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LEC PPC Agenda

Date: February 4, 2016

Subject: February 8, 2016 Lodi Energy Center Project Participant Committee Meeting

Location: 12745 N. Thornton Road, Lodi, CA and/or Posted Teleconference Location

Time: 10:00 a.m.

*** In compliance with the Brown Act, you may participate in person at the meeting location or via teleconference at one of the locations listed below. In either case, please: (1) post this notice at a publicly accessible location at the participation location at least 72-hours before the meeting begins, and (2) have a speaker phone available for any member of the public who may wish to attend at your location.

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NCPA 12745 N. Thornton Road Lodi, CA	NCPA 651 Commerce Drive Roseville, CA	CITY OF HEALDSBURG 401 Grove Street Healdsburg, CA
BAY AREA RAPID TRANSIT 300 Lakeside Drive, 16 th Floor Oakland, CA	CITY OF GRIDLEY 685 Kentucky Street Gridley, CA	CITY OF LOMPOC 100 Civic Center Plaza Lompoc, CA
CITY OF BIGGS 465 "C" Street Biggs, CA	PLUMAS-SIERRA RURAL ELECTRIC COOP 73233 Highway 70 Portola, CA	POWER & WATER RESOURCES POOLING AUTHORITY 915 L Street, Suite 1480 Sacramento, CA 95814
CALIFORNIA DEPARTMENT OF WATER RESOURCES 2135 Butano Drive, Suite 100 Room 125 Sacramento, CA 95825	Silicon Valley Power Santa Clara 1500 Warburton Avenue, Santa Clara, CA 95050	City of Ukiah 300 Seminary Avenue Ukiah, CA 95482
CITY OF AZUSA 729 N. Azusa Avenue Azusa, CA 91702		

The Lodi Energy Center Project Participant Committee may take action on any of the items listed on this Agenda regardless of whether the matter appears on the Consent Calendar or is described as an action item, a report, or an information item. If this Agenda is supplemented by staff reports, they are available to the public upon written request. Pursuant to California Government Code Section 54957.5, the following is the location at which the public can view Agendas and other public writings: NCPA, 651 Commerce Drive, Roseville, CA or www.ncpa.com

Persons requiring accommodations in accordance with the Americans with Disabilities Act in order to attend or participant in this meeting are requested to contact the NCPA Secretary at 916.781.3636 in advance of the meeting to arrange for such accommodations.

1. Call Meeting to Order and Roll Call

PUBLIC FORUM

Any member of the public who desires to address the Lodi Energy Center Project Participant Committee on any item considered by the Lodi Energy Center Project Participant Committee at this meeting, before or during the Committee's consideration of that item, shall so advise the Chair and shall thereupon be given an opportunity to do so. Any member of the public who desires to address the Lodi Energy Center Project Participant Committee on any item within the jurisdiction of the Lodi Energy Center Project Participant Committee and not listed on the Agenda may do so at this time.

2. Meeting Minutes - Approval of January 11, 2016 regular meeting minutes

MONTHLY REPORTS

3. Operational Report for January 2016 - (Jeremy Lawson)

4. Market Data Report for January 2016 – Verbal Report (Bob Caracristi)

5. Monthly Asset Report for December 2015 – (Michael DeBortoli)

6. Bidding Strategies Report - Verbal Report and update regarding bidding strategies and regulation down revenues (Ken Goeke)

CONSENT CALENDAR

All items on the Consent Calendar are considered routine and will be approved without discussion by a single roll call vote. Any Project Participant or member of the public may remove any item from the Consent Calendar. If an item is removed, it will be discussed separately following approval of the remainder of the Consent Calendar. Prior to the roll call vote to approve the Consent Calendar, the Participants will be polled to determine if any Participant wishes to abstain from one or more items on the Consent Calendar.

7. Treasurer's Report for January 2016 - Accept by all Participants

8. Financial Report for January 2016 - Approve by all Participants

9. GHG Reports (excerpted from monthly ARB) - Accept by all Participants

Consent Items pulled for discussion: _____

BUSINESS ACTION ITEMS

- 10. Hot Gas Path Outage Project May 2016** - Staff seeking approval authorizing the General Manager to execute agreements and issue purchase orders for maintenance work related to the Lodi Energy Center Hot Gas Path Outage Project, for a total cost not to exceed \$4,880,000; and report back to the PPC upon completion of the project (*Mike DeBortoli*)

INFORMATIONAL/ DISCUSSION ITEMS

- 11. Standard Large Generator Interconnection Agreement Upgrade Project with CAISO** – Staff to provide update (*Michael DeBortoli*)
- 12. FY 2016-17 Power Supply Budget Assumptions and Preliminary Results** - Staff to review the LEC's FY2016-17 power supply budget assumptions and preliminary generation and cost/revenue results (*Jan Bonatto*)
- 13. FY 2016-17 Initial Budget Presentation** – Staff to present draft budget for review (*Mike DeBortoli*)
- 14. Other New Business**

ADJOURNMENT

Next Regular Meeting: March 14, 2016

**Lodi Energy Center
Project Participant Committee Meeting
January 11, 2016 - MEETING MINUTES**

Location: Lodi Energy Center
12745 N. Thornton Rd, Lodi CA 95242
and by teleconference
10:00 A.M.

1. Call Meeting to Order and Roll Call

The PPC meeting was called to order at 10:01 a.m. by Chairman George Morrow. He took a moment to thank the Participants for making time to attend the monthly PPC meetings. He asked that roll be called of the Project Participants as listed below.

PPC Meeting Attendance Summary		
Participant	Attendance	Particulars / GES
Azusa - Morrow	Present	2.7857%
BART - Lloyd	Absent	6.6000%
Biggs - Sorenson	Present	0.2679%
CDWR - Forsythe	Present	33.5000%
Gridley - Borges	Absent	1.9643%
Healdsburg - Crowley	Absent	1.6428%
Lodi - Cadek	Present	9.5000%
Lompoc - Stassi	Absent	2.0357%
MID - Caballero	Present	10.7143%
Plumas-Sierra - Brozo	Absent	0.7857%
PWRPA - McLaughlin	Absent	2.6679%
SVP - Hance	Present	25.7500%
Ukiah - Grandi	Absent	1.7857%
Summary		
Present	6	82.5179%
Absent	7	17.4821%
Quorum by #:	No	
Quorum by GES:	Yes	
Meeting Date:	January 11, 2016	

Public Forum

Chairman Morrow asked if any members of the public were present in Lodi or at any of the other noticed meeting locations who would like to address the PPC on any agenda items. No members of the public were present.

2. Meeting Minutes

The draft minutes of the regular meeting held on December 14, 2015, were considered. The LEC PPC considered the following motion:

Date: 1/11/2016

Motion: The PPC approves the minutes of the December 14, 2015, regular meeting as presented.

Moved by: Lodi

Seconded by: MID

Discussion: There was no further discussion.

Vote Summary on Motion		
Participant	Vote	Particulars / GES
Azusa	Yes	2.7857%
BART	Absent	6.6000%
Biggs	Yes	0.2679%
CDWR	Yes	33.5000%
Gridley	Absent	1.9643%
Healdsburg	Absent	1.6428%
Lodi	Yes	9.5000%
Lompoc	Absent	2.0357%
Modesto	Yes	10.7143%
Plumas-Sierra	Absent	0.7857%
PWRPA	Absent	2.6679%
Silicon Valley Power	Yes	25.7500%
Ukiah	Absent	1.7857%
Vote Summary		
Total Ayes	6	82.5179%
Total Noes	0	0.0000%
Total Abstain	0	0.0000%
Total Absent	7	17.4821%
Result:	Motion passed.	

MONTHLY REPORTS

3. Operational Reports for December 2015

Mike DeBortoli presented the Operational Report for December. He explained the circumstances regarding the vibration instrument failure which caused the outage on December 31. The probe was recalibrated and the unit was placed back in service very quickly. Mike displayed a presentation describing the outage which occurred in early when internal duct work of the HRSG failed causing hot spots. He showed numerous pictures, explained how vibration insulation cracking occurs, showed the insulation downstream, and talked about the new fix for this problem. He said the unit was kept available although it did not run so there was no RA impact. This proved to be a good strategy.

Ken Speer mentioned that LEC was listed as No. 17 in the nation for Gas Combined Cycle Heat Rates (2014) in the Power Plant Operating Performance Report recently published in an article dated December 21, 2015 by Power Engineering – Electric Light & Power Magazine.

