694	132	562	81%
Customer Programs	481	101	380	79%
	3,911	788	3,123	80%
Judicial Action				
	300	167	133	44%
Power Management				
System Control & Load Dispatch	7,427	1,705	5,722	77%
Forecasting & Prescheduling	2,811	671	2,139	76%
Industry Restructuring	423	104	319	75%
Contract Admin, Interconnection Svcs & Ext. Affairs	975	250	725	74%
Gas Purchase Program	81	15	66	81%
Market Purchase Project	116	21	95	82%
	11,833	2,767	9,066	77%
Energy Risk Management				
	198	31	168	85%
Settlements				
	975	228	747	77%
Integrated System Support				
	307	113	195	63%
Participant Pass Through Costs				
	1,718	217	1,501	87%
Support Services				
	-	323	(323)	
	19,242	4,633	14,608	76%
TOTAL ANNUAL BUDGET COST	743,834	484,265	259,569	35%
LESS: THIRD PARTY REVENUE				
Plant ISO Energy Sales	101,640	64,273	37,367	37%
Member Resource ISO Energy Sales	34,353	13,381	20,971	61%
Member Owned Generation ISO Energy Sales	83,030	40,567	42,464	51%
Revenue from Customers	-	44,641	(44,641)	
NCPA Contracts ISO Energy Sales	12,615	12,704	(89)	-1%
Western Resource ISO Energy Sales	19,297	12,093	7,204	37%
Load Aggregation Energy Sales	-	147,573	(147,573)	
Ancillary Services Sales	4,317	3,634	684	16%
Transmission Sales	110	28	83	75%
Western Credits, Interest & Other Income	41,469	18,543	22,926	55%
	296,831	357,435	(60,605)	-20%
NET ANNUAL BUDGET COST TO PARTICIPANTS	447,003	126,830	\$ 320,174	72%

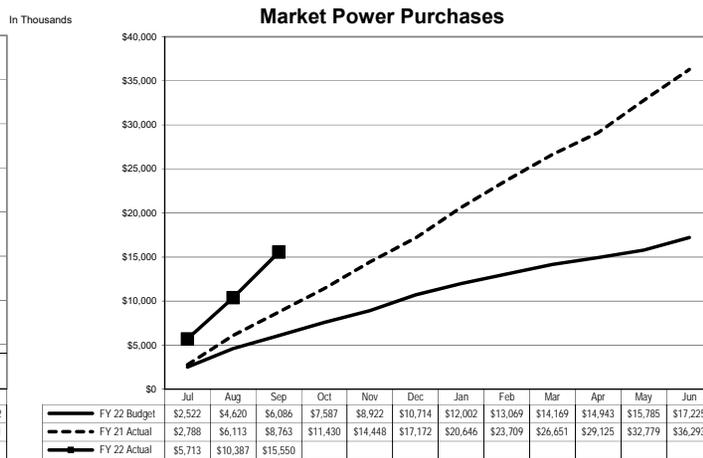
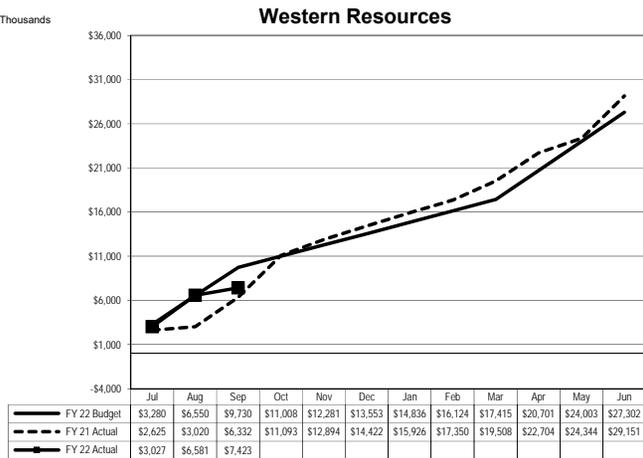
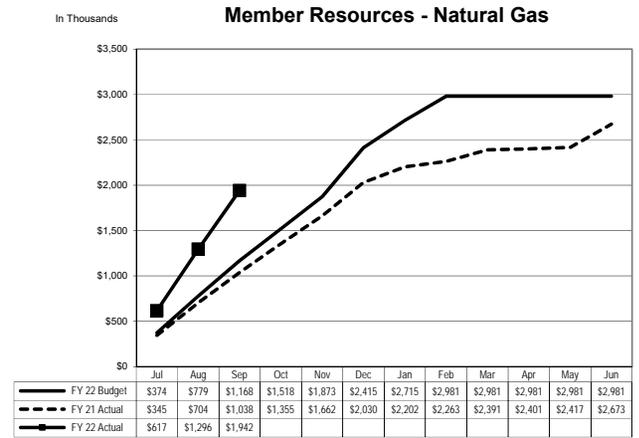
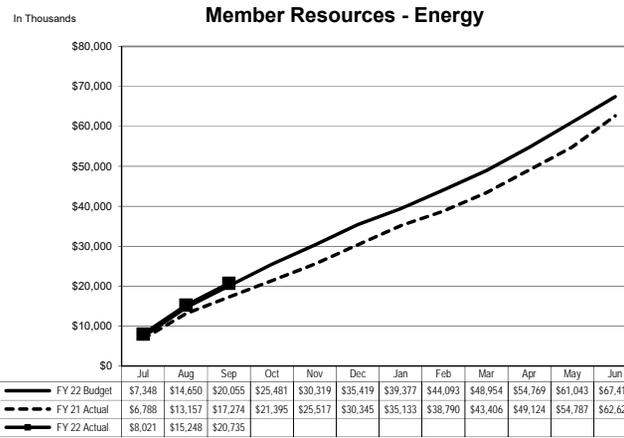
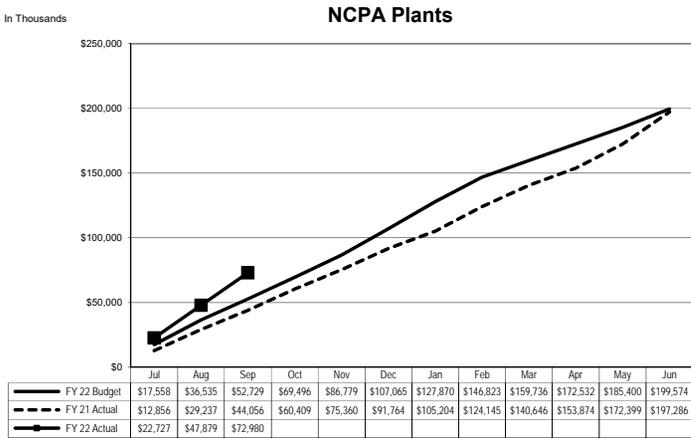


