



BUSINESS PROGRESS REPORT

MARCH 2018



Table of Contents

Generation Costs & Reliability	1
Environmental, Health & Safety Projects	4
Power Management/NCPA Market Results.....	5
Debt & Financial Management	10
Schedule Coordination Goals.....	11
NCPA Bills & Settlements.....	12
Political Arena State/Federal/Western Programs	13
Human Resources.....	14
Annual Budget FY to Date.....	15
Budget vs. Actual by Major Area	16
Generation Resources Analysis by Source	17
Management Services Analysis by Source	18
Third Party Revenue Analysis by Source	20
Generation Detail Analysis by Plant	21

Generation Costs & Reliability

Combustion Turbine Project

Unit Operation for February

Unit	Availability		Production		Reason for Run
	Unit 1	Unit 2	Unit 1	Unit 2	
CT1 Alameda	57.2%	100.0%	548.5	604.3	CAISO / CAISO
			MWh		
Curtailments, Outages, and Comments: 2/1/18-Alameda CT Unit 1 o/s for exhaust repairs Returned 2/12/18 1356 OMS 5441014. 2/17/18-Alameda GT #1 failed start, DC lube oil pump 1716-2215 OMS 5723947. 2/23/18-Alameda Unit 1 failed to start – suspect lube oil pump switch 1745 - 2235 OMS 5744559.					
Unit	Availability		Production		Reason for Run
CT1 Lodi	93.4%		417.3 MWh		CAISO
Curtailments, Outages, and Comments: 2/11/18-Lodi CT o/s at 1920 due to SCADA control issue, start command latched. Returned 2/23/18 0818 OMS 5700571. 2/20/18-Lodi CT reached 2 start max for the day 0910-2359 OMS 5730369. 2/21/18-Lodi CT reached daily start up fuel limit 1728-2359 OMS 5737285. 2/25/18-Lodi GT unavailable due to transmission outage 0133 - 0915 OMS 5747421.					
Unit	Availability		Production		Reason for Run
CT2 STIG	100.0%		0.0 MWh		Available Resource
Curtailments, Outages, and Comments: 1/1/18 - False Fire Alarm (19.5hrs)					
Unit	Availability		Production		Reason for Run
LEC	98.1%		110,676 MWh		CAISO
Curtailments, Outages, and Comments: 2/4/18-LEC Out of Service for 12.5 Hours for HRSG Inspection, OMS 5673861. 2/9/18 LEC in local control due to emission issues from 1439 to 1530 OMS 5695890. 2/16/18-LEC gas compressor tripped on startup, delayed startup by 20 minutes OMS 5721457. 2/24/18-LEC unit off AGC, emissions trouble OMS 5745960 0824-0900. 2/25/18-LEC IGV trouble, plant off AGC, derate to 260mw 0600 - 0800 OMS 5747619. 2/26/18-LEC emissions trouble, no AGC 0523-0536 OMS 5749250.					

Maintenance Summary – Specific per asset above.

Geothermal Facilities

Availability/Production for February

Unit	Availability	Net Electricity Generated/Water Delivered	Out-of-Service/Descriptors
Unit 1	87.90 %	18,367 MWh	U1 was off line 2/23/18 from 1315-1400 due to hotwell level control valve failure. Found/corrected problem with linkage and unit placed back in service.
Unit 2	93.75 %	*16,944 MWh	U2 had no outages for the month
Unit 3	N/A %	N/A	Unit 3 remains out of service.
Unit 4	100 %	28,707 MWh	U4 had no outages for the month
Southeast Geysers Effluent Pipeline	100 %	237.7 mgallons	Average flow rate: 5,566 gpm
Southeast Solar Plant	N/A	46,830 KWh	Year-to-date KWh: 954,442
Bear Canyon Pump Station Zero Solar	N/A	70,741 KWh	Year-to-date KWh: 2,109,146

* Accounts for an additional 1,783 MWh of house load for the 21KV power supply to the effluent pipeline supplied from Unit #2.

Hydroelectric Project

Availability/Production for February

Units	Availability	Net Electricity Generated	Out-of-Service
Collierville Unit 1	100.00 %	8492 MWh	CV #1 unit no reportable outages.
Collierville Unit 2	100.00 %	1044 MWh	CV #2 unit no reportable outages. CV #2 unit derate to 110mw's due to stator ground fault repair.
Spicer Unit 1	95.63 %	166 MWh	NSM #1 unit was out of service on, 02/13/18 at 1430 through 1504 due to transfer trip comm. trouble. NSM #1 unit was out of service on, 02/16/18 at 1042 through 1359 due to transfer trip comm. trouble. NSM #1 unit was out of service on, 02/20/18 at 1235 through 02/21/18 at 1406 due to bearing oil pump bad contact.
Spicer Unit 2	99.42 %	23 MWh	NSM #2 unit was out of service on, 02/13/18 at 1430 through 1504 due to transfer trip comm. trouble. NSM #2 unit was out of service on, 02/16/18 at 1042 through 1359 due to transfer trip comm. trouble.
Spicer Unit 3	99.30 %	217 MWh	NSM #3 unit was out of service on, 02/13/18 at 1430 through 1536 due to transfer trip comm. trouble. NSM #3 unit was out of service on, 02/16/18 at 1043 through 1416 due to transfer trip comm. trouble.

Operations & Maintenance Activities:

- CMMS work orders
- Planning and Preparation for CV2 Generator rewind
- 2017 water year report review and completion (USGS)

Environmental, Health & Safety (EH&S) Projects

Incident Reports

- No lost time accidents or recordable incidents occurred in February. One vehicle accident occurred at Hydro on February 28th. A NCPA utility truck backed into a non-NCPA vehicle. There were no injuries and damage to both vehicles was less than \$1,000.
- 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 as updated through the payroll period ended February 17, 2018.
- 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.

February Generation Services Safety Report

	Hydro	GEO	CT Group *	NCPA HQ **
CalOSHA Recordable (this month)	0	0	0	0
CalOSHA Recordable (calendar year)	0	0	0	0
Days since Recordable	1158	92	1048	6,116
Work Hours Since Last Recordable	100,797	17,832	152,720	2,204,474
LTA's (this month)	0	0	0	0
LTA's (calendar year)	0	0	0	0
Days without LTA	3,774	911	8,952	5,045
Work Hours without LTA	346,362	184,500	594,084	1,826,492
Vehicle Incident (month)	1	0	0	0
Vehicle Incident (calendar year)	1	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 February 17, 2018.

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 2018 Data

	February 2018		Calendar Year 2018	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	328.99 2/20 @1900	173,471	329.79 1/8 @1800	368,578
SVP	473.34 2/9 @1500	280,325	473.34 2/9 @1500	587,345
MSSA	779.21 2/20 @ 1900	453,796	782.06 1/8 @ 1800	955,923

Last Year 2017 Data*

	February 2017		Calendar Year 2017	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	333.38 2/1 @1900	178,650	485.85 9/1 @1700	384,323
SVP	459.86 2/2 @1500	275,073	586.59 9/1 @1600	576,018
MSSA	777.44 2/1 @ 1900	453,723	1070.79 9/1 @ 1700	960,341

*Last year's data added for comparison purposes only

System Peak Data

	All Time Peak Demand	2018 Peak Demand
NCPA Pool	517.83 MW on 7/24/06 @ 1500	329.79 1/8 @ 1800
SVP	586.59 MW on 9/1/17 @ 1600	473.34 2/9 @ 1500
MSSA	1070.79 MW on 9/1/17 @ 1700	782.06 1/8 @ 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		
	February 2018	Calendar Year 2018
MSSA % Within the Band	97.87%	98.65%

- Spicer Meadows:
 - February 13 @ 1430 – 1504 and February 16 @ 1042 – 1359, Unit 1 and 2 unavailable due to transfer trip communication trouble. Unit 3 remained on providing station service power.
 - February 20 – 21, Unit 1 failed start due to bearing oil pump trouble.
- Geothermal Units:
 - February 23 @ 1316 – 1357, Unit 1 trip due to high condenser level.
- Lodi Energy Center:
 - February 4 @ 0000 – 1230, LEC unavailable for HRSG inspection.
 - February 8, 9, 24, 25 and 26, Unit taken off AGC control for short periods due to high CO emissions caused by CAISO regulation moving unit excessively.
 - February 16, Unit 20 minutes late reaching Pmin on startup due to gas compressor trip.
- Alameda CTs:
 - February 12, unit returned to service from exhaust tunnel seal work.
 - February 17 @ 1716 – 2215, unit failed start due to DC lube oil pump trouble.
 - February 23 @ 1745 – 2235, unit failed start.
- Lodi CT:
 - February 11-12, unit unavailable due to control system software issue.
 - February 20 @ 0530 – 0600, unit failed start.
 - February 20 @ 0717 – 2359, unit unavailable due to emission limitation, 2 starts per day.
 - February 21 @ 1730 – 2359, unit unavailable due to emission limitation, 2 starts per day.
 - February 25 @ 0133 – 0920, unit unavailable due to City of Lodi line outage, Lodi CT line breaker CB52L open.
- Collierville Units:
 - February 1 – 28, Unit 2 remains derated due to stator ground fault repair.
- STIG:
 - No curtailments.