Mike continued the report noting that the AGC control deviation is tracking well. The unit had 12 hot starts, 2 warm starts, and zero cold starts. There were no OSHA recordable accidents, no permit violations and no NERC/WECC violations. The report reflected monthly production of 131,782 MWH, 528 service hours, and equivalent operating availability of 99.73%. The report set forth the Capacity Factor @ 280MW Pmax of 63.26% and @ 302MW Pmax of 58.65%. The plant is still scheduled for the planned outage on May 1-29, 2016. In response to a question from Martin Caballero, Mike said that he expects the welding repairs and patches to the HRSG hot spot problem will hold until the scheduled outage in May. The situation is being closely monitored as he does not want to lose insulation downstream again.

4. Market Data Report for December 2015

Bob Caracristi discussed the operating and financial settlement results for the month which dovetailed with the operational report.

5. Monthly Asset Report

Mike DeBortoli presented the monthly asset report/budget review for November. He said revenues continue to be soft and the VOM is following downward. While the budget numbers were gaining ground, the unexpected maintenance issues in January will affect the net costs. As of this November report, the asset report shows above budget by 5.8%.

6. Bidding Strategies Report

Ken Goeke presented his monthly report about the bidding strategies utilized in December, regulation revenues, and a costs comparison. He said again this month no special strategies were used. He also talked about the bidding utilized in early January.

Consent Calendar (Items 7 – 13) Item 14 Removed

The consent calendar was considered. Chairman Morrow asked if any Participant wished to have any item removed for separate discussion. Vice Chair Martin Caballero requested that item no. 14 be removed from Consent. Chairman Morrow then asked if any Participant wished to abstain from one or more items on the Consent Calendar. There were no abstentions. The LEC PPC considered the following motion:

Date: 1/11/2016

Motion: The PPC approves the Consent Calendar items consisting of agenda items no. 7. Treasurer's Report for December 2015; 8. Financial Reports for December 2015; 9. GHG Reports excerpted from monthly ARB; 10. Pacific Star Chemical, LLC dba Northstar Chemical five year Multi-Task General Services Agreement for not to exceed amount to \$1,500,000 for chemical purchases; 11. Worley Parsons Group, Inc. First Amendment to existing five year Multi-Task Consulting Services Agreement increasing the not to exceed amount to \$1,000,000 and expanding the scope of work; 12. KM Industrial, Inc. five year Multi-Task General Services Agreement for not to exceed

\$500,000 for specialized high pressure cleaning of industrial equipment; and
 13. Revised Exhibit 5 to Schedule 1.00 of the PMOA for 2016 Grid
 Management Charge (GMC) rates related to the Market Services and System
 Operation Charge.

Moved by: MID
Seconded by: Lodi

Discussion: There was no further discussion.

Vote Summary on Motion		
Participant	Vote	Particulars / GES
Azusa	Yes	2.7857%
BART	Absent	6.6000%
Biggs	Yes	0.2679%
CDWR	Yes	33.5000%
Gridley	Absent	1.9643%
Healdsburg	Absent	1.6428%
Lodi	Yes	9.5000%
Lompoc	Absent	2.0357%
Modesto	Yes	10.7143%
Plumas-Sierra	Absent	0.7857%
PWRPA	Absent	2.6679%
Silicon Valley Power	Yes	25.7500%
Ukiah	Absent	1.7857%
Vote Summary		
Total Ayes	6	82.5179%
Total Noes	0	0.0000%
Total Abstain	0	0.0000%
Total Absent	7	17.4821%
Result: Motion passed.		

14. LEC PMOA Schedule 6.00 – Contact List

Martin Caballero requested that the proposed Schedule 6.00 be updated to reflect James McFall's new title, Interim AG Electric Resources. The LEC PPC considered the following motion:

Date: 1/11/2016

Motion: The PPC approves the revised Schedule 6.00 of the PMOA updating the Contact List for the Project Participants with the change made to reflect the new title for MID's contact, James McFall, as Interim AG Electric Resources.

Moved by: MID
Seconded by: CDWR

Discussion: There was no further discussion.

Vote Summary on Motion		
Participant	Vote	Particulars / GES
Azusa	Yes	2.7857%
BART	Absent	6.6000%
Biggs	Yes	0.2679%
CDWR	Yes	33.5000%
Gridley	Absent	1.9643%
Healdsburg	Absent	1.6428%
Lodi	Yes	9.5000%
Lompoc	Absent	2.0357%
Modesto	Yes	10.7143%
Plumas-Sierra	Absent	0.7857%
PWRPA	Absent	2.6679%
Silicon Valley Power	Yes	25.7500%
Ukiah	Absent	1.7857%
Vote Summary		
Total Ayes	6	82.5179%
Total Noes	0	0.0000%
Total Abstain	0	0.0000%
Total Absent	7	17.4821%
Result:		Motion passed.

BUSINESS ACTION ITEMS

15. FY 15 Annual Billing Settlements

Donna Stevener presented the final FY 15 billing settlements for approval as previewed at last month's meeting. The written staff report and its attachments provided the billing settlements summary, an allocation of the project costs by participant, and the detailed budget variance analysis. Ken Speer noted the actual fuel cost has the largest variance from the budget amount due to increased generation. Donna Stevener said she is looking into changing how this variable cost is handled. Ken said both the variable and fixed O&M costs are also up because the plant ran more. The result of the settlements is that moneys are owed from the Project Participants for unfunded costs. The question was asked if moneys over collected for the Interconnection Agreement Upgrade Project can be netted against this cost since about \$4.5 million dollars will be coming back. Mike DeBortoli said about \$1.351 million is sitting in the escrow account and that it is a timing issue because the money cannot be refunded back until the financial security is released. For NCPA members the excess funds collected on the pipeline project will most likely be applied to the GORE accounts. Donna Stevener said she would prefer not to refund the moneys piecemeal but depending on timing, will look into application of the moneys to settlements due.

INFORMATIONAL ITEMS

16. Standard Large Generator Interconnection Agreement Upgrade Project with CAISO

Mike DeBortoli updated the Committee advising that the final version of the First Amended and Restated Interconnection Agreement is fully executed so it is a real project now. A project manager has been designated for CAISO so there is now a specific person to work with however; PG&E has not yet named its project manager. George Morrow asked when the new MWs will be available. Mike said there is no time frame yet. He noted also that the substation will need upgrades at the time the line goes in.

17. LEC Operational Insurance Renewed for 2016

Donna Stevener presented this item to provide the committee with the results for insurance renewal for the period November 20, 2015 to November 20, 2016. On October 12, 2015, the PPC approved the coverage levels with a premium cost of not to exceed \$675,000. Negotiations with Marsh, Inc., the brokerage firm utilized by the Agency, continued after approval. The operational property and liability insurance were renewed at the same limits as last year with added coverages of terrorism in both the property and liability insurance programs. The cost for renewal of both programs totaled \$608,175. The committee agreed this is good news.

18. One-Time Bill Credit from PG&E to Its End-Use Natural Gas Customer

In addition to NCPA following this item, Steve Hance also has been monitoring the status. Since this will be a one-time bill credit, possibly coming in March, Ken Goeke said it will not affect the bidding strategy. Martin Caballero said he did some quick calculations based on information put out by PG&E and he estimates the credit for LEC to be between three and four million dollars.

19. Other New Business

None.

Adjournment

The next regular meeting of the PPC is scheduled for Monday, February 8, 2016. The meeting was adjourned at 11:05 a.m.

Submitted by: Linda Stone



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Lodi Energy Center Project Participant Committee Operational Report

Agenda Item No.: 3

Date: 2/08/2016
To: Lodi Energy Center Project Participant Committee

Safety

- OSHA Recordable: 0 Accidents

Notice of Violations

- Permits: 0 Violations
- NERC/WECC: 0 Violations

Outage Summaries:

- **HRSB Transition Duct Failure** (1/9/16 – 1/10/16) – Similar to the forced outage in November, the internal duct work of the HRSB failed and exposed hot combustion turbine exhaust gas to the exterior shell of the HRSB. The plant was shut down, allowed to cool, and weld repairs and patches were conducted.