Annual Budget Budget vs. Actual By Major Area As of September 30, 2021



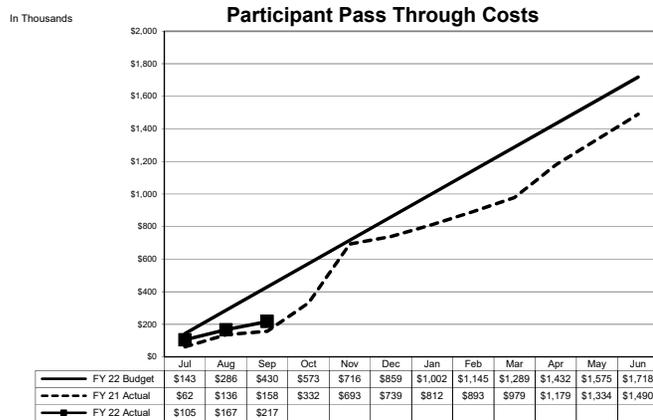
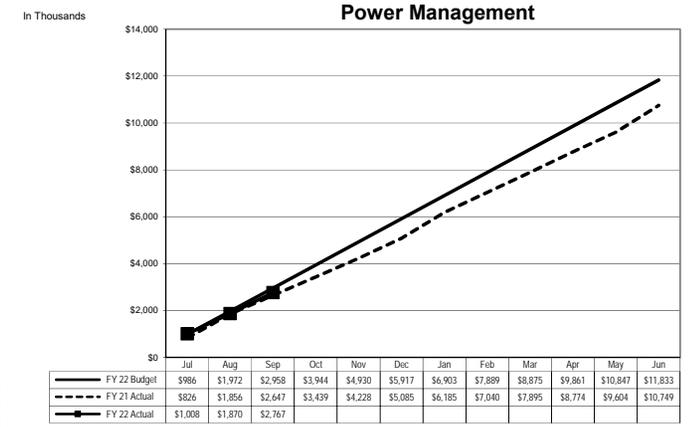
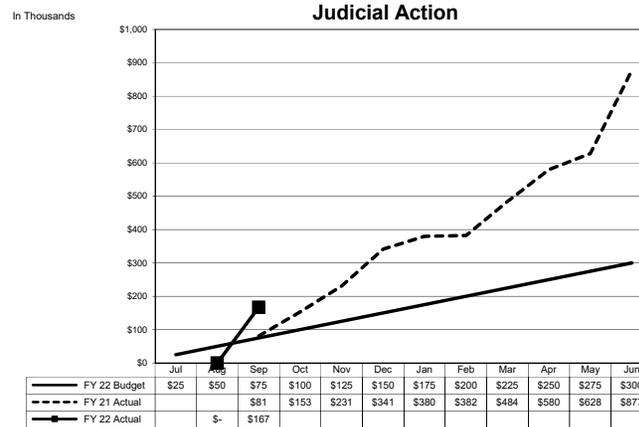
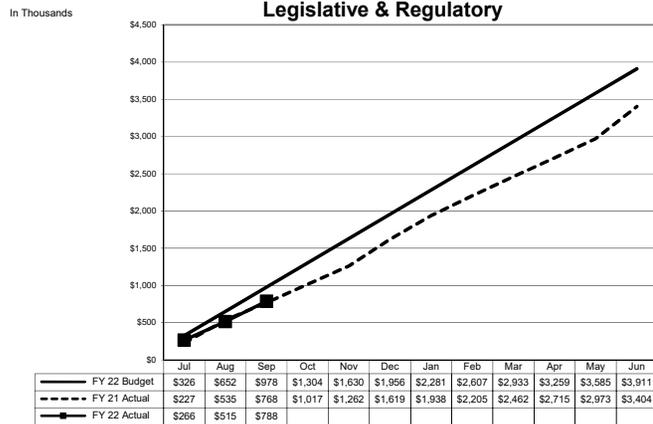
Footnote: Transmission is solely reflective of Independent System Operator (ISO) costs