Pooling & Portfolio Planning & Forecasting

- Actual NCPA Pool load of 173.5 GWh during February 2018 was 95.2% of the pre-month forecast of 182.3GWh. Pool load, running 73.8 GWh through March 12, should reach the forecast of 191.3 GWh, with temperatures running slightly below normal mid-month.
- The Lodi Energy Center (LEC) generated 19,902 MWh for the pool in February, over three times the 6,185 MWh forecast, partly due to colder weather at the end of the month increasing run times. Ongoing supply disruptions in SoCal kept implied heat rates there above normal, which also adding to LEC run hours. For March, pool share of LEC generation was forecasted at 5,823 MWh and had already reached 10,189 MWh by March 12.
- For the month of February, 0.88” of rain was recorded at Big Trees gage. February Big Trees average precipitation is 10.00”.
- The Value of Storage (VOS) of New Spicer Meadow Reservoir (NSMR) has been increased from \$55/MWh to \$65/MWh.
- NSMR storage as of February 28 was at 83,110 acre-feet. The historical average NSMR storage at the end of February is 75,131 acre-feet. As of March 13, NSMR storage is 83,965 acre-feet. The current NCPA Pool share of NSMR storage is 42,694 acre-feet.
- Combined Calaveras Project generation for the Pool in February totaled 4.7 GWh, down from 11.8 GWh in January. The Pool’s 4.7 MWh in February was less than the pre-month forecast of 7.4 GWh. Through March 13, Calaveras generation for the Pool is 3.3 GWh, with the full month forecasted at 16.2 GWh.
- Western Base Resource (BR) Pool delivery in February 2018 was 18.7 GWh, or 45% of Western’s 41.4 GWh forecast. Through March 12, BR pool allocations of 5.8 GWh (including 0.7 GWh Displacement) are again likely to fall short of Western’s most recent 33.7 GWh March forecast, unless rains continue.
- The PG&E Citygate gas index traded at \$2.885/MMBtu for March 13 delivery - compared to an average of \$2.704/MMBtu (with a high of \$3.34/MMBtu late in the month) in February. The March PG&E Bidweek price is \$2.76, or 21 cents lower than February’s, but March gas prices continue to be volatile with weather changes.
- Day-ahead NP15 electricity prices averaged \$31.90/MWh (HLH) and \$28.55 (LLH) during February, with the hourly TH_NP15 maximum at \$95/MWh and the minimum a negative \$3.894. So far, in March on-peak prices have averaged \$36.85, with weekend prices often falling to zero in the mid-day hours.

NCPA Pool Loads & Resources Value Summary								
	Peak and Energy Summary Feb-18				Estimated Production Costs		Cost of Serving Demand	
	Coincident Peak (MW) Feb-20-18 Hour 19	Total MWh	Forecast Values	Avg. MW	NCPA Pool		Totals	Avg (\$/MWh)
Demand	329.0	173,464	182,282	258.1	N/A	N/A		
WAPA	132.0	18,713	41,432	27.8	\$ 832,419	\$ 44.48	\$ 5,571,490	\$ 32.12
Geothermal	-	26,549	25,565	39.5	504,440	19.00		
Hydro	-	4,700	7,917	7.0	28,200	6.00		
Stig & CTs	-	865	109	1.3	61,964	71.63		
LEC	-	19,902	6,185	29.6	666,303	33.48		
Contracts	57.0	81,905	87,947	121.9	4,632,384	56.56	\$ 7,643,568	\$ 44.06
Market - Net (Net Sales = Negative)	140.0	20,830	13,127	31.0	654,941	31.44		
Net Total	329.0	173,464	182,282	258.1	\$ 7,380,651	\$ 44.06		

Monthly Market Summary						
	Pool Energy (MWh)	HLH Avg MCP (\$/MWh)	Avg Variable Cost of Pool Generation (\$/MWh)	Forward Prices (EOX NP15 HLH Ask Prices)		
				NP15 2/1/2018 (\$/MWh)	3/12/2018 (\$/MWh)	
Jul-17	221,169	\$ 39.42	\$ 36.21	Mar-18	\$ 26.82	\$ 36.10
Aug-17	223,320	\$ 51.70	\$ 37.30	Apr-18	26.81	33.04
Sep-17	206,930	\$ 45.07	\$ 40.69	May-18	28.80	33.16
Oct-17	190,730	\$ 44.93	\$ 39.05	Q3 2018	\$ 40.27	\$ 44.62
Nov-17	184,467	\$ 38.23	\$ 39.53	Q4 2018	38.34	40.31
Dec-17	198,630	\$ 35.89	\$ 40.56	Q1 2019	37.50	36.99
Jan-18	195,093	\$ 34.68	\$ 43.74	CY2019	\$ 36.89	\$ 36.34
Feb-18	173,464	\$ 32.12	\$ 44.06	CY2020	39.13	38.87
Mar-18				CY2021	41.19	41.73
Apr-18				CY2022	42.64	43.22
May-18				CY2023	43.81	44.45
Jun-18				CY2024	44.92	45.50

NOTES TO SUMMARY TABLE:

Peak and Energy Summary:

* Monthly generation summary of Coincidental Peak (hour in which pool demand peaked), total MWh for the month, and pre-month forecasted values for report period.

* Generation totals are for POOL SHARE of the projects.

* Hydro totals include Collierville and Spicer generation.

Estimated Production Costs:

* Fixed project costs not included except for WAPA, where total month's project costs are used to calculate the average unit cost.

* STIG and CT costs include forward natural gas and basis hedge transactions.

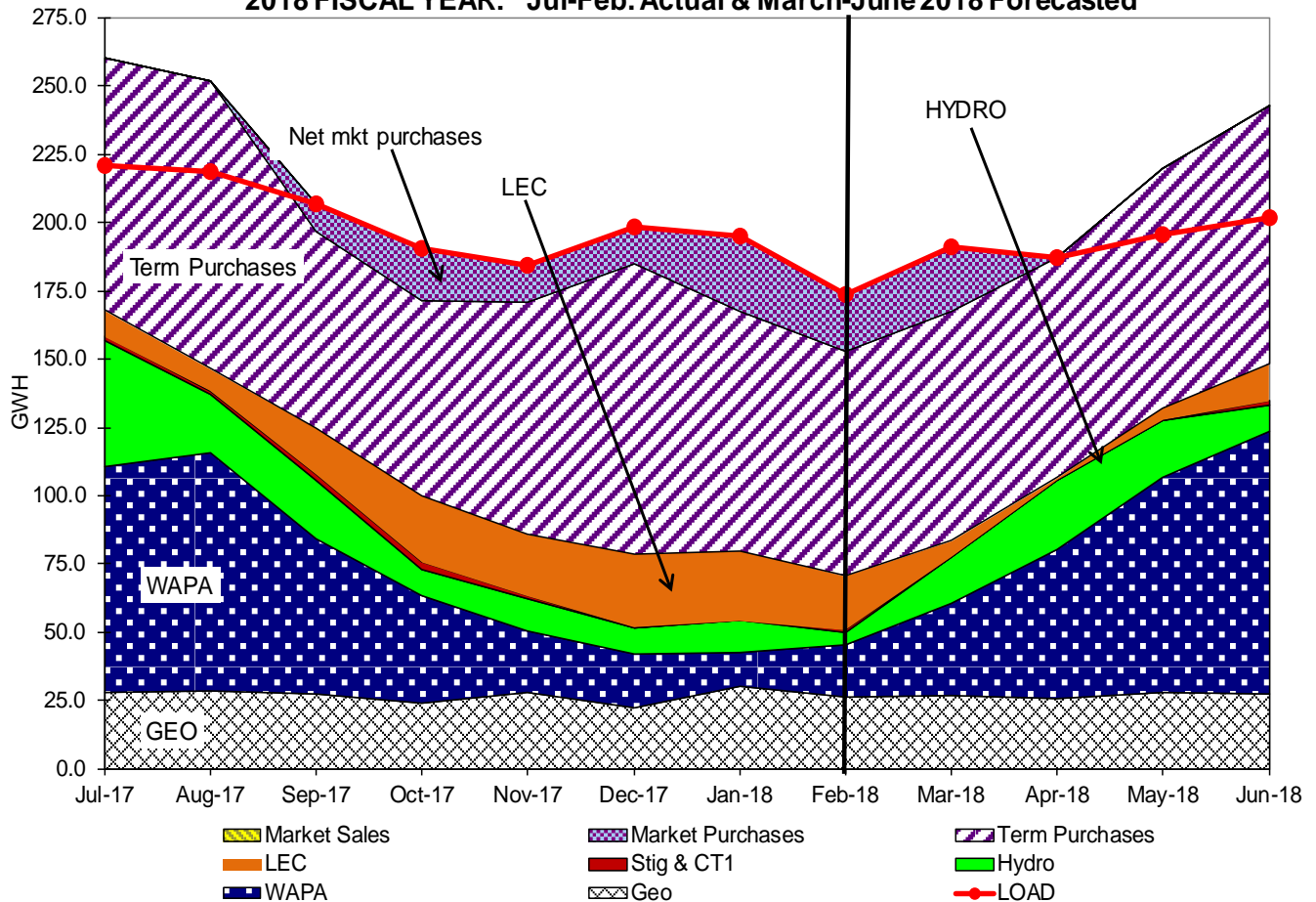
* STIG & CT costs reflect \$2.60 and \$1.62/MWh variable O&M costs per 6-12-06 GSCA.