Planned Outage Summaries:

- 2016, May 1st – May 29th: Hot Gas Path (HGP), Hot Reheat Valve (HRH), Misc

Generating Unit Statistics:

LEC

Report**Date:**

Start Date 1/1/2016

End Date 1/31/2016

1. Monthly Production 97,231 MWH
2. Productivity Factor
 - a. Service Hours 391 Hours
 - b. Service Factor 52.52 %
 - c. Capacity Factor @ 280MW Pmax 46.67 %
 - d. Capacity Factor @ 302MW Pmax 43.27 %
3. Equivalent Operating Availability (EOA) 93.54 %
4. Forced Outage Rate (FOR)
 - a. Combustion Turbine Generator 10.94 %
 - b. Steam Turbine Generator 10.94 %
5. Heat Rate Deviation (HRD)
 - a. Fuel Cost (Not Current Market Price) 4.00 \$/mmBTU

MW Range		Average HR BTU/kW-Hr	PMOA HR BTU/kW-Hr	Deviation %	Production MWH	Cost \$
Seg. 1	296 - 302	6,850	6850	0.00%	0	\$0
Seg. 2	284 - 296	6,972	6870	1.48%	20,772	\$8,448
Seg. 3	275 - 284	7,000	6971	0.42%	21,130	\$2,447
Seg. 4	250 - 275	7,034	7081	-0.67%	30,283	-\$5,705
Seg. 5	225 - 250	7,091	7130	-0.54%	9,622	-\$1,486
Seg. 6	200 - 225	7,197	7315	-1.62%	5,360	-\$2,537
Seg. 7	175 - 225	7,363	7711	-4.51%	5,609	-\$7,804
Seg. 8	165 - 175	7,722	7856	-1.70%	2,913	-\$1,557
					95,688	-\$8,195

6. AGC Control Deviation

MW Range		High Dev MWH	Low Dev MWH	Absolute Dev MWH	Cost \$
Seg. 1	296 - 302	0	0	0	\$0
Seg. 2	284 - 296	36	-72	108	\$3,014
Seg. 3	275 - 284	21	-274	296	\$8,279
Seg. 4	250 - 275	134	-37	171	\$4,816
Seg. 5	225 - 250	55	-31	85	\$2,424
Seg. 6	200 - 225	34	-26	60	\$1,734
Seg. 7	175 - 225	32	-24	57	\$1,671
Seg. 8	165 - 175	13	-7	20	\$617
		325	-472	797	\$22,556

7. Starting Reliability

Start Type	Hot Starts	Warm Starts	Cold Starts
Number of Starts	6	1	1
Start Time Benchmark (Minutes)	85	160	235
Start Time Actual (Average Minute)	90.0	170.0	178.0
Start Time Deviation (%)	5.9%	6.3%	-24.3%
Start Fuel Benchmark PMOA (mmBTU)	1,967	5,200	5,430
Start Fuel Actual (Average mmBTU)	1,689	3,338	3,513
Fuel Deviation	-14.1%	-35.8%	-35.3%
Costs of Fuel Deviations (\$)	-\$1,113	-\$7,449	-\$7,667

Definitions:

1. Monthly Production = Plant Net MWH's
2. Capacity Factor
 - a. Service Hours = In Production or in Service State
 - b. Service Factor = $SH / PH \times 100\%$
 - c. Capacity Factor = $Production / 302MW \times PH$
 - d. Capacity Factor = $Production / 280MW \times PH$
3. Monthly Equivalent Availability Factor (EAF) = $(AH - EPDH - EFDH) / PH \times 100\%$
4. Forced Outage Rate = $(FOH / (FOH + SH)) \times 100\%$
5. Heat Rate Deviation (HRD)
 - a. Fuel Cost = Cost of Fuel in \$/mmBTU
 - b. Average Heat Rate = The Average Heat Rate for the given Range
 - c. Heat Rate Deviation = $(Heat\ Rate\ Average - Heat\ Rate\ Expected) / Heat\ Rate\ Expected \times 100\%$
 - d. Production = The Sum of Production for the given Range
 - e. Costs of Heat Rate Deviations = $(Average\ Heat\ Rate - Expected\ Heat\ Rate) \times Production \times Cost\ of\ Fuel$
6. AGC Deviation-
 - a. MWH's = AGC Set Point Generation - LEC Actual Generation
 - b. Cost of Deviations = Fuel Cost x Heat Rate x Generation
7. Starting Reliability
 - a. Number of Starts = Start Count for Hot, Warm, and Cold
 - b. Start Time = Average Time from 0 Fuel Flow to Pmin
 - c. Start Fuel = Average Fuel Consumption to Pmin
 - d. Cost of Fuel Deviation = $(Actual\ Fuel\ Consumed - Expected\ Fuel) \times Cost\ of\ Fuel$



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LEC Treasurer's Report

AGENDA ITEM NO.: 7

Date: February 8, 2016
To: LEC Project Participant Committee
Subject: Treasurer's Report for the Month Ended January 31, 2016

In compliance with NCPA policy and State of California Government Code Sections 53601 and 53646(b), the following monthly report is submitted for your information and acceptance.

Cash - At month end cash totaled \$1,393,405.

Investments - The carrying value of the LEC's investment portfolio totaled \$32,509,285 at month end. The current market value of the portfolio totaled \$32,526,468.

The overall portfolio had a combined weighted average interest rate of 0.983% with a bond equivalent yield (yield to maturity) of 0.938%. Investments with a maturity greater than one year totaled \$17,390,000. During the month \$2 million was invested.

Funds not required to meet annual cash flow are reinvested and separately reported as they occur.

Interest Rates - During the month, rates on 90 day T-Bills increased 11 basis points (from 0.21% to 0.32%) and rates on one year T-Bills decreased 19 basis points (from 0.66% to 0.47%).

To the best of my knowledge and belief, all securities held by LEC as of January 31, 2016 are in compliance with the Agency's investment policy. There are adequate cash flow and investment maturities to meet next month's cash requirements.

Environmental Analysis

The Treasurer's report will not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 of the California Environmental Quality Act. No environmental review is necessary.

Respectfully submitted,

DONNA STEVENER
Assistant General Manager/CFO
Administrative Services/Finance

Prepared by:

SONDRA AINSWORTH
Treasurer-Controller

Attachments

LODI ENERGY CENTER

TREASURER'S REPORT

JANUARY 31, 2016

TABLE OF CONTENTS

	<u>PAGE</u>
CASH & INVESTMENT BALANCE	1
CASH ACTIVITY SUMMARY	2
INVESTMENT ACTIVITY SUMMARY	3
INTEREST RATE/YIELD ANALYSIS	4
INVESTMENT MATURITIES ANALYSIS	5
DETAIL REPORT OF INVESTMENTS	APPENDIX

Northern California Power Agency/Lodi Energy Center
Treasurer's Report
Cash & Investment Balance
January 31, 2016

	CASH	INVESTMENTS	TOTAL	PERCENT	INVESTMENTS at MARKET
MANDATORY FUNDS					
Debt Service Account	-	9,276,197	9,276,197	27.36%	9,274,168
Debt Service Reserve	-	11,864,445	11,864,445	35.00%	11,872,372
O & M Reserve	-	11,297,510	11,297,510	33.32%	11,308,795
	-	32,438,152	32,438,152	95.68%	32,455,335
ADDITIONAL PROJECT FUNDS					
GHG Cash Account	-	71,132	71,132	0.21%	71,132
Transmission Upgrade Escrow ¹	1,393,405		1,393,405	4.11%	
Participant Deposit Account	-	1	1	0.00%	1
	\$ 1,393,405	\$ 32,509,285	\$ 33,902,690	100.00%	\$ 32,526,468

NOTE A -Investment amounts shown at book carrying value.

¹ Amount held in escrow

Northern California Power Agency/Lodi Energy Center
Treasurer's Report
Cash Activity Summary
January 31, 2016

	RECEIPTS			EXPENDITURES			CASH
	OPS/CONSTR	INTEREST (NOTE B)	INVESTMENTS (NOTE A)	OPS/CONSTR	INVESTMENTS (NOTE B)	INTER-COMPANY/ FUND TRANSFERS	INCREASE / (DECREASE)
MANDATORY FUNDS							
Debt Service Account	\$ -	\$ 4	\$ -	\$ -	\$ (2,202,685)	\$ 2,202,681	\$ -
Debt Service Reserve	-	58	-	-	(58)	-	-
O & M Reserve	-	2,134	(2,134)	-	-	-	-
	-	2,196	(2,134)	-	(2,202,743)	2,202,681	-
ADDITIONAL PROJECT FUNDS							
GHG Cash Account	-	66	(66)	-	-	-	-
Transmission Upgrade Escrow ¹		23					23
Participant Deposit Account	-	-	-	-	-	-	-
							-
TOTAL	\$ -	\$ 2,285	\$ (2,200)	\$ -	\$ (2,202,743)	\$ 2,202,681	\$ 23

NOTE A -Investment amounts shown at book carrying value.