Annual Budget Cost Generation Resources Analysis By Source As of September 30, 2021



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

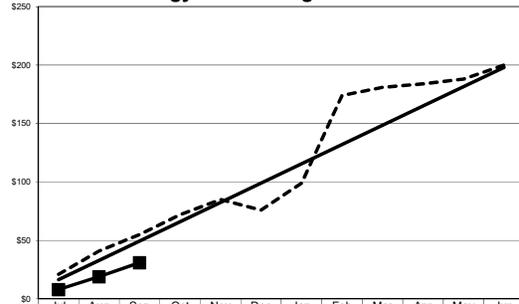
Annual Budget Cost Management Services Analysis By Source As of September 30, 2021



**Annual Budget Cost
Management Services Analysis By Source
As of September 30, 2021**

In Thousands

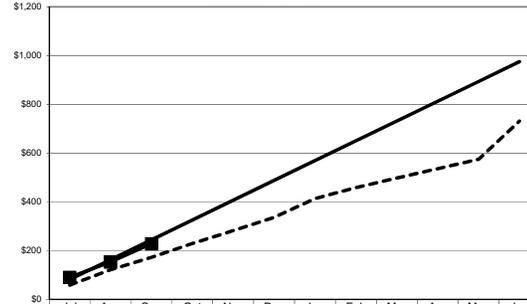