Cost of Serving Demand:

Compares price of meeting total monthly demand with (1) Hourly pool market clearing price;

(2) Variable cost of pool gen. Pool Gen is sum of estimated costs divided by sum of generation.

NCPA POOL RESOURCES 2018 FISCAL YEAR: Jul-Feb. Actual & March-June 2018 Forecasted



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 May 2018:
 - Monthly System Resource Adequacy Demonstration (filed March 16, 2018).
 - Monthly Supply Plan (filed March 16, 2018).

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 the current active initiatives:

Day-Ahead Market Enhancements

- In this initiative, CAISO will consider enhancements to combine the Integrated Forward Market with the Residual Unit Commitment process, change the day-ahead scheduling granularity from hourly to 15-minute, and add an imbalance reserve product. Additional design elements needed to extend the day-ahead market to EIM entities will also be considered.

Flexible Resource Adequacy Criteria and Must Offer Obligation (FRAC MOO Phase 2)

- This initiative will explore further enhancements to flexible capacity requirements to help address generation oversupply and ramps less than three hours. This effort also seeks new rules to allow intertie resources and storage resources' not operating under non-generator resource provisions to provide flexible capacity. Through this effort, CAISO will also assess the impact of merchant variable energy resources on flexible capacity requirements.

Review Transmission Access Charge Structure

- This initiative will consider possible 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.

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-17	71,656	82,819	11,163	\$2,334,679	\$ 28.19	\$ 1.60	\$ 27.59
Aug-17	55,736	79,371	23,635	\$2,334,679	\$ 29.41	\$ 0.08	\$ 27.14
Sep-17	56,044	57,011	967	\$1,979,032	\$ 34.71	\$ 0.12	\$ 26.27
Oct-17	33,604	39,352	5,748	\$833,923	\$ 21.19	\$ 0.79	\$ 25.27
Nov-17	19,601	22,441	2,840	\$833,923	\$ 37.16	\$ 0.27	\$ 24.46
Dec-17	15,404	19,821	4,417	\$833,923	\$ 42.07	\$ 0.25	\$ 24.15
Jan-18	7,358	-	(7,358)	\$833,923	\$ 113.34	\$ 0.10	\$ 25.83
Feb-18	13,359	-	(13,359)	\$833,923	\$ 62.42	\$ 0.10	\$ 28.01
Mar-18	30,216	-	(30,216)	\$833,923	\$ 27.60	\$ 0.10	\$ 29.52
Apr-18	50,443	-	(50,443)	\$2,035,038	\$ 40.34	\$ 0.10	\$ 30.44
May-18	66,832	-	(66,832)	\$2,035,038	\$ 30.45	\$ 0.10	\$ 32.68
Jun-18	74,030	-	(74,030)	\$2,035,038	\$ 27.49	\$ 0.10	\$ 33.09
1/	As forecasted in NCPA 17/18 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.						

Footnote: The Western Base Resource Tracking table above will be updated as part of the next iteration of the BPR to include the periods: Jan. 18, Feb. 18 and Mar. 18.

Debt and Financial Management

- Volatility spiked in early February after a historically long period of calm, investor-friendly markets. This uptick in volatility was prompted by January's higher than expected wage growth figures, which fueled rising inflation concerns. Rising inflation and low unemployment are likely to cause the Federal Reserve (Fed) to raise interest rates quicker than previously expected. There is 100% analyst consensus the Fed will raise rates at their March meeting.
- Newly appointed Fed Chair Jerome Powell told members of the House Financial Services Committee that the economy has strengthened since December and indicated that the Fed is on track to gradually increase its short-term interest rates. Powell gave an upbeat picture of the economy, citing global synchronized growth and the \$1.5 trillion tax cut. He also acknowledged the sluggish nature of inflation which has consistently come below the Fed's target for the past few years.
- The U.S. Treasury Yield curve continued to rise during the month of February. Short-term and long-term yields rose the most, relative to medium-term yields which rose half as much. Yields along the three- and 30-year yields increased by 20 and 19 basis points (bps), while two- and five-year yields rose 11 and 12 bps, respectively.

- On February 27, Fitch Ratings upgraded the rating on NCPA's outstanding hydroelectric project bonds to AA- from A+.

Schedule Coordination Goals

Software Development

- A new Azure-based Security/Authentication Scheme has been implemented in most of the Scheduling Applications deployed in the Extranet.
- IS staff is assisting Santa Clara to transition its MSS portfolio from scheduling via Web Service into the use of the new client-based NCPA Scheduling Suite. Rollout is anticipated for April 2018.
- IS Staff has begun software configuration for a new Community Choice Energy (CCE) customer, East Bay CCE, which scheduling services is anticipated to begin in June 2018.
- Various other software development is underway. The Resource Adequacy Compliance App is a tool to manage RA supply planning and compliance tracking. The Green House Gas (GHG) Accounting App is a tool for the business user to track GHG transactions by Member. The Shared Services App has three modules about Training, Support Services, and Vendor Contracts. It calculates the billable amount for the Member's portion of the Shared Services.

Network

- Additional collaboration sites are being created to expand the functionality of the Agency's new extranet, "NCPA Connect." This will provide further capabilities to share and edit documents for specific working groups and committees.
- The IS team continues to evaluate hardware/software solutions to replace the aging Storage Area Network that is coming off support by the end of 2018. Staff expects to have a solution purchased before the end of the fiscal year.
- The CAISO/AT&T ECN 56K to T1 circuit project continues as NCPA is currently working to upgrade the network to Collierville. Coordinating with Generation Services to provide enhanced telemetry from the Murphys office across the new Hydro microwave path. Staff expects to be completed by the end of March.
- Work continues on streamlining the meetings workflow process using SharePoint to assist in preparing documents and presentations for a variety of NCPA committees. A full go-live date is expected by March.
- The IS team continues to evaluate records retention software that will integrate with the Agency's SharePoint environments and will be critical to the automation of records management. Currently staff is reviewing different products and receiving

demonstrations about their capabilities with an expected purchase before the end of the fiscal year.

- Information Services continues to work alongside Generation Services to help expand their physical security presence at the plant locations. This includes diagramming, installing and configuring network switches in preparation for security devices. Network telemetry has been configured for both the CT and Hydro plants, and currently working to complete Geo by the end of March.
- The IS department and Dispatch Realtime operations are preparing for a Disaster Recovery exercise beginning March 16th. During this time data center, Dispatch and Scheduling operations will run from the DRC over the weekend and will failback on Sunday March 18th during night shift.

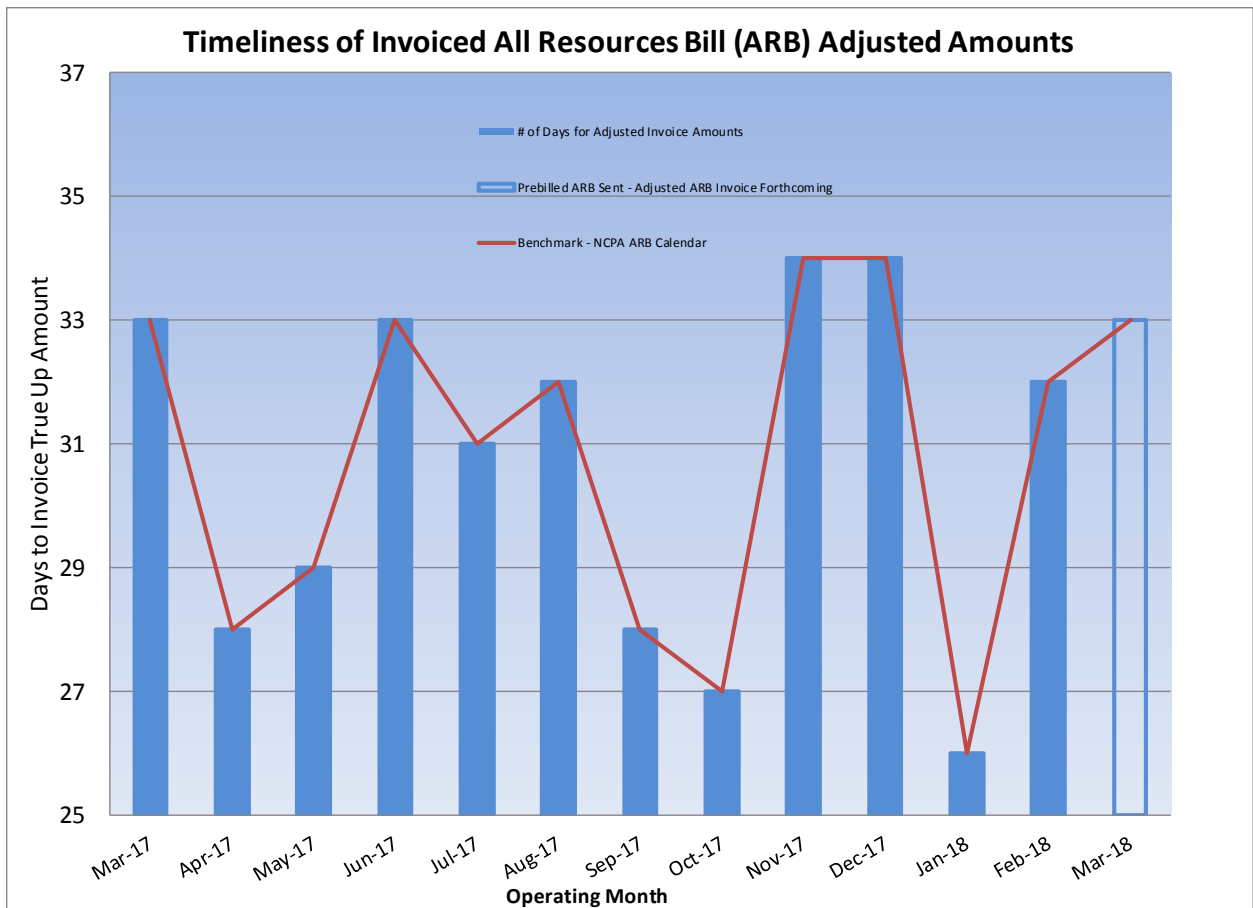
NCPA Bills & Settlements

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 February 2018 NCPA All Resources Bill (ARB) monthly invoice sent to members on February 20, 2018 contains:

- March 2018 monthly pre-billed budget/forecast amounts;
- January 2018 (1st Adjustment) NCPA Project and CAISO Initial settlement true-ups;
- December 2017 (2nd Adjustment) NCPA Project settlement true-up and T+12 business day recalculated CAISO settlement true-up allocations;
- October 2017 (3rd Adjustment) T+55 business day recalculated CAISO settlement true-up allocations and NCPA Projects true-up;
- April 2017 (4th Adjustment) T+9 month recalculated CAISO settlement true-up allocations;
- June 2016 (5th Adjustment) T+18 month recalculated CAISO settlement true-up allocations;
- March 2015 (6th Adjustment) T+33 month recalculated CAISO settlement true-up
- December 2014 (7th Adjustment) T+35 month CAISO settlement true-up



Legislative & Regulatory

Political Arena State/Federal/Western Programs

- NCPA is analyzing hundreds of NCPA-relevant bills that were introduced by the state Legislature by the February 16th bill introduction deadline. NCPA is currently in the process of assessing potential bill positions and meeting with stakeholders and legislative offices to work on amendments where appropriate. Major issues include regionalization; wildfire mitigation, response, and liability; natural gas power plant operations; building decarbonization; air quality; energy efficiency; and renewable energy procurement. NCPA is also monitoring bills related to energy storage, clean vehicles, consumer choice aggregators, resource adequacy, net energy metering expansion, and workforce development.
- NCPA submitted comments to the National Marine Fisheries Service (NMFS) on its science plan objectives for the Shasta Reasonable and Prudent Alternative (RPA) studies. NCPA requested that NMFS share how it plans to measure and track the costs and benefits, fund the study, and whether NMFS would adopt a new baseline for winter run salmon in light of California’s population growth and climate change.

- NCPA and the Joint Utility Group have begun a coordinated effort to address concerns regarding the next round of changes that will be made to the state's cap-and-trade programs. Recognizing the value of utility auction proceed investments to date, CARB does not appear to have any interest in reducing the amount of freely allocated allowances the Air Board has already agreed to provide to electric utilities from 2021-2030. NCPA is now working to ensure that NCPA members continue to have maximum flexibility regarding how the proceeds from the sale of allowances are used. In the coming months, NCPA will be focused on expanding the uses of allowance value, including but not limited to wildfire mitigation efforts.
- A small contingent of NCPA members and staff participated in the American Public Power Association's Legislative Rally in Washington, D.C. on February 26 - March 1. NCPA members briefed delegation offices, key congressional committees, and federal agencies on key issues including:
 - The Administration's proposed privatization of WAPA's transmission and the imposition of market rates;
 - Multiple challenges facing Central Valley Project power customers and the need for a holistic solution that will restore CVP competitiveness;
 - Senate legislation that threatens local control over pole attachments;
 - The need for increased federal funding for wildfire suppression;
 - Streamlining the hydropower licensing process, and;
 - Needed improvements in the provision of federal disaster assistance.

Also, during the APPA meeting, NCPA successfully advanced a policy resolution in support of improving both utility mutual assistance and federal disaster aid. Thank you to the representatives from Redding, Roseville, and Santa Clara that joined in this effort and provided an important local voice in our advocacy efforts.

Human Resources

Hires:

None.

Intern Hires:

None.

Promotions/Position Changes:

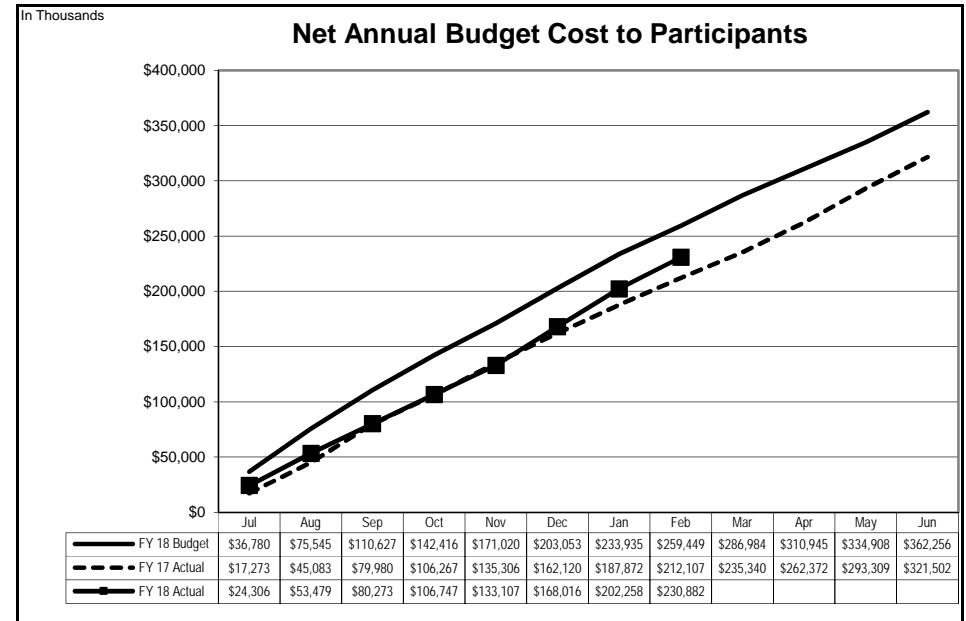
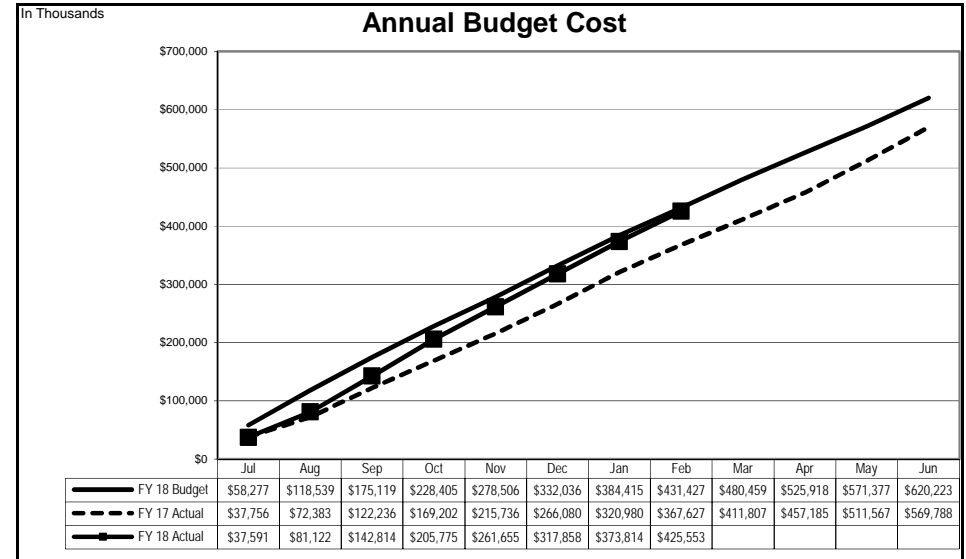
None.

Separations:

None.