NOTE B -Net of accrued interest purchased on investments.

¹ Amount held in escrow

Northern California Power Agency/Lodi Energy Center
Treasurer's Report
Investment Activity Summary
January 31, 2016

	PURCHASED	SOLD OR MATURED	(NON-CASH) DISC/(PREM) AMORT	(NON-CASH) GAIN/(LOSS) ON SALE	INVESTMENTS TRANSFERS	INCREASE / (DECREASE)
MANDATORY FUNDS						
Debt Service Account	2,202,685	-	2,119	-	-	2,204,804
Debt Service Reserve	58	-	(50)	-	-	8
O & M Reserve	-	2,134	(1,562)	-	-	572
	<u>2,202,743</u>	<u>2,134</u>	<u>507</u>	<u>-</u>	<u>-</u>	<u>2,205,384</u>
ADDITIONAL PROJECT FUNDS						
GHG Cash Account		66	-	-		66
Participant Deposit Acct.		-	-	-	-	-
TOTAL	<u>\$ 2,202,743</u>	<u>\$ 2,200</u>	<u>\$ 507</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 2,205,450</u>

Less Non- Cash Activity

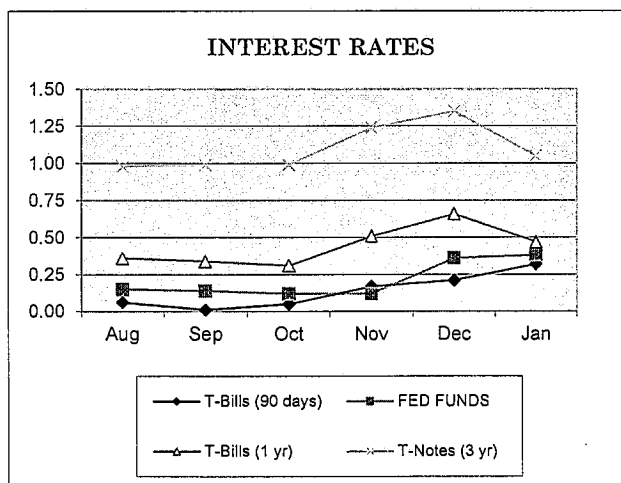
Disc/(Prem) Amortization & Gain/(Loss) on Sale	(507)
Net Change in Investment --Before Non-Cash Activity	<u>\$ 2,204,943</u>

NOTE A -Investment amounts shown at book carrying value.

**Northern California Power Agency
Lodi Energy Center
Interest Rate/Yield Analysis
January 31, 2016**

	<u>WEIGHTED AVERAGE INTEREST RATE</u>	<u>BOND EQUIVALENT YIELD</u>
OVERALL COMBINED	<u><u>0.983%</u></u>	<u><u>0.938%</u></u>
Debt Service Account	0.338%	0.343%
Debt Service Reserve	1.005%	1.041%
O & M Reserve	1.496%	1.322%
GHG Cash Account	0.367%	0.367%

KEY INTEREST RATES		
	<u>CURRENT</u>	<u>PRIOR YEAR</u>
Fed Fds (Ovrnight)	0.38%	0.12%
T-Bills (90da.)	0.32%	0.02%
Agency Disc (90da.)	0.39%	0.06%
T-Bills (1yr.)	0.47%	0.17%
Agency Disc (1yr.)	0.54%	0.24%
T-Notes (3yr.)	1.05%	0.84%



Northern California Power Agency
Total Portfolio
Investment Maturities Analysis
January 31, 2016

Type	0-7 Days	8-90 Days	91-180 Days	181-270 Days	271-360 Days	1-5 Years	5-10 Years	Total	Percent
US Government Agencies	\$0	\$0	\$9,284	\$0	\$0	\$17,390	\$0	\$26,674	82.17%
US Bank Trust Money Market	3,409							3,409	10.50%
Commercial Paper	0							0	0.00%
Investment Trusts (LAIF)	2,378							2,378	7.33%
U.S.Treasury Market Acct.								0	0.00%
U.S.Treasury Bill								0	0.00%
Certificates of Deposit								0	0.00%
Total Dollars	\$5,787	\$0	\$9,284	\$0	\$0	\$17,390	\$0	\$32,461	100.00%
Total Percents	17.83%	0.00%	28.60%	0.00%	0.00%	53.57%	0.00%	100.00%	

Investments are shown at Face Value, in thousands.

NORTHERN CALIFORNIA POWER AGENCY

Detail Report Of Investments

APPENDIX

Note: This appendix has been prepared to comply with
Government Code section 53646.



Northern California Power Agency

Treasurer's Report

01/31/2016

LEC Issue#1 2010A DS Fund

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
US Bank Trust	USB	935	0.100	07/01/2013	935		1	0.100	935	SYS79003	79003	935
Federal Home Loan Ba	USBT	695,000	0.520	12/24/2015	693,474	05/24/2016	113	0.528	694,124	313384XF1	26288	693,866
Federal Home Loan Ba	USBT	2,560,000	0.240	12/02/2015	2,556,979	05/27/2016	116	0.243	2,556,672	313384XJ3	26278	2,558,020
Federal National Mtg	USBT	694,000	0.360	01/27/2016	693,126	06/01/2016	121	0.365	693,042	313588XP5	26296	693,160
Fund Total and Average		\$ 3,949,935	0.310		\$ 3,944,514		116	0.315	\$ 3,944,773			\$ 3,945,981

LEC Issue #1 2010B DS Fund

US Bank Trust	USB	391	0.100	07/01/2013	391		1	0.100	391	SYS79004	79004	391
Federal Home Loan Ba	USBT	811,000	0.520	12/24/2015	809,219	05/24/2016	113	0.528	809,978	313384XF1	26289	809,676
Federal National Mtg	USBT	727,000	0.360	01/27/2016	726,084	06/01/2016	121	0.365	725,997	313588XP5	26298	726,120
Fund Total and Average		\$ 1,538,391	0.444		\$ 1,535,694		117	0.451	\$ 1,536,366			\$ 1,536,187

LEC Issue #2 2010A DS Fund

US Bank Trust	USB	804	0.100	07/01/2013	804		1	0.100	804	SYS79011	79011	804
Federal Home Loan Ba	USBT	436,000	0.519	12/24/2015	435,043	05/24/2016	113	0.528	435,451	313384XF1	26290	435,288
Federal Home Loan Ba	USBT	2,188,000	0.240	12/02/2015	2,185,418	05/27/2016	116	0.243	2,185,156	313384XJ3	26279	2,186,308
Federal National Mtg	USBT	434,000	0.360	01/27/2016	433,453	06/01/2016	121	0.365	433,401	313588XP5	26297	433,475
Fund Total and Average		\$ 3,058,804	0.297		\$ 3,054,718		116	0.301	\$ 3,054,812			\$ 3,055,875

LEC Issue #2 2010B DS Fund

US Bank Trust	USB	195	0.100	07/01/2013	195		1	0.100	195	SYS79012	79012	195
Federal Home Loan Ba	USBT	349,000	0.520	12/24/2015	348,234	05/24/2016	113	0.528	348,560	313384XF1	26291	348,430
Federal National Mtg	USBT	390,000	0.360	01/27/2016	389,509	06/01/2016	121	0.365	389,462	313588XP5	26299	389,528
Fund Total and Average		\$ 739,195	0.435		\$ 737,938		117	0.442	\$ 738,217			\$ 738,153

GRAND TOTALS:	\$ 9,286,325	0.338	\$ 9,272,864	116	0.343	\$ 9,274,168.	\$ 9,276,196
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*Bond Equivalent Yield to Maturity is shown based on a 365 day year to provide a basis for comparison between all types. Investments with less than 6 months to maturity use an approximate method, all others use an exact method.

