

**TURN DATA REQUEST-046**  
**SDG&E-SOCALGAS 2019 GRC – A.17-11-007/8**  
**SDG&E\_SOCALGAS RESPONSE**  
**DATE RECEIVED: APRIL 18, 2018**  
**DATE RESPONDED: MAY 8, 2018**

1. Please provide a narrative explanation for the fluctuation in spending on a year-by-year basis for Account 1EG003.000 (Generation Plant Palomar) in the historical period of 2012-2016. In particular, explain why non-labor expenses varied between \$12,238,000 and \$20,752,000, and identify and briefly describe the planned and unplanned maintenance events that contributed to the amounts recorded as non-labor expenses in 2014 being higher than the other years. (SDG&E-16-WP page 5)

**Utility Response 1:**

The \$18,005,000 Recorded-Adjusted Non-labor expense in 2012 includes costs due to repair of the steam turbine and some large steam valves.

The \$20,752,000 Recorded-Adjusted Non-labor expense in 2014 was due to the performance of a Major Outage at the Palomar plant. This outage includes overhauls of the turbine generators and extensive work performed in the entire plant.

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2. Please provide a narrative explanation for the fluctuation in spending on a year-by-year basis for Account 1EG006.000 (Generation Plant Desert Star) in the historical period of 2012-2016. In particular, explain why non-labor expenses varied between \$5,173,000 and \$13,642,000, and identify and briefly describe the planned and unplanned maintenance events that contributed to the amounts recorded as non-labor expenses in 2014 being higher than the other years. (SDG&E-16-WP page 13)

**Utility Response 2:**

In 2014 Desert Star combustion turbine #1 (CT1) experienced a planned major overhaul on the combustion turbine, and a generator major inspection with re-wedging of the stator. Also, the steam turbine (ST) experienced a planned major overhaul on the high pressure, intermediate pressure, and low pressure turbines, as well as a major inspection on the ST generator. Although the parts and labor used during the combustion turbine major are covered under the Long Term Service Agreement (LTSA), the 2 generators and the steam turbine are not covered. Also contributing the increased 2014 non-labor expenses are additional crane services and insulation work not needed in a typical year in which turbine major inspections are not conducted.

In 2015 Desert Star combustion turbine #2 (CT2) experienced a planned major overhaul on the combustion turbine, and generator major inspection with re-wedging of the stator. Although the parts and labor used during the combustion turbine major are covered under the (LTSA), the generator is not covered. Also contributing the increased 2015 non-labor expenses are additional crane services and insulation work not needed in a year in which turbine major inspections are not conducted.

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3. Please explain why labor costs were much higher for Cuyamaca Peak in 2012 than in other years. (SDG&E-16 WP page 27)

**Utility Response 3:**

The Cuyamaca Peak plant was acquired by SDG&E in 2012 (Decision 11-12-002). The higher Recorded-Adjusted Labor costs in 2012 include the additional time for Operations and Maintenance personnel to bring the condition of the plant to SDG&E standards, and to train on the plant operation.

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4. Please explain why property insurance is included in costs for Otay Mesa separately instead of including Otay Mesa in SDG&E's company-wide property insurance. (SDG&E-16 WP page 34)

**Utility Response 4:**

SDG&E's 2019 forecast property insurance costs for the Otay Mesa Energy Center were not included in the insurance cost forecast of SDG&E witness Neil K. Cayabyab (Exhibit SDG&E-27) because SDG&E does not yet own the Otay Mesa Energy Center. However, SDG&E expects to include the property insurance for the Otay Mesa Energy Center in its overall insurance forecast in future GRCs.

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5. Please provide the basis for Otay Mesa property insurance costs estimated by SDG&E. (SDG&E-16 WP page 34)

**Utility Response 5:**

Please see SDG&E's response to Question 10.b. of TURN DR-023 (submitted to TURN on March 19, 2018).

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6. Please provide calculations supporting the estimate of Otay Mesa rent payments forecasted by SDG&E for the 2019 test year.

**Utility Response 6:**

Please see SDG&E's response to Question 10.b of TURN DR-023 (submitted to TURN on March 19, 2018).

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7. Please provide relevant portions of the Desert Star lease that show annual costs