**Annual Budget
2017-2018 Fiscal Year To Date
As of February 28, 2018**

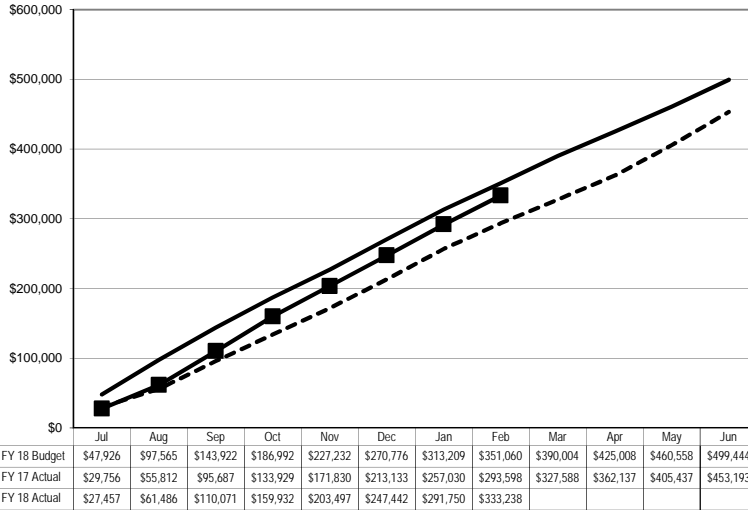
In Thousands	Program			
	Annual Budget	Actual	Under(Ovr) Budget	YTD % Remaining
GENERATION RESOURCES				
NCPA Plants				
Hydroelectric	53,862	38,147	\$ 15,716	29%
Geothermal Plant	32,120	18,700	13,420	42%
Combustion Turbine No. 1	3,199	3,020	178	6%
Combustion Turbine No. 2 (STIG)	8,623	6,113	2,510	29%
Lodi Energy Center	61,088	55,612	5,476	9%
	158,892	121,592	37,300	23%
Member Resources - Energy	53,389	35,034	18,355	34%
Member Resources - Natural Gas	3,457	2,344	1,113	32%
Western Resource	30,120	13,096	17,024	57%
Market Power Purchases	19,318	21,295	(1,977)	-10%
Load Aggregation Costs - ISO	233,822	139,038	94,784	41%
Net GHG Obligations	446	839	(393)	-88%
	499,444	333,238	166,206	33%
TRANSMISSION				
Independent System Operator	102,925	82,442	20,482	20%
MANAGEMENT SERVICES				
Legislative & Regulatory				
Legislative Representation	1,976	1,067	909	46%
Regulatory Representation	838	414	424	51%
Western Representation	830	330	499	60%
Member Services	436	233	203	47%
	4,079	2,043	2,036	50%
Judicial Action	625	544	81	13%
Power Management				
System Control & Load Dispatch	5,864	3,488	2,376	41%
Forecasting & Prescheduling	2,647	1,517	1,130	43%
Industry Restructuring	424	197	228	54%
Contract Admin, Interconnection Svcs & Ext. Affairs	1,152	547	605	52%
Green Power Project	18	1	16	92%
Gas Purchase Program	88	39	49	55%
Market Purchase Project	130	57	73	56%
	10,323	5,847	4,477	43%
Energy Risk Management	207	135	71	35%
Settlements	774	363	412	53%
Integrated System Support	319	63	255	80%
Participant Pass Through Costs	1,526	748	778	51%
Support Services	-	129	(129)	N/A
	17,854	9,873	7,981	45%
TOTAL ANNUAL BUDGET COST	620,222	425,553	194,669	31%
LESS: THIRD PARTY REVENUE				
Plant ISO Energy Sales	70,367	81,021	(10,653)	-15%
Load Aggregation Energy Sales	151,019	73,196	77,823	52%
Ancillary Services Sales	2,731	3,541	(810)	-30%
Western Resource Energy Sales	18,026	17,259	767	4%
Other ISO Revenue	-	11,306	(11,306)	N/A
Transmission Sales	110	74	37	33%
Western Credits, Interest & Other Income	15,713	8,276	7,437	47%
	257,967	194,671	63,295	25%
NET ANNUAL BUDGET COST TO PARTICIPANTS	362,256	230,882	\$ 131,374	36%