Current Market Value is based on prices from Trustee/ Custodian Statements or bid prices from the Wall Street Journal as of 01/31/2016



Northern California Power Agency

Treasurer's Report

01/31/2016

LEC Issue #1 2010 DSR Fund

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
US Bank Trust	USB	58,509	0.100	07/01/2013	58,509		1	0.100	58,509	SYS79005	79005	58,509
Federal National Mtg	USB	4,170,000	0.875	05/30/2014	4,171,960	08/28/2017	574	0.977	4,175,963	3135GOMZ3	26136	4,170,951
Federal Farm Credit	USBT	4,287,000	1.850	06/08/2015	4,287,000	06/08/2020	1,589	1.850	4,289,915	3133EEU65	26230	4,287,000
Fund Total and Average		\$ 8,515,509	1.360		\$ 8,517,469		1081	1.411	\$ 8,524,387			\$ 8,516,460

LEC Iss#1 2010B BABS Subs Resv

US Bank Trust	USB	2,261,352	0.100	07/01/2013	2,261,352		1	0.100	2,261,352	SYS79006	79006	2,261,352
Fund Total and Average		\$ 2,261,352	0.100		\$ 2,261,352		1	0.100	\$ 2,261,352			\$ 2,261,352

LEC Issue #2 2010B DSR BABS

US Bank Trust	USB	1,086,633	0.100	07/01/2013	1,086,633		1	0.100	1,086,633	SYS79013	79013	1,086,633
Fund Total and Average		\$ 1,086,633	0.100		\$ 1,086,633		1	0.100	\$ 1,086,633			\$ 1,086,633
GRAND TOTALS:		\$ 11,863,494	1.005		\$ 11,865,454		776	1.041	\$ 11,872,372			\$ 11,864,445

*Bond Equivalent Yield to Maturity is shown based on a 365 day year to provide a basis for comparison between all types. Investments with less than 6 months to maturity use an approximate method, all others use an exact method.

Current Market Value is based on prices from Trustee/ Custodian Statements or bid prices from the Wall Street Journal as of 01/31/2016

Investment # 26230 – FFCB - Callable on 6/8/16, then any time.



Northern California Power Agency

Treasurer's Report

01/31/2016

LEC O & M Reserve

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
Local Agency Investm		2,307,335	0.367	07/01/2013	2,307,335		1	0.367	2,307,335	SYS70047	70047	2,307,335
Union Bank of Califo	UBOC	0	0.002	07/18/2013	0		1	0.002	0	SYS70041	70041	0
Federal National Mtg	UBOC	2,933,000	1.875	08/28/2015	2,998,142	02/19/2019	1,114	1.220	2,999,960	3135G0ZA4	26248	2,990,175
Federal Farm Credit	UBOC	6,000,000	1.740	09/30/2015	6,000,000	09/30/2020	1,703	1.740	6,001,500	3133EFFZ5	26260	6,000,000
Fund Total and Average		\$ 11,240,335	1.495		\$ 11,305,477		1199	1.322	\$ 11,308,795			\$ 11,297,510
GRAND TOTALS:		\$ 11,240,335	1.495		\$ 11,305,477		1199	1.322	\$ 11,308,795			\$ 11,297,510

*Bond Equivalent Yield to Maturity is shown based on a 365 day year to provide a basis for comparison between all types.

Investments with less than 6 months to maturity use an approximate method, all others use an exact method.

Current Market Value is based on prices from Trustee/ Custodian Statements or bid prices from the Wall Street Journal as of 01/31/2016

Investment # 26260 – FFCB - Callable on 3/30/16, then any time.



Northern California Power Agency

Treasurer's Report

01/31/2016

LEC GHG Auction Acct

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
Local Agency Investm		71,132	0.367	07/01/2013	71,132		1	0.367	71,132	SYS70046	70046	71,132
Fund Total and Average		\$ 71,132	0.367		\$ 71,132		1	0.367	\$ 71,132			\$ 71,132
GRAND TOTALS:		\$ 71,132	0.367		\$ 71,132		1	0.367	\$ 71,132.			\$ 71,132

*Bond Equivalent Yield to Maturity is shown based on a 365 day year to provide a basis for comparison between all types. Investments with less than 6 months to maturity use an approximate method, all others use an exact method.

Current Market Value is based on prices from Trustee/ Custodian Statements or bid prices from the Wall Street Journal as of 01/31/2016



Northern California Power Agency

Treasurer's Report

01/31/2016

LEC Construction Revolving

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
Local Agency Investm		1	0.254	07/01/2013	1		1	0.254	1	SYS70040	70040	1
Fund Total and Average		\$ 1	0.254		\$ 1		1	0.254	\$ 1			\$ 1
GRAND TOTALS:		\$ 1	0.254		\$ 1		1	0.254	\$ 1.			\$ 1

*Bond Equivalent Yield to Maturity is shown based on a 365 day year to provide a basis for comparison between all types.

Investments with less than 6 months to maturity use an approximate method, all others use an exact method.

Current Market Value is based on prices from Trustee/ Custodian Statements or bid prices from the Wall Street Journal as of 01/31/2016



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LEC Financial Reports

AGENDA ITEM NO.: 8

Date: February 8, 2016

Subject: January 31, 2016 Financial Reports (Unaudited)

**NORTHERN CALIFORNIA POWER AGENCY
LODI ENERGY CENTER
STATEMENTS OF NET POSITION
UNAUDITED**

	January 31	
	2016	2015
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	\$ 71,066	\$ 70,913
Interest receivable	48,105	18,468
Inventory and supplies - at average cost	1,585,927	1,353,389
Prepaid insurance	464,039	-
Due from (to) Agency, net	19,287,224	25,822,755
TOTAL CURRENT ASSETS	21,456,361	27,265,525
RESTRICTED ASSETS		
Cash and cash equivalents	11,851,733	9,399,564
Investments	21,977,097	22,935,241
Interest receivable	19,711	28,514
TOTAL RESTRICTED ASSETS	33,848,541	32,363,319
ELECTRIC PLANT		
Electric plant in service	423,412,179	423,372,867
Less: accumulated depreciation	(46,250,514)	(31,650,465)
	377,161,665	391,722,402
Construction work-in-progress	95,332	3,425
TOTAL ELECTRIC PLANT	377,256,997	391,725,827
OTHER ASSETS		
Regulatory assets	17,774,272	15,137,046
TOTAL OTHER ASSETS	17,774,272	15,137,046
TOTAL ASSETS	\$ 450,336,171	\$ 466,491,717

**NORTHERN CALIFORNIA POWER AGENCY
LODI ENERGY CENTER
STATEMENTS OF NET POSITION
UNAUDITED**

	January 31	
	2016	2015
LIABILITIES & NET POSITION		
CURRENT LIABILITIES		
Accounts and retentions payable	\$ 2,074,848	\$ 4,901,394
Operating reserves	14,795,055	12,474,923
Current portion of long-term debt	9,480,000	9,025,000
Accrued interest payable	2,821,690	2,876,821
TOTAL CURRENT LIABILITIES	29,171,593	29,278,138
NON-CURRENT LIABILITIES		
Operating reserves and other deposits	5,491,151	982,012
Long-term debt, net	362,028,461	372,289,434
TOTAL NON-CURRENT LIABILITIES	367,519,612	373,271,446
TOTAL LIABILITIES	396,691,205	402,549,584
DEFERRED INFLOWS OF RESOURCES		
Regulatory credits	43,714,134	45,767,842
NET POSITION		
Invested in capital assets, net of related debt	(8,326,889)	(8,447,341)
Restricted	13,671,263	16,732,424
Unrestricted	4,586,458	9,889,208
TOTAL NET POSITION	9,930,832	18,174,291
TOTAL LIABILITIES AND NET POSITION	\$ 450,336,171	\$ 466,491,717

**NORTHERN CALIFORNIA POWER AGENCY
LODI ENERGY CENTER
STATEMENT OF REVENUES, EXPENSES
& CHANGES IN NET POSITION
UNAUDITED**

	Seven Months Ended January 31	
	2016	2015
SALES FOR RESALE		
Participants	\$ 19,375,156	\$ 22,620,971
Other	31,624,429	43,187,079
TOTAL SALES FOR RESALE	50,999,585	65,808,050
OPERATING EXPENSES		
Operations	22,316,599	33,274,527
Depreciation	8,516,901	8,516,110
Purchased power	3,899,088	-
Maintenance	4,440,532	3,758,849
Administrative and general	2,428,481	3,001,946
Transmission	389,192	4,255,909
Intercompany (sales) purchases	138,820	313,815
TOTAL OPERATING EXPENSES	42,129,613	53,121,156
NET OPERATING REVENUES	8,869,972	12,686,894
OTHER REVENUES (EXPENSES)		
Interest expense	(9,471,551)	(9,606,828)
Interest income	169,686	113,910
Other	3,032,380	2,322,760
TOTAL OTHER REVENUES (EXPENSES)	(6,269,485)	(7,170,158)
FUTURE RECOVERABLE AMOUNTS	1,383,555	2,518,896
REFUNDS TO PARTICIPANTS	1,414,799	530,871
INCREASE IN NET POSITION	5,398,841	8,566,503
NET POSITION		
Beginning of year	4,531,991	9,607,788
End of period	\$ 9,930,832	\$ 18,174,291