Energy Risk Management



	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									

In Thousands

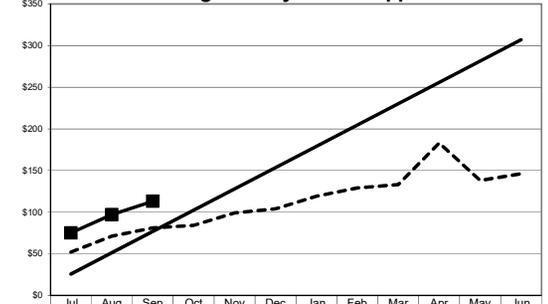
Settlements



	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									

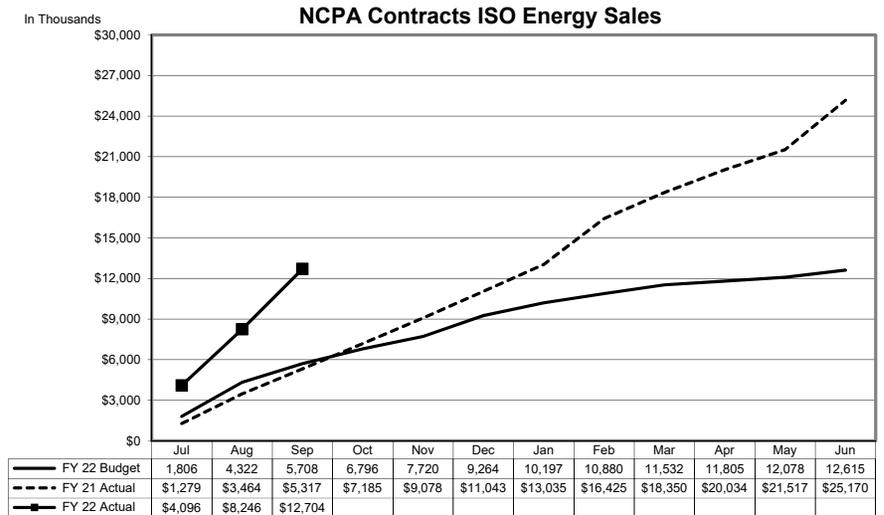
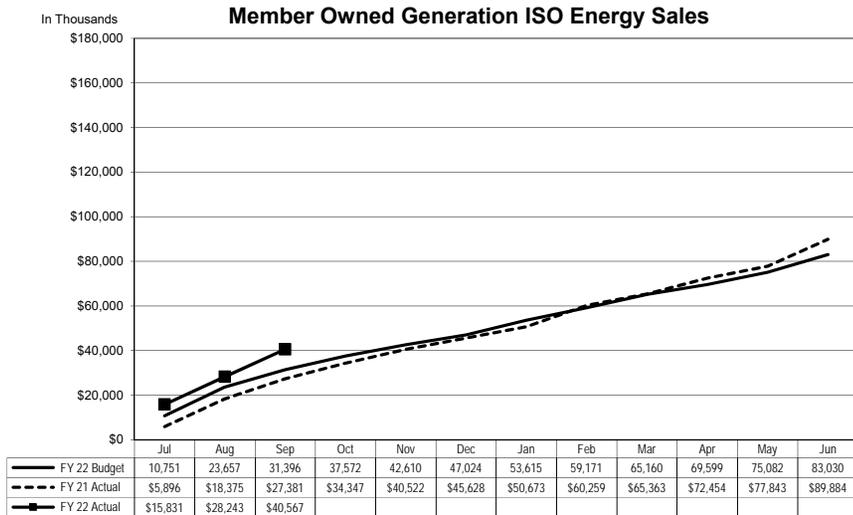
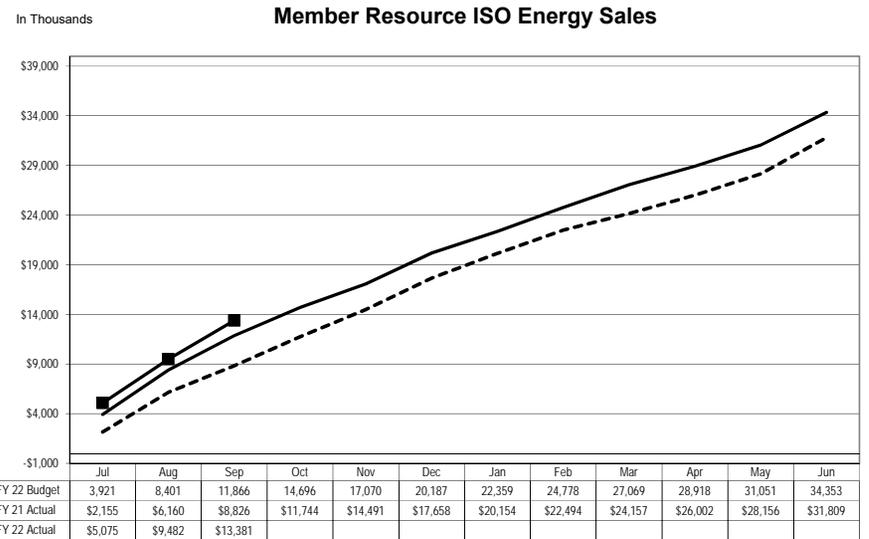
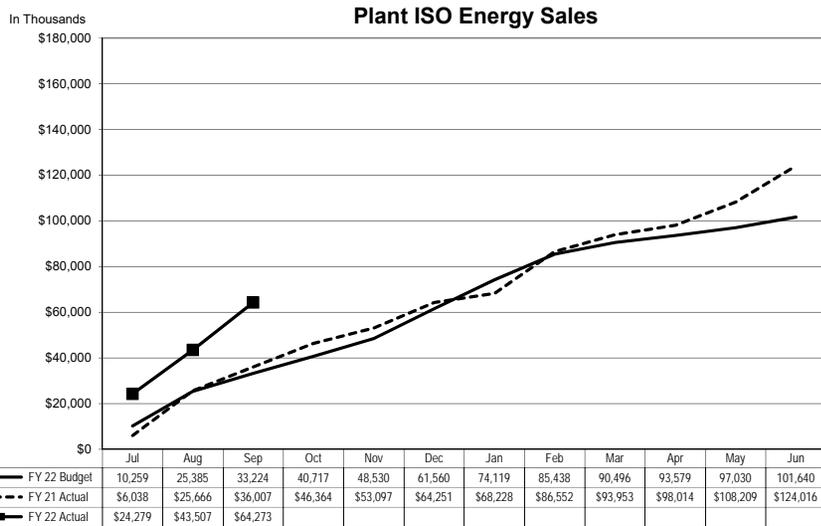
In Thousands