Annual Budget Budget vs. Actual By Major Area As of February 28, 2018

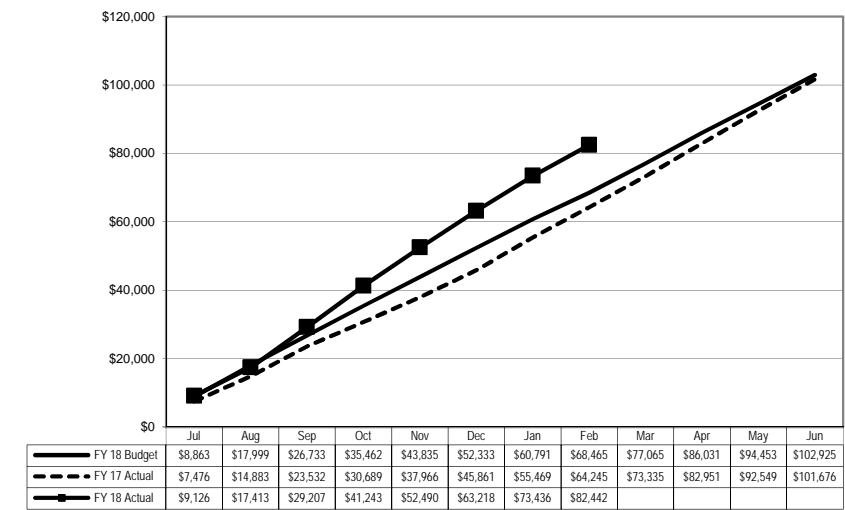
In Thousands

Generation Resources



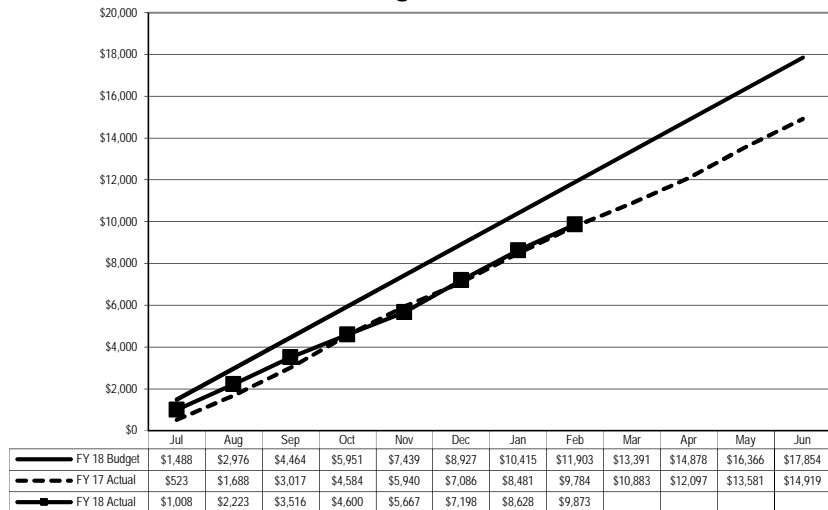
In Thousands

Transmission-ISO



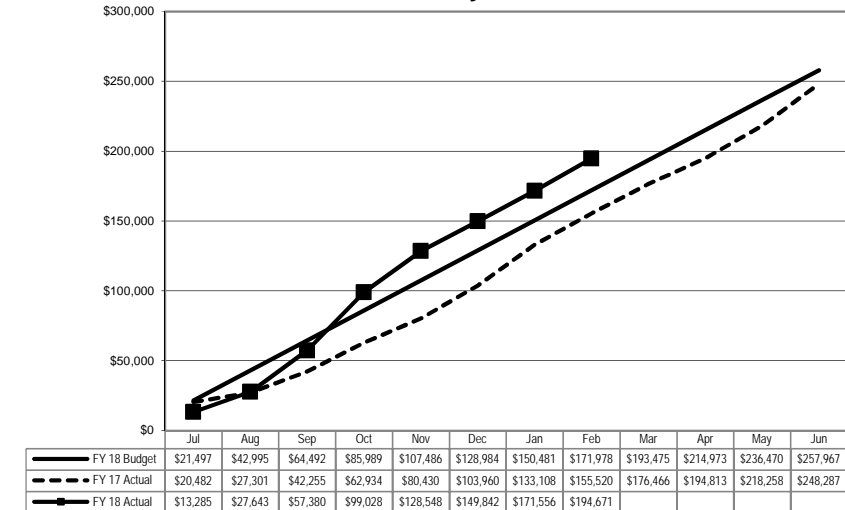
In Thousands

Management Services



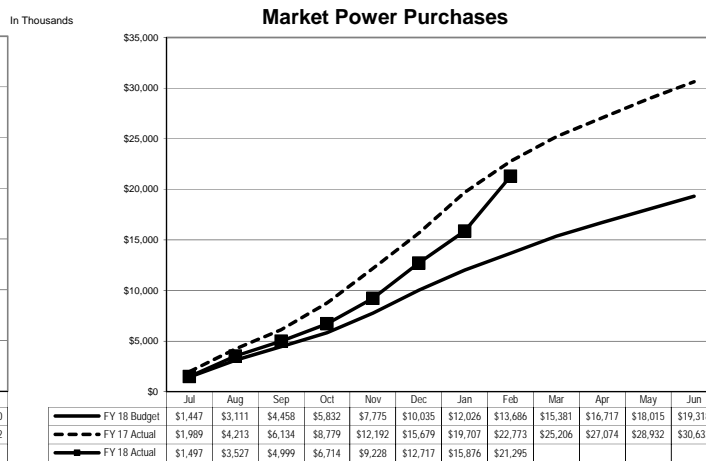
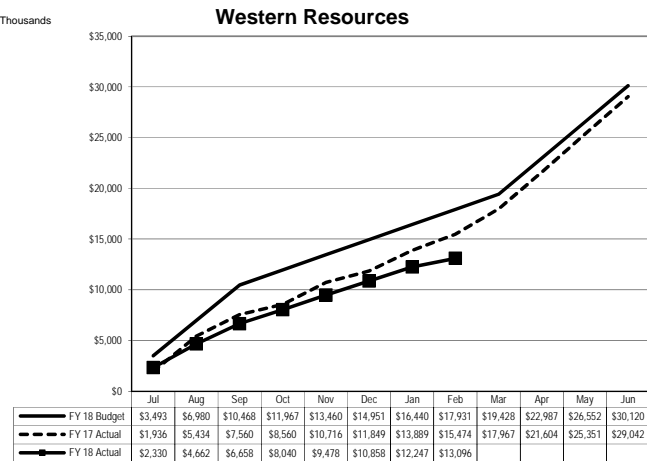
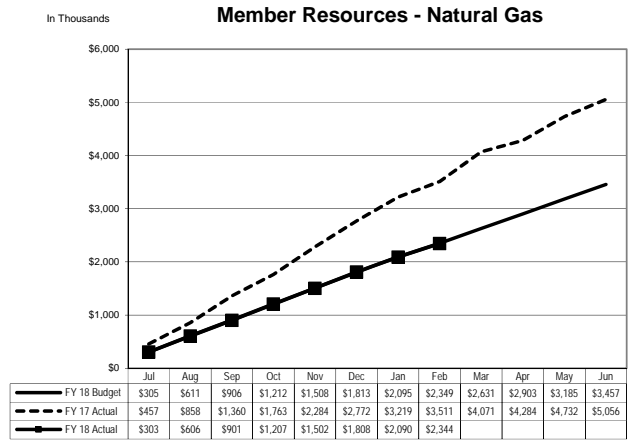
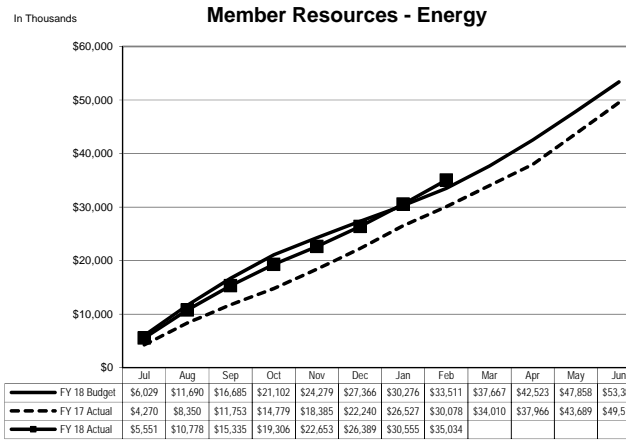
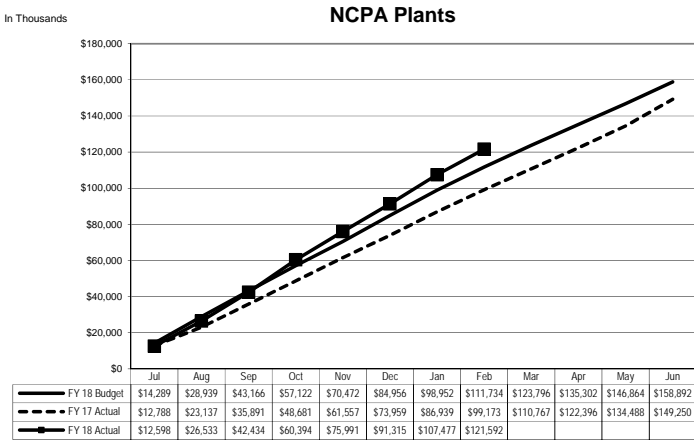
In Thousands

Third Party Revenue



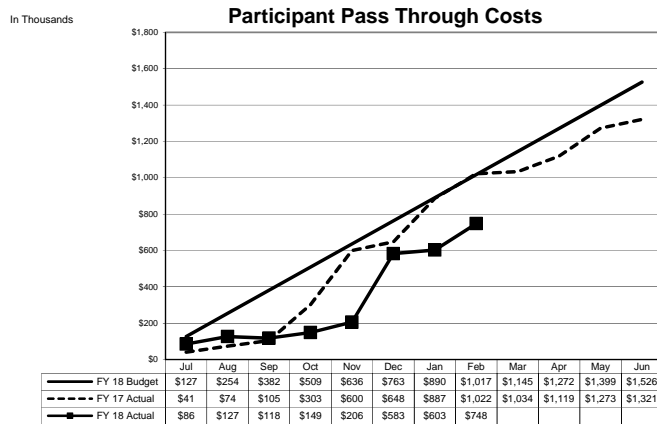
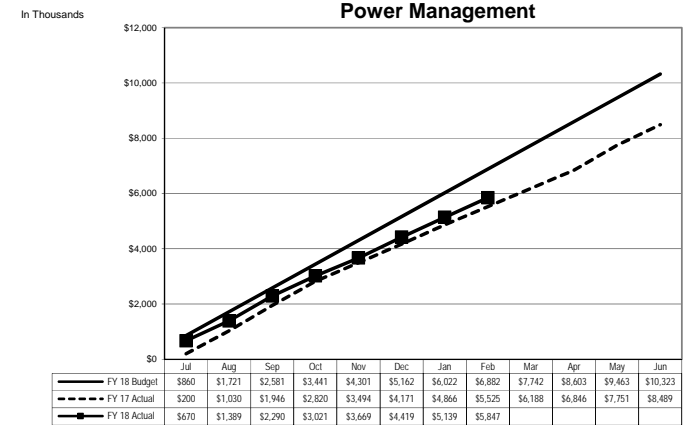
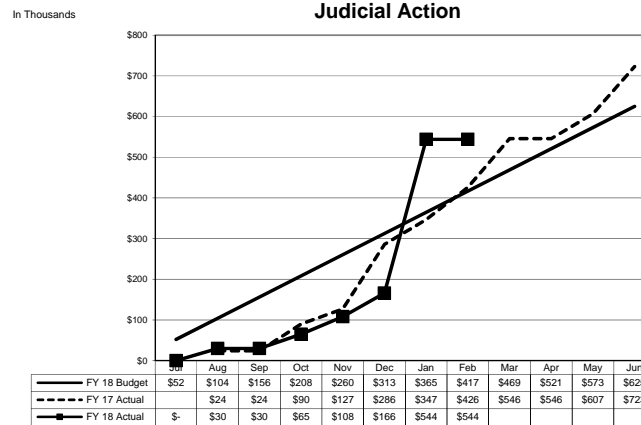
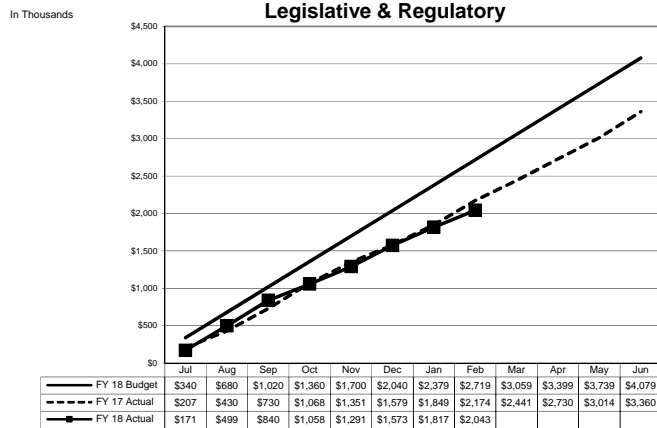
Footnote: Transmission is solely reflective of Independent System Operator (ISO) costs