**Lodi Energy Center
FY 2016 Operating Costs
As of January 31, 2016**

	Annual Budget	Actual	Remaining	YTD % Remaining	Notes
Routine O&M Costs					
Variable	\$ 4,844,523	\$ 2,485,310	\$ 2,359,213	49%	B
Fixed	1,780,003	1,318,902	461,101	26%	
Administration	1,316,163	600,165	715,998	54%	
Mandatory Costs	235,000	127,226	107,774	46%	
Inventory Stock	400,000	111,487	288,513	72%	
Routine O&M Costs without Labor	8,575,689	4,643,090	3,932,599	46%	
Labor	4,381,034	2,347,486	2,033,548	46%	
Total Routine O&M Cost	12,956,723	6,990,576	5,966,147	46%	
Other Costs					
Fuel	49,851,536	18,906,285	30,945,251	62%	A
CA ISO Charges	657,289	389,192	268,097	41%	
CA ISO Purchased Energy	-	3,899,088	(3,899,088)	N/A	C
Debt Service	26,440,994	15,427,816	11,013,178	42%	
Insurance	820,000	478,333	341,667	42%	
Other Costs	56,875	44,933	11,942	21%	
Generation Services Shared	388,592	130,386	258,206	66%	
Administrative & General (Allocated)	1,905,508	890,324	1,015,184	53%	
Power Management Allocated Costs	1,228,543	716,650	511,893	42%	
Total O&M Cost	94,306,060	47,873,583	46,432,477	49%	
Projects					
Operations & Maintenance	371,740	132,289	239,451	64%	
Capital	782,849	54,350	728,499	93%	
Maintenance Reserve	1,800,000	1,050,000	750,000	42%	
Total Projects	2,954,589	1,236,639	1,717,950	58%	
Annual Cost	97,260,649	49,110,222	48,150,427	50%	
Less: Third Party Revenue					
Interest Income	44,489	104,832	(60,343)	-136%	
ISO Energy Sales	67,279,734	30,704,052	36,575,682	54%	
Ancillary Services Sales	1,616,222	920,377	695,845	43%	
Other Income	-	1,136	(1,136)	N/A	
	68,940,445	31,730,397	37,210,048	54%	
Net Annual Cost to Participants	\$ 28,320,204	\$ 17,379,825	\$ 10,940,379	39%	
Total Variable Costs	55,353,348	21,780,787	33,572,561		
Total Fixed Costs	41,907,301	27,329,435	14,577,866		
	<u>\$ 97,260,649</u>	<u>\$ 49,110,222</u>	<u>\$ 48,150,427</u>		
Net Cumulative Generation (MWh)	1,605,494	842,737			
Total O&M Cost Per MWh	\$ 58.74	\$ 56.81			
Net Annual Cost Per MWh	\$ 17.64	\$ 20.62			

Footnotes:

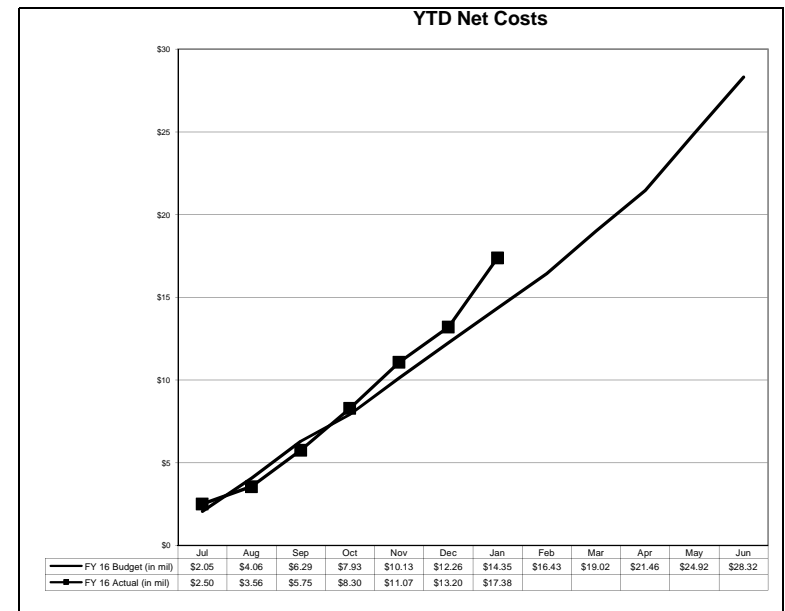
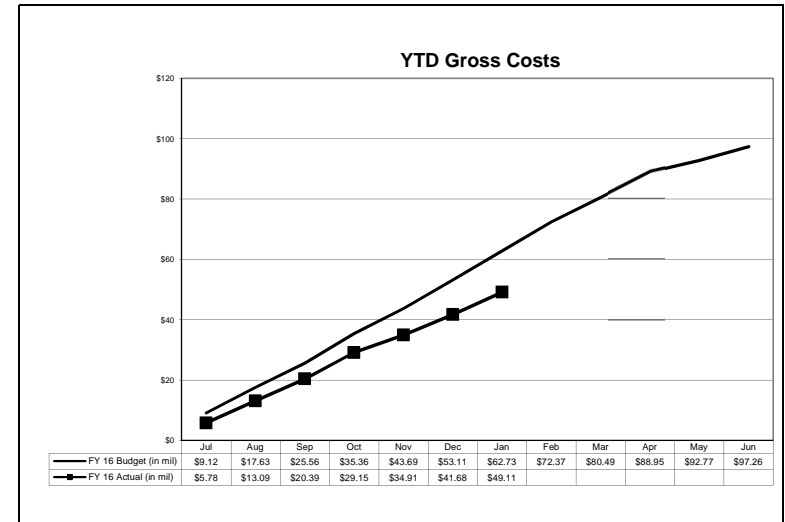
General - January payroll, A&G allocation and generation services allocation are estimated.

A - Non-budgeted costs due to CA ISO calls for regulation down resulting in additional market purchases and

Participants purchasing energy from CA ISO using LEC as the SC.

B - Higher costs due to maintenance and clean out of water treatment system. Variance expected to level out during the year.

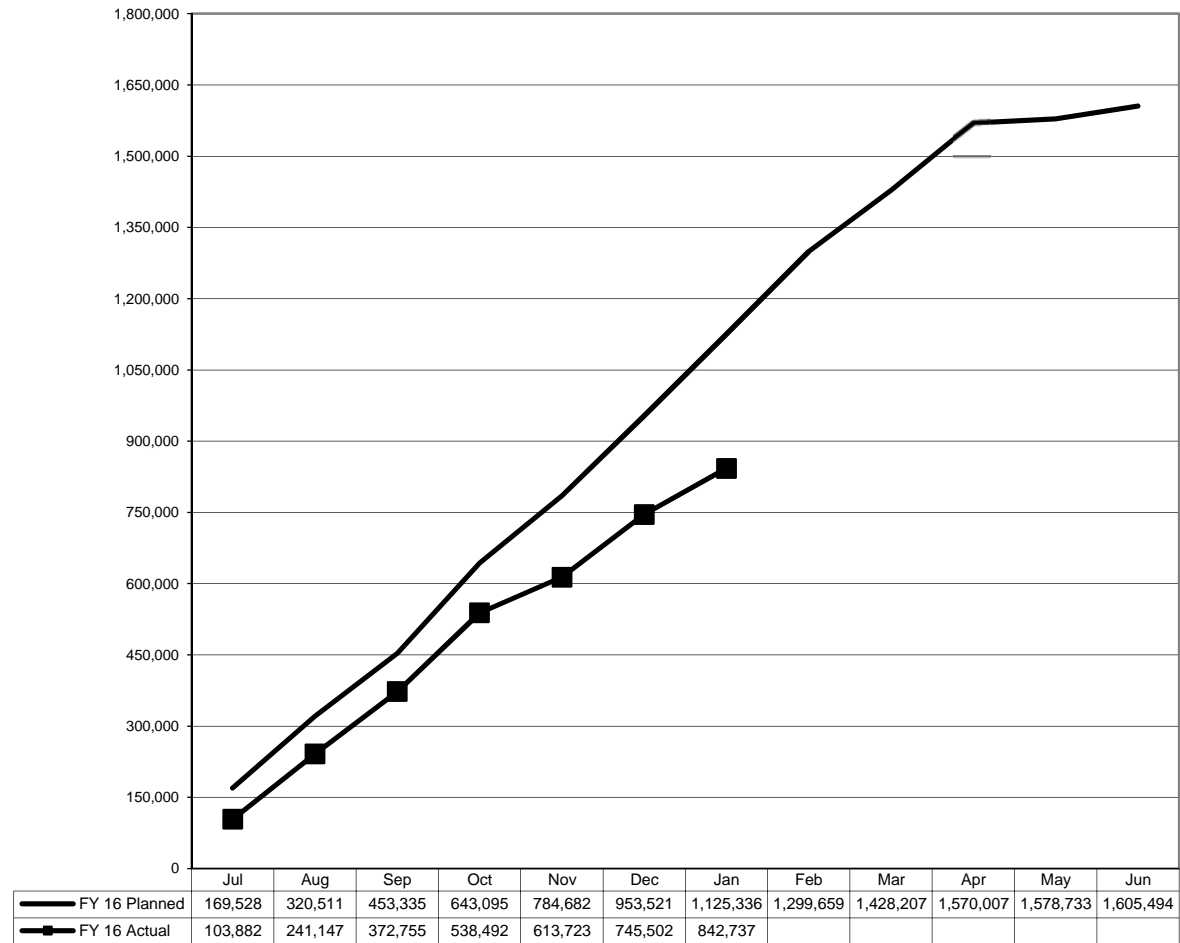
C - Higher costs due to annual trustee fee paid during month. Variance expected to level out during the year.