Integrated Systems Support

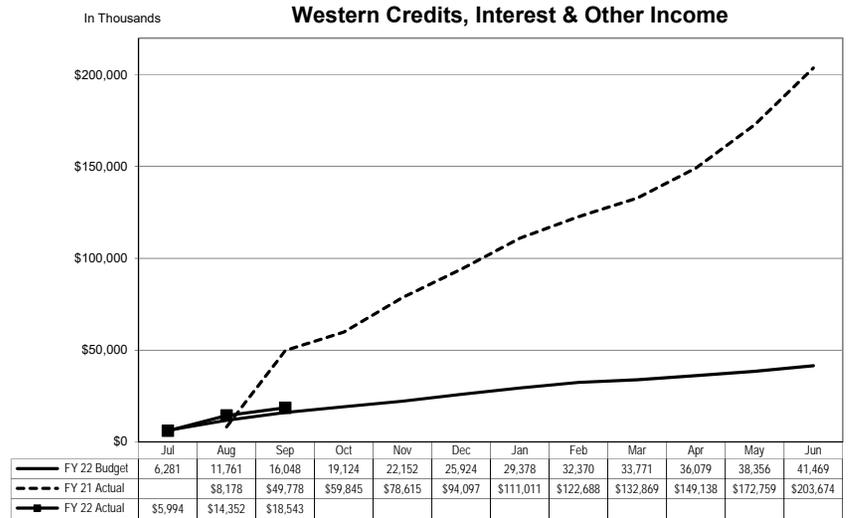
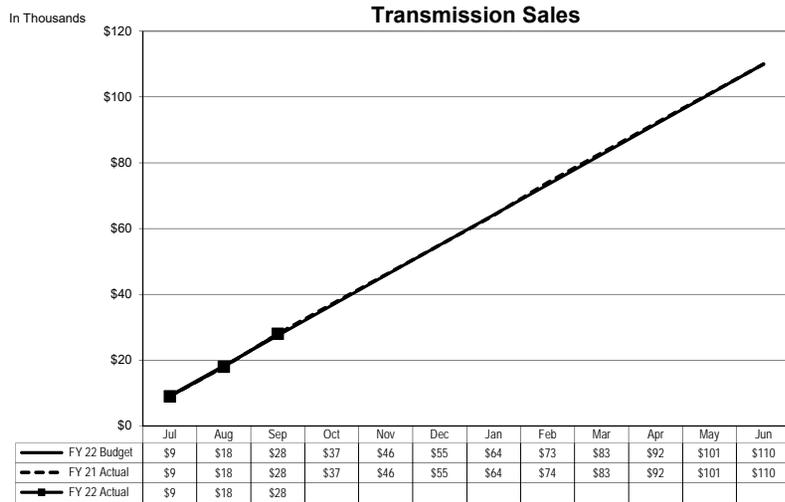
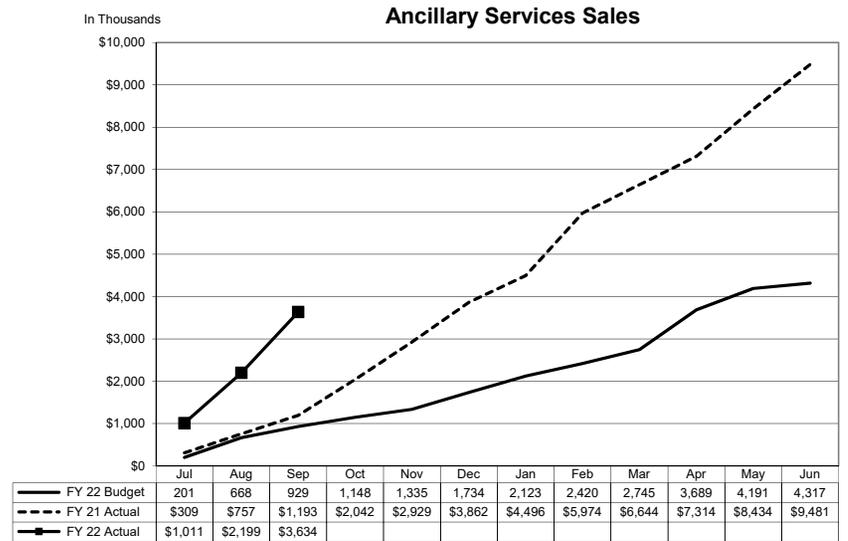
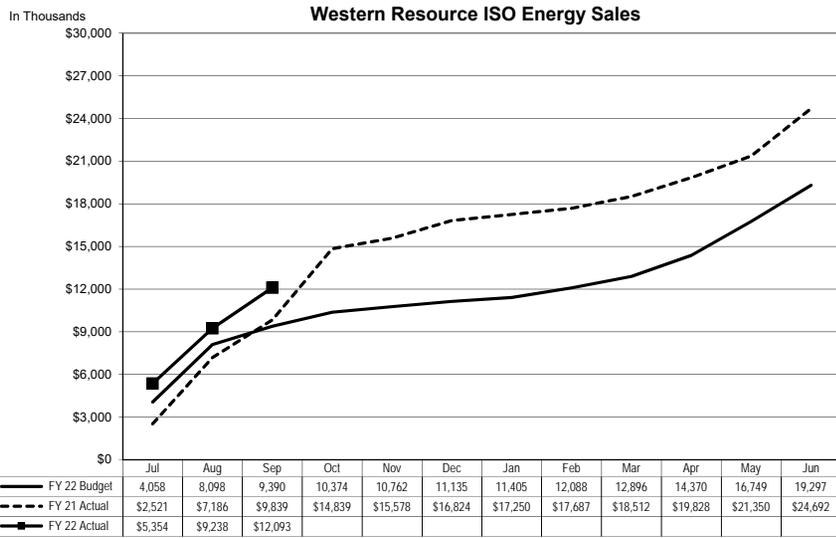