**Annual Budget Cost
Generation Resources Analysis By Source
As of February 28, 2018**



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

**Annual Budget Cost
Management Services Analysis By Source
As of February 28, 2018**

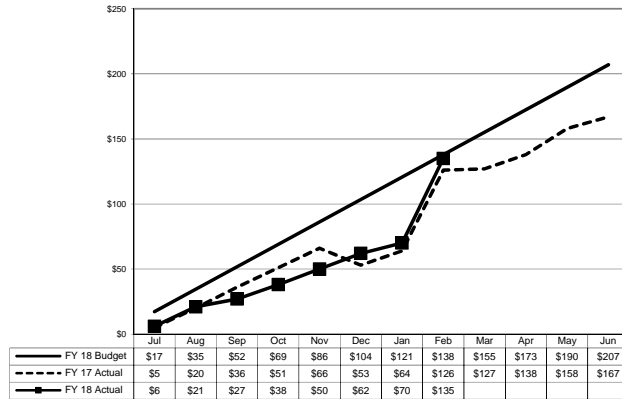


**Annual Budget Cost
Management Services Analysis By Source
As of February 28, 2018**

In Thousands

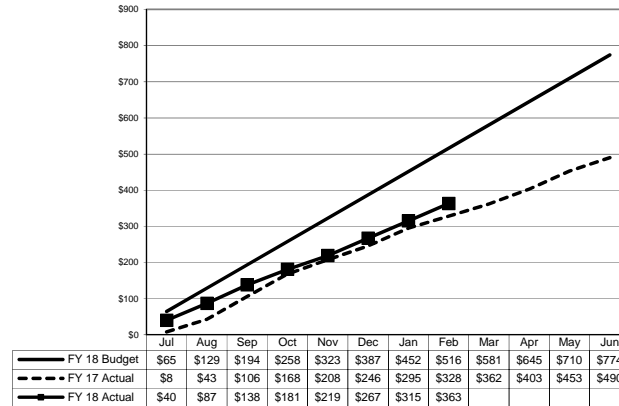
Energy Risk Management

In Thousands

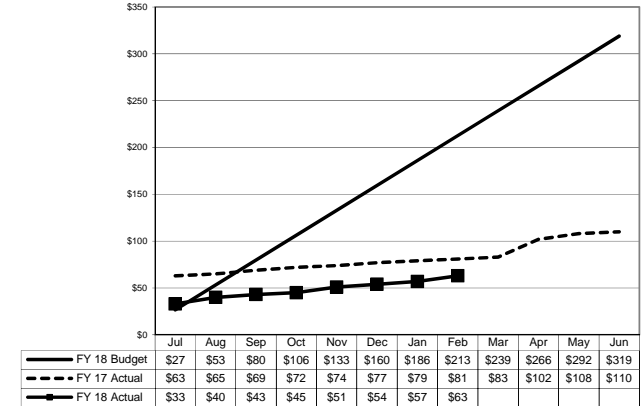


Settlements

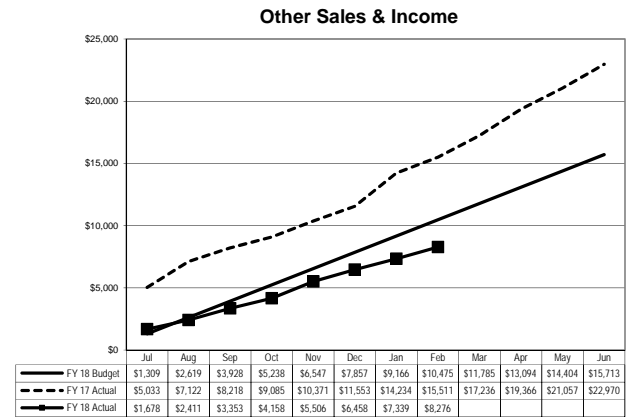
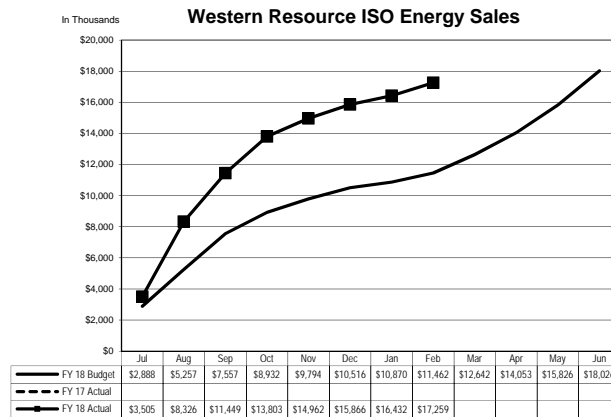
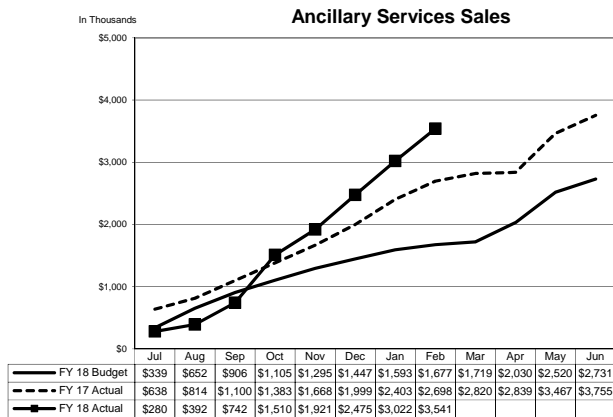
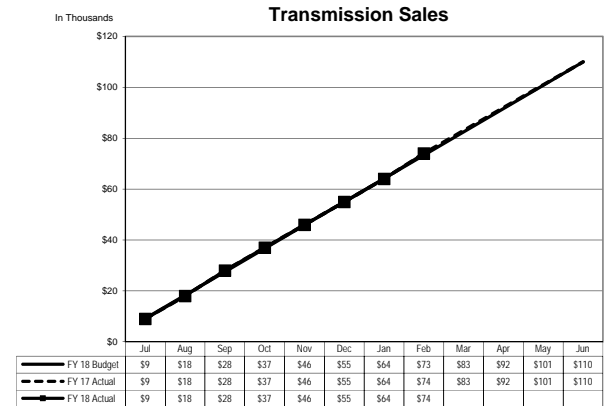
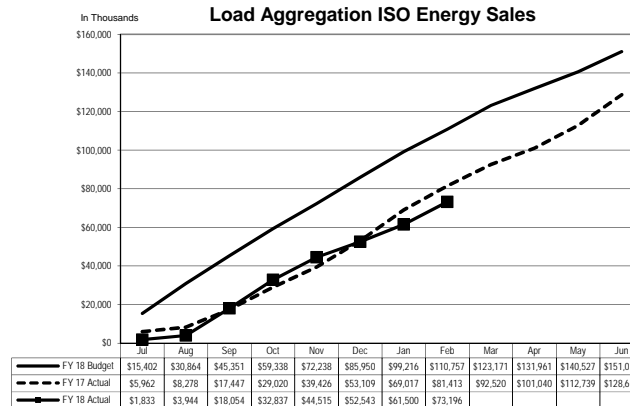
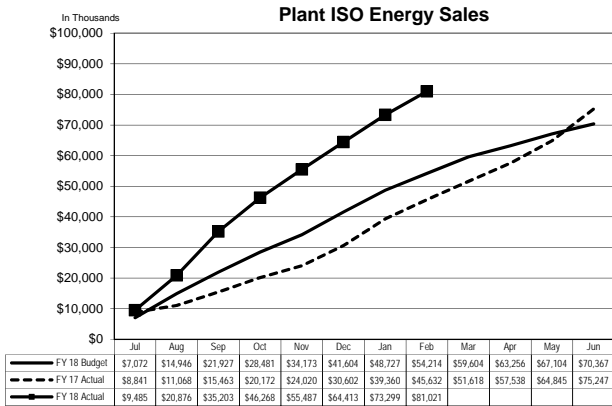
In Thousands



Integrated Systems Support



**Annual Budget Cost
Third Party Revenue Analysis By Source
As of February 28, 2018**



**Annual Budget
NCPA Generation Detail Analysis By Plant
As of February 28, 2018**

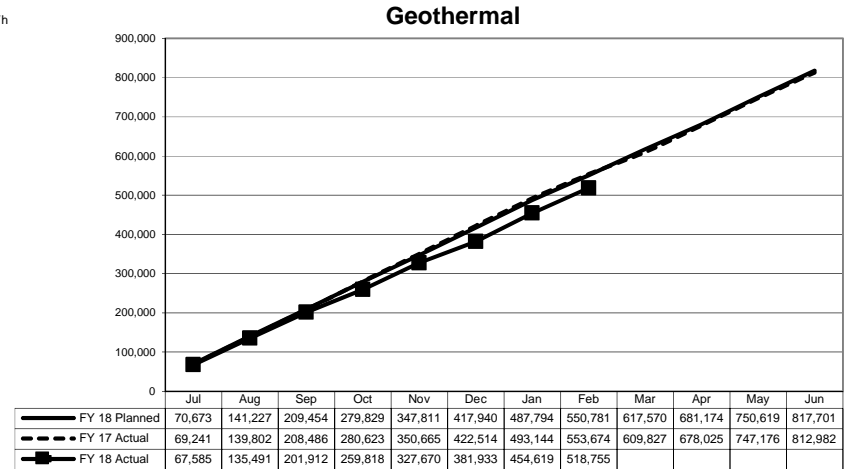
Generation Cost Analysis

\$ in thousands

	Geothermal				
	Budget	Actual	\$/MWh Actual	Under(Ovr) Budget	YTD % Remaining
Routine O & M	\$ 17,564	\$ 10,028	\$ 19.33	\$ 7,537	43%
Capital Assets/Spare Parts Inventories	1,440	382	0.74	1,058	73%
Other Costs	7,863	4,837	9.32	3,026	38%
CA ISO Charges	317	163	0.31	154	49%
Debt Service	4,936	3,290	6.34	1,645	33%
Annual Budget	32,120	18,700	36.05	13,420	42%
Less: Third Party Revenue					
Interest Income	148	180	0.35	(33)	-22%
ISO Energy Sales	28,349	19,384	37.37	8,965	32%
Ancillary Services Sales	-	(4)	(0.01)	4	
Effluent Revenues	700	902	1.74	(202)	-29%
Misc	110	77	0.15	33	
	29,307	20,539	39.59	8,768	30%
Net Annual Budget Cost to Participants	\$ 2,813	\$ (1,839)	\$ (3.54)	\$ 4,652	165%
Net Generation--MWh @ Meter	817,701	518,755			
\$/MWh (A)	\$ (2.60)	\$ (9.89)			