Annual Budget LEC Generation Analysis Planned vs. Actual FY 2016

In MWh

Lodi Energy Center





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LEC GHG Reports

AGENDA ITEM NO.: 9

Date: February 8, 2016

Subject: GHG Reports (excerpted from monthly ARB)

2013 NCPA All Resources Bill LEC GHG Compliance Instrument Detail Report
for the Lodi Energy Center

IDENTIFIER	Actual													Compliance Year 2013 Total
	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	
Energy (MWh)	0	82,787	101,925	128,167	134,284	32,545	80,153	122,492	94,615	92,091	98,739	105,078	138,068	1,210,944
Gas Schedule (MMBtu)	0	593,484	723,038	894,657	952,529	229,724	579,650	870,331	673,965	650,250	692,396	738,008	965,292	8,563,324
Emissions Factor (MT/MMBtu)	0	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	
HVAC/Water Heater (MT)													86,000	
Monthly MT Emissions (MT)	0	32,027	39,019	48,280	51,403	12,397	31,281	46,967	36,371	35,091	37,365	39,827	52,178	462,206
Cumulative MT Obligation (MT)	0	32,027	71,046	119,326	170,730	183,127	214,407	261,375	297,745	332,836	370,201	410,028	462,206	462,206
Compliance Instrument Participant Transfers (to LEC)														
Auction Allowances	92,695	5,350	0	13,644	105,000	50,632	30,628	1,600	102,200	12,594	0	0	46,290	460,633
Secondary Market Allowances	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reserve Sale Allowances	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsets	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Compliance Instrument Participant Transfers (MT)	92,695	5,350	0	13,644	105,000	50,632	30,628	1,600	102,200	12,594	0	0	46,290	460,633
NCPA Compliance Instrument Purchases (for LEC)														
Auction Purchases	47,000	0	0	0	0	0	0	0	0	0	0	0	0	47,000
Secondary Market Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reserve Sale Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offset Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NCPA Compliance Instrument Purchases (MT)	47,000	0	0	0	0	0	0	0	0	0	0	0	0	47,000
Compliance Instruments Surrendered to CARR (MT)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Monthly Activity (MT)	139,695	5,350	0	13,644	105,000	50,632	30,628	1,600	102,200	12,594	0	0	46,290	507,633
Cumulative MT Account Balance [MTA] (MT)	139,695	145,045	145,045	158,689	263,689	314,321	344,949	346,549	448,749	461,343	461,343	461,343	507,633	507,633
MTA Shortfall (MT)	(139,695)	(113,018)	(73,999)	(39,363)	(92,959)	(131,194)	(130,542)	(85,174)	(151,004)	(128,507)	(91,142)	(51,315)	(45,427)	(45,427)

2014 NCPA All Resources Bill LEC GHG Compliance Instrument Detail Report for the Lodi Energy Center													
IDENTIFIER	Actual												Compliance Year 2014 Total
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	
Energy (MWh)	136,604	156,089	120,489	55,378	71,210	51,037	118,473	69,006	178,831	197,715	51,636	106,338	1,312,806
Gas Schedule (MMBtu)	951,700	1,092,730	858,805	391,272	512,068	371,695	836,762	496,327	1,251,547	1,371,546	372,826	759,691	9,266,969
Emissions Factor (MT/MMBtu)	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	
HVAC/Water Heater (MT)												173,000	
Monthly MT Emissions (MT)	51,358	58,969	46,345	21,115	27,634	20,059	45,156	26,784	67,540	74,015	20,120	41,170	500,265
Cumulative MT Obligation (MT)	513,564	572,533	618,879	639,994	667,628	687,686	732,842	759,626	827,166	901,181	782,385	823,555	823,555
Compliance Instrument Participant Transfers (to LEC)													
Auction Allowances	102,347	50,000	48,066	25,000	1,290	138,448	0	0	13,586	50,520	100,350	350	529,957
Secondary Market Allowances	0	0	0	0	0	0	0	0	0	0	0	0	0
Reserve Sale Allowances	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsets	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Compliance Instrument Participant Transfers (MT)	102,347	50,000	48,066	25,000	1,290	138,448	0	0	13,586	50,520	100,350	350	529,957
NCPA Compliance Instrument Purchases (for LEC)													
Auction Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary Market Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Reserve Sale Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Offset Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NCPA Compliance Instrument Purchases (MT)	0	0	0	0	0	0	0	0	0	0	0	0	0
Compliance Instruments Surrendered to CARB (MT)	0	0	0	0	0	0	0	0	0	0	138,916	0	138,916
Total Monthly Activity (MT)	102,347	50,000	48,066	25,000	1,290	138,448	0	0	13,586	50,520	100,350	350	529,957
Cumulative MT Account Balance [MTA] (MT)	609,980	659,980	708,046	733,046	734,336	872,784	872,784	872,784	886,370	936,890	898,324	898,674	898,674
MTA Shortfall (MT)	(96,416)	(87,447)	(89,167)	(93,052)	(66,708)	(185,098)	(139,942)	(113,158)	(59,204)	(35,709)	(115,939)	(75,119)	(75,119)

	2015 NCPA All Resources Bill LEC GHG Compliance Instrument Detail Report for the Lodi Energy Center												
	Actual												Compliance Year 2015
IDENTIFIER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	Total
Energy (MWh)	196,019	151,600	184,507	181,244	91,067	142,275	103,883	137,266	131,608	165,737	75,231	131,779	1,692,216
Gas Schedule (MMBtu)	1,368,474	1,073,330	1,299,294	1,269,481	646,027	1,009,450	740,553	971,283	927,730	1,171,129	541,136	940,340	11,958,227
Emissions Factor (MT/MMBtu)	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	
HVAC/Water Heater (MT)													
Monthly MT Emissions (MT)	73,850	57,922	70,116	68,508	34,863	54,475	39,964	52,415	50,065	63,200	29,202	50,745	645,326
Cumulative MT Obligation (MT)	897,404	955,327	1,025,443	1,093,951	1,128,814	1,183,288	1,223,252	1,275,668	1,325,733	1,388,933	592,071	642,816	642,816
Compliance Instrument Participant Transfers (to LEC)													
Auction Allowances	41,342	250	250,100	15,000	86,000	107,327	104,000	0	0	58,201	375	0	662,595
Secondary Market Allowances	0	0	0	0	0	0	0	0	0	0	0	0	0
Reserve Sale Allowances	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsets	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Compliance Instrument Participant Transfers (MT)	41,342	250	250,100	15,000	86,000	107,327	104,000	0	0	58,201	375	0	662,595
NCPA Compliance Instrument Purchases (for LEC)													
Auction Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary Market Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Reserve Sale Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Offset Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NCPA Compliance Instrument Purchases (MT)	0	0	0	0	0	0	0	0	0	0	0	0	0
Compliance Instruments Surrendered to CARB (MT)	0	0	0	0	0	0	0	0	0	0	826,064	0	826,064
Total Monthly Activity (MT)	41,342	250	250,100	15,000	86,000	107,327	104,000	0	0	58,201	375	0	662,595
Cumulative MT Account Balance [MTA] (MT)	940,016	940,266	1,190,366	1,205,366	1,291,366	1,398,693	1,502,693	1,502,693	1,502,693	1,560,894	735,205	735,205	735,205
MTA Shortfall (MT)	(42,612)	15,061	(164,923)	(111,415)	(162,552)	(215,405)	(279,441)	(227,025)	(176,960)	(171,961)	(143,134)	(92,389)	(92,389)