	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 22 Budget	\$26	\$51	\$77	\$102	\$128	\$154	\$179	\$205	\$230	\$256	\$281	\$307
FY 21 Actual	\$52	\$71	\$81	\$84	\$99	\$104	\$119	\$129	\$133	\$183	\$138	\$146
FY 22 Actual	\$75	\$97	\$113									

**Annual Budget Cost
Third Party Revenue Analysis By Source
As of September 30, 2021**



**Annual Budget Cost
Third Party Revenue Analysis By Source
As of September 30, 2021**



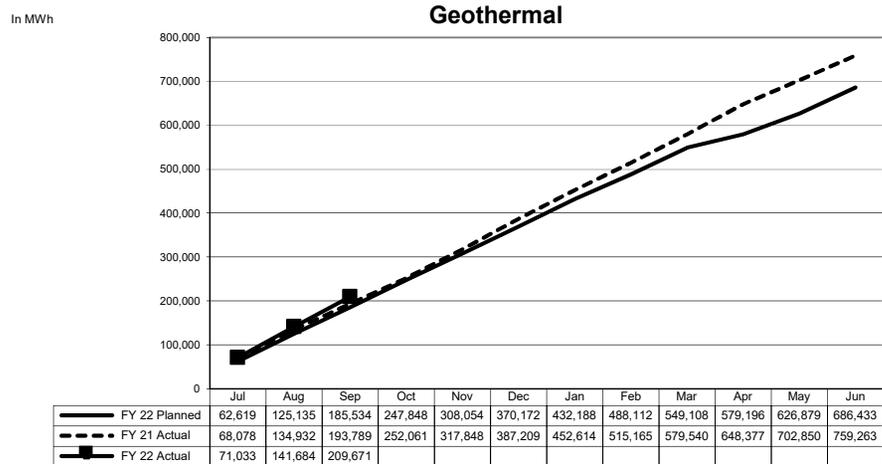
**Annual Budget
NCPA Generation Detail Analysis By Plant
As of September 30, 2021**