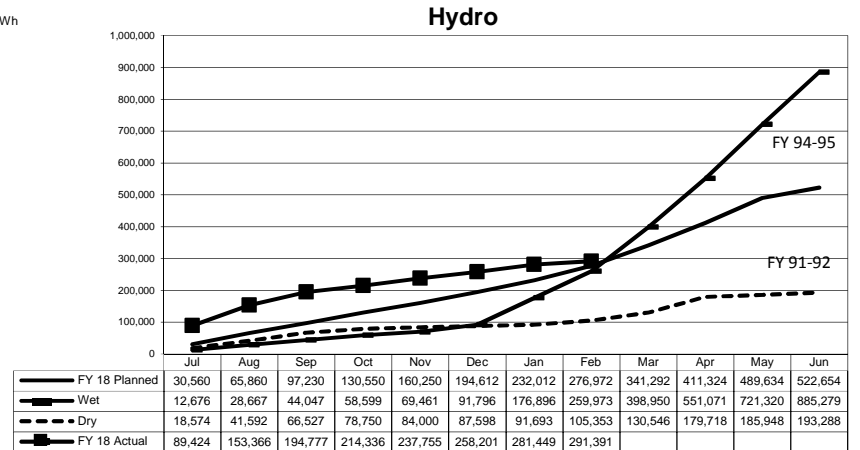
MWhs Generated

In MWh



	Hydroelectric				
	Budget	Actual	\$/MWh Actual	Under(Ovr) Budget	YTD % Remaining
Routine O & M	\$ 8,465	\$ 4,655	\$ 15.97	\$ 3,811	45%
Capital Assets/Spare Parts Inventories	2,365	4,770	16.37	(2,405)	-102%
Other Costs	3,093	1,790	6.14	1,303	42%
CA ISO Charges	1,680	1,427	4.90	253	15%
Debt Service	38,258	25,505	87.53	12,753	33%
Annual Budget	53,862	38,147	130.91	15,716	29%
Less: Third Party Revenue					
Interest Income	244	282	0.97	(38)	-16%
ISO Energy Sales	22,050	17,118	58.74	4,932	22%
Ancillary Services Sales	2,222	1,741	5.97	481	22%
Misc	-	63	0.21	(63)	
	24,516	19,203	65.90	5,313	22%
Net Annual Budget Cost to Participants	\$ 29,346	\$ 18,943	\$ 65.01	\$ 10,403	36%
Net Generation--MWh @ Meter	522,654	291,391			
\$/MWh (A)	\$ (17.05)	\$ (22.52)			

In MWh



Footnotes:

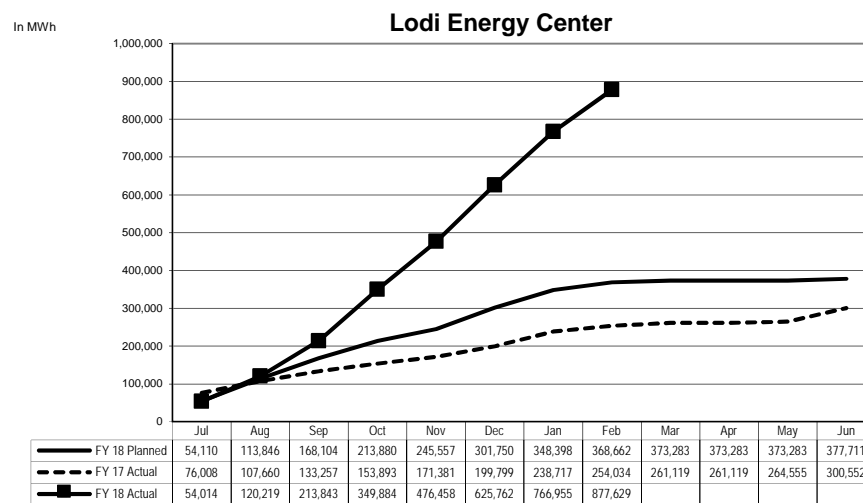
(A) Aggregate fiscal year generation in \$/MWh (excluding debt service)

**Annual Budget
NCPA Generation Detail Analysis By Plant
As of February 28, 2018**

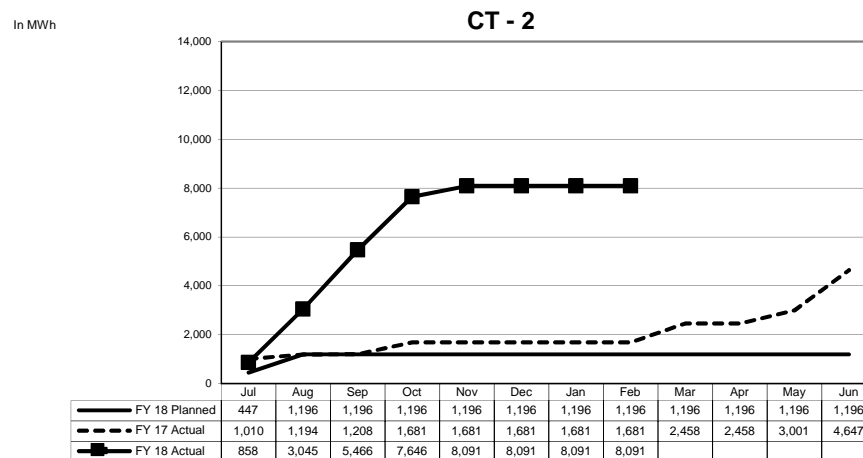
Generation Cost Analysis

	Lodi Energy Center				
	Budget	Actual	\$/MWh Actual	Under(Ovr) Budget	YTD % Remaining
Routine O & M	\$ 10,174	\$ 8,305	\$ 9.46	\$ 1,869	18%
Fuel	14,877	22,200	25.30	(7,323)	-49%
AB 32 GHG Offset	-	-	-	-	0%
CA ISO Charges and Energy Purchases	3,921	4,359	4.97	(439)	-11%
Capital Assets/Spare Parts Inventories	2,636	1,398	1.59	1,238	47%
Other Costs	3,063	1,779	2.03	1,284	42%
Debt Service	26,417	17,571	20.02	8,846	33%
Annual Budget	61,088	55,612	63.37	5,476	9%
Less: Third Party Revenue					
Interest Income	172	273	0.31	(101)	-59%
ISO Energy Sales	19,760	41,548	47.34	(21,788)	-110%
Ancillary Services Sales	397	1,171	1.33	(774)	-195%
Transfer Gas Credit	-	-	-	-	0%
Misc	-	0	0.00	(0)	0%
	20,329	42,993	48.99	(22,664)	-111%
Net Annual Budget Cost to Participants	\$ 40,759	\$ 12,619	\$ 14.38	\$ 28,140	69%
Net Generation--MWh @ Meter	377,711	877,629			
\$/MWh (A)	\$ 37.97	\$ (5.64)			

MWhs Generated



	Combustion Turbine No. 2 (STIG)				
	Budget	Actual	\$/MWh Actual	Under(Ovr) Budget	YTD % Remaining
Routine O & M	\$ 1,471	\$ 895	\$ 110.57	\$ 576	39%
Fuel and Pipeline Transport Charges	835	819	101.23	16	2%
Capital Assets/Spare Parts Inventories	121	10	1.24	111	92%
Other Costs	502	277	34.25	225	45%
CA ISO Charges	0	317	39.17	(316)	-68341%
Debt Service	5,693	3,795	469.08	1,898	33%
Annual Budget	8,623	6,113	755.54	2,510	29%
Less: Third Party Revenue					
Interest Income	43	51	6.32	(8)	-19%
ISO Energy Sales	89	1,139	140.80	(1,050)	-1182%
Ancillary Service Sales	-	0	0.00	(0)	0%
Fuel and Pipeline Transport Credits	864	944	116.63	(79)	-9%
Misc	-	-	-	-	0%
	996	2,134	263.74	(1,138)	-114%
Net Annual Budget Cost to Participants	\$ 7,627	\$ 3,979	\$ 491.80	\$ 3,648	48%
Net Generation--MWh @ Meter	1,196	8,091			
\$/MWh (A)	\$ 1,616.78	\$ 22.71			



Footnotes:

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

**Annual Budget
NCPA Generation Detail Analysis By Plant
As of February 28, 2018**

Generation Cost Analysis

	Combustion Turbine No. 1				
	Budget	Actual	\$/MWh Actual	Under(Ovr) Budget	YTD % Remaining
Routine O & M	\$ 1,520	\$ 1,448	\$ 132.36	\$ 72	5%
Fuel and Pipeline Transport Charges	172	-	-	172	100%
Capital Assets/Spare Parts Inventories	992	289	26.42	703	71%
Other Costs	514	990	90.57	(476)	-93%
CA ISO Charges	1	293	26.81	(293)	-49849%
Debt Service	-	-	-	-	
Annual Budget	3,199	3,020	276.16	178	6%
Less: Third Party Revenue					
Interest Income	-	-	-	-	
ISO Energy Sales	119	1,831	167.43	(1,712)	-1439%
Ancillary Services Sales	-	0	0.00	(0)	0%
Misc	-	16	1.43	(16)	0%
	119	1,847	168.86	(1,728)	-1452%
Net Annual Budget Cost to Participants	\$ 3,080	\$ 1,173	\$ 107.30	\$ 1,906	62%
Net Generation--MWh @ Meter	1,514	10,936			
\$/MWh (A)	\$ 2,034.06	\$ 107.30			

Footnotes:

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

MWhs Generated

In MWh