	2016 NCPA All Resources Bill LEC GHG Compliance Instrument Detail Report for the Lodi Energy Center									
	Estimated						Compliance Year 2016	Cumulative Totals		
IDENTIFIER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	Total	Total	Charge Code	Source
Energy (MWh)	101,212	91,202	101,212	81,192	55,055	53,386	483,258	4,699,225		Forecast/Meter
Gas Schedule (MMBtu)	708,482	638,413	708,482	568,343	385,383	373,705	3,382,808	33,171,329		Forecast/Meter
Emissions Factor (MT/MMBtu)	0.054	0.054	0.054	0.054	0.054	0.054				MARS
HVAC/Water Heater (MT)										
Monthly MT Emissions (MT)	38,233	34,452	38,233	30,671	20,797	20,167	182,553	1,607,796		derived
Cumulative MT Obligation (MT)	681,050	715,502	753,735	784,406	805,203	825,370	825,370	825,370		derived
Compliance Instrument Participant Transfers (to LEC)										
Auction Allowances	211,481	0	0	0	0	0	211,481	1,864,666		CITSS
Secondary Market Allowances	0	0	0	0	0	0	0	0		CITSS
Reserve Sale Allowances	0	0	0	0	0	0	0	0		CITSS
Offsets	0	0	0	0	0	0	0	0		CITSS
Total Compliance Instrument Participant Transfers (MT)	211,481	0	0	0	0	0	211,481	1,864,666		
NCPA Compliance Instrument Purchases (for LEC)										
Auction Purchases	0	0	0	0	0	0	0	47,000		CITSS
Secondary Market Purchases	0	0	0	0	0	0	0	0		CITSS
Reserve Sale Purchases	0	0	0	0	0	0	0	0		CITSS
Offset Purchases	0	0	0	0	0	0	0	0		CITSS
Total NCPA Compliance Instrument Purchases (MT)	0	0	0	0	0	0	0	47,000		
Compliance Instruments Surrendered to CARB (MT)	0	0	0	0	0	0	0	964,980		CITSS
Total Monthly Activity (MT)	211,481	0	0	0	0	0	211,481	1,911,666		derived
Cumulative MT Account Balance [MTA] (MT)	946,686	946,686	946,686	946,686	946,686	946,686	946,686	946,686		derived
MTA Shortfall (MT)	(265,636)	(231,184)	(192,951)	(162,280)	(141,483)	(121,316)	(121,316)	(121,316)	MTA SHORTFALL	derived

Forecast has been updated through June 2016

NCPA All Resources Bill LEC GHG Obligation Detail Report (Cumulative) February 2016																
IDENTIFIER	AZUSA	BART	BIGGS	CDWR	GRI	HEA	LOD	LOM	MID	PLU	PWRPA	SNCL	UKI	TOTAL	Charge Code	Source
Allocation Percentages																
Generation Entitlement Share %	2.7857%	6.6000%	0.2679%	33.5000%	1.9643%	1.6428%	9.5000%	2.0357%	10.7143%	0.7857%	2.6679%	25.7500%	1.7857%	100%		MARS
Obligation Accounts																
Current MT Compliance Obligation (MTO) Balance (MT)	19,994	47,371	1,923	240,447	14,099	11,792	67,196	14,562	76,902	5,638	19,149	184,821	15,298	719,192		derived
Current MT Compliance Instrument Account (MTA) Balance (MT)	17,969	56,754	2,343	333,572	17,493	14,083	82,692	24,578	114,878	5,682	20,609	224,215	16,090	930,958		derived
MTA Shortfall (MT)	2,025	(9,382)	(420)	(93,125)	(3,394)	(2,291)	(15,496)	(10,016)	(37,976)	(43)	(1,460)	(39,394)	(792)	(211,766)	MTA SHORTFALL	Derived
Monthly GHG Price \$/MT	12.83	12.83	12.83	12.83	12.83	12.83	12.83	12.83	12.83	12.83	12.83	12.83	12.83	12.83	MTA SHORTFALL	ICE Index
GHG Minimum Cash Compliance Obligation (\$)	25,980	0	0	0	0	0	0	0	0	0	0	0	0	25,980	MTA SHORTFALL	Derived
Current Month CCA Balance (\$)*	60,991	0	143	0	1,103	4,780	755	0	0	0	0	0	2,652	70,424	CCA BALANCE	Accounting
Net GHG Obligation (\$)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NET GHG OBLIG	Derived

* The Current Month CCA Balance (\$) consists of the current cash balance plus any outstanding balance of Net GHG Obligation (\$) billed but not yet received.



Lodi Energy Center Project Participant Committee

Staff Report

AGENDA ITEM NO.: 10

Date: February 4, 2016
To: Lodi Energy Center Project Participant Committee
Subject: Lodi Energy Center Hot Gas Path Outage Project - May 2016

Proposal

Staff recommends that the PPC approve authorization of the NCPA General Manager to execute agreements and purchase orders for maintenance work related to the Lodi Energy Center (LEC) Hot Gas Path Outage Project, for a total cost not-to-exceed \$4,880,000; and report back to the PPC upon completion of the project.

Background

The Lodi Energy Center has an outage scheduled for May 1-29 for work related to the hot gas path. During the Hot Gas Path outage, the LEC team will complete preventative maintenance work on all of the primary pumps, motors, and ancillary equipment that cannot be worked on while the unit is operating without affecting the output of the facility. NCPA will hire a number of contractors to perform work during Hot Gas Path outage.

Listed below is a summary of the work to be performed as a part of the Hot Gas Path:

1. Gas Turbine hot gas inspection (HGP) + true up cost
2. Steam Turbine limited overhaul inspection (valves and borescope inspection)
3. HRSG insulation (multiple hot spots/leaks)
4. Replace Gas Turbine flow shield and expansion joint
5. Gas Relief valves inspection and testing
6. Hot Reheat bypass valve repair and inspection, includes safety bulletin (bonnet bolts replacement)
7. Anhydrous ammonia NDT tank inspection (UT) and relief valve replacement
8. Gas turbine Starting motor attached lube oil seal replacement
9. HRSG Liner repairs to include new floor insulation
10. Install isolation valves on gas turbine hydraulic oil system (IGV & gas valves)
11. Cooling Tower fan blade inspection (blade pitch, bolts & external gear box inspection)
12. Steam Turbine insulation pad repairs
13. Scaffolding throughout facility for access to equipment
14. Water treatment maintenance (mix tank, clarifier's cleaning and inspection)
15. Exciter Blowers check valve modification and B blower installation

Selection Process

All of the work that is not already covered under the Long Term Maintenance Agreement will be bid per the NCPA purchasing policies and manuals.

Fiscal Impact

Hot Gas Path Outage Work	Anticipated Cost
Gas Turbine Hot Gas Inspection + True-up cost	\$3,900,000
Steam Turbine limited overhaul inspection (valves and borescope inspection)	\$300,000
Balance of cost for BOP work listed in summary	\$680,000
Total Cost	\$4,880,000

The budgetary funds to complete the Hot Gas Path Outage Project are categorized as follows:

NCPA has \$4,180,000 of pre-collected funds in the Maintenance Reserve to do the Hot Gas Path Outage Project (Account # 265-009-005-610-044-002).

The remainder of funds, \$700,000 was anticipated in the routine budget and has been accounted for in Asset Report projections.

Recommendation

Staff recommends that the PPC approve authorization of the General Manager to execute agreements and purchase orders for maintenance work related to the Lodi Energy Center Hot Gas Path Outage Project, for a total cost not-to-exceed \$4,880,000; and report back to the PPC upon completion of the project.

Prepared by:

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