Generation Cost Analysis

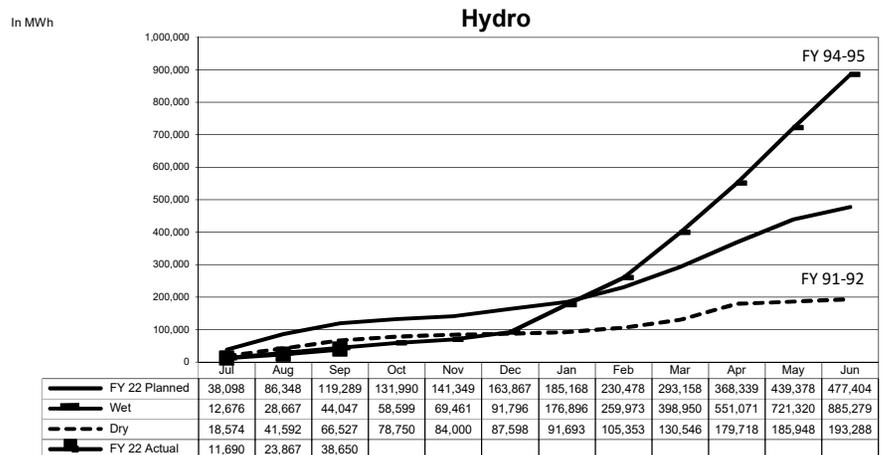
\$ in thousands

	Geothermal				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
	Routine O & M	\$ 17,803	\$ 4,359	\$ 20.79	\$ 13,444
Capital Assets/Spare Parts Inventories	6,205	1,560	7.44	4,645	75%
Other Costs	11,197	3,002	14.32	8,195	73%
CA ISO Charges	504	367	1.75	137	27%
Debt Service	4,953	1,238	5.91	3,715	75%
Annual Budget	40,662	10,526	50.20	30,136	74%
Less: Third Party Revenue					
Interest Income	382	17	0.08	365	95%
ISO Energy Sales	27,578	13,910	66.34	13,667	50%
Ancillary Services Sales	-	-	-	-	-
Effluent Revenues	750	(326)	(1.55)	1,076	143%
Misc	113	28	0.13	85	75%
	28,823	13,630	65.01	15,193	53%
Net Annual Budget Cost to Participants	\$ 11,839	\$ (3,104)	\$ (14.80)	\$ 14,943	126%
Net Generation--MWh @ Meter	686,433	209,671			
\$/MWh (A)	\$ 10.03	\$ (20.71)			

MWhs Generated



	Hydroelectric				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
	Routine O & M	\$ 9,882	\$ 1,673	\$ 43.30	\$ 8,209
Capital Assets/Spare Parts Inventories	3,465	995	25.73	2,470	71%
Other Costs	4,677	1,188	30.73	3,490	75%
CA ISO Charges	2,635	1,964	50.81	671	25%
Debt Service	33,422	8,355	216.18	25,066	75%
Annual Budget	54,081	14,175	366.74	39,906	74%
Less: Third Party Revenue					
Interest Income	670	27	0.71	643	96%
ISO Energy Sales	22,047	6,002	155.28	16,046	73%
Ancillary Services Sales	2,241	1,669	43.18	572	26%
Misc	-	-	-	-	-
	24,959	7,698	199.17	17,261	69%
Net Annual Budget Cost to Participants	\$ 29,123	\$ 6,477	\$ 167.57	\$ 22,646	
Net Generation--MWh @ Meter	477,404	38,650			
\$/MWh (A)	\$ (9.00)	\$ (48.61)			



Footnotes:

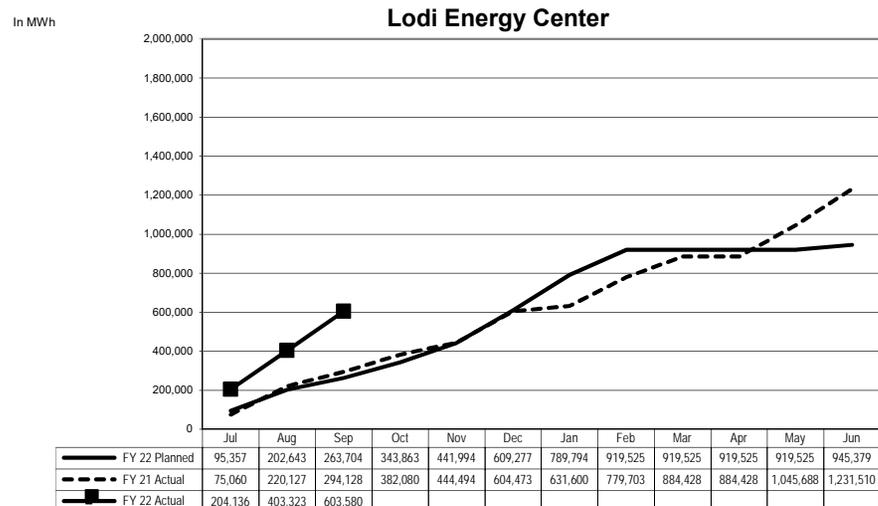
(A) Aggregate fiscal year generation in \$/MWh (excluding debt service)

**Annual Budget
NCPA Generation Detail Analysis By Plant
As of September 30, 2021**

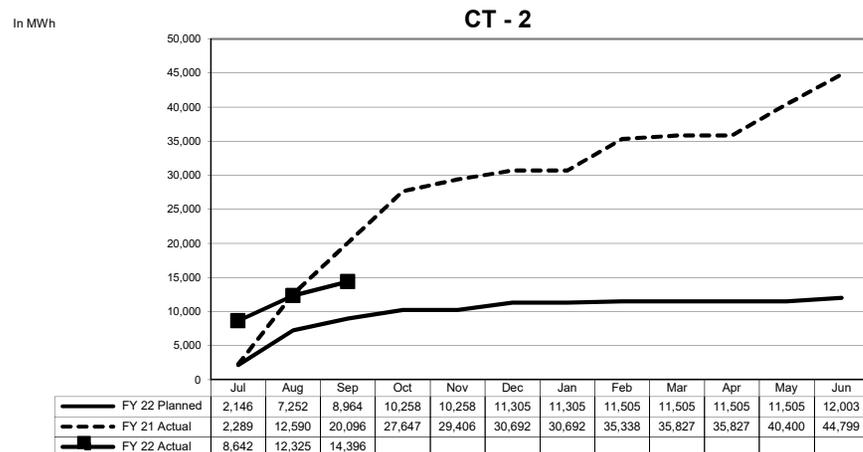
Generation Cost Analysis

	Lodi Energy Center				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 9,558	\$ 2,718	\$ 4.50	\$ 6,840	72%
Fuel	31,029	24,828	41.14	6,201	20%
AB 32 GHG Offset	6,269	5,536	9.17	733	12%
CA ISO Charges and Energy Purchases	3,137	1,423	2.36	1,714	55%
Capital Assets/Spare Parts Inventories	5,007	567	0.94	4,440	89%
Other Costs	7,805	1,550	2.57	6,254	80%
Debt Service	26,008	6,591	10.92	19,417	75%
Annual Budget	88,813	43,215	71.60	45,599	51%
Less: Third Party Revenue					
Interest Income	386	71	0.12	314	81%
ISO Energy Sales	49,394	40,673	67.39	8,721	18%
Ancillary Services Sales	1,152	1,826	3.02	(674)	-58%
Transfer Gas Credit	-	-	-	-	0%
GHG Allowance Credits	6,102	5,419	8.98	682	11%
Misc	-	-	-	-	0%
	57,034	47,990	79.51	9,044	16%
Net Annual Budget Cost to Participants	\$ 31,779	\$ (4,775)	\$ (7.91)	\$ 36,554	115%
Net Generation--MWh @ Meter	945,379	603,580			
\$/MWh (A)	\$ 6.10	\$ (18.83)			

MWhs Generated



	Combustion Turbine No. 2 (STIG)				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 1,627	\$ 335	\$ 23.28	\$ 1,292	79%
Fuel and Pipeline Transport Charges	1,265	1,008	69.99	258	20%
Capital Assets/Spare Parts Inventories	46	-	-	46	100%
Other Costs	735	165	11.49	570	78%
CA ISO Charges	136	103	7.16	33	24%
Debt Service	5,048	1,262	87.66	3,786	75%
Annual Budget	8,858	2,873	199.58	5,985	68%
Less: Third Party Revenue					
Interest Income	109	6	0.44	102	94%
ISO Energy Sales	1,321	1,755	121.88	(434)	-33%
Ancillary Service Sales	-	-	-	-	0%
Fuel and Pipeline Transport Credits	1,788	526	36.54	1,262	71%
GHG Allowance Credits	104	-	-	104	100%
Misc	-	-	-	-	0%
	3,322	2,287	158.87	1,035	31%
Net Annual Budget Cost to Participants	\$ 5,536	\$ 586	\$ 40.71	\$ 4,950	89%
Net Generation--MWh @ Meter	12,003	14,396			
\$/MWh (A)	\$ 40.69	\$ (46.95)			



Footnotes:

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

**Annual Budget
NCPA Generation Detail Analysis By Plant
As of September 30, 2021**

Generation Cost Analysis

	Combustion Turbine No. 1				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 2,497	\$ 803	\$ 172.17	\$ 1,693	68%
Fuel and Pipeline Transport Charges	792	440	94.38	351	44%
Capital Assets/Spare Parts Inventories	2,573	250	53.59	2,323	90%
Other Costs	1,104	268	57.44	836	76%
CA ISO Charges	90	430	92.07	(340)	-379%
Debt Service	-	-	-	-	-
Annual Budget	7,055	2,191	469.64	4,864	69%
Less: Third Party Revenue					
Interest Income	-	11		(11)	
ISO Energy Sales	1,300	1,933	414.32	(633)	-49%
Ancillary Services Sales	-	-	-	-	0%
Misc	-	-	-	-	0%
	1,300	1,944	414.32	(644)	-50%
Net Annual Budget Cost to Participants	\$ 5,755	\$ 247	\$ 52.99	\$ 5,508	96%
Net Generation--MWh @ Meter	10,440	4,665			
\$/MWh (A)	\$ 551.26	\$ 52.99			

Footnotes:

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

MWhs Generated

In MWh

CT - 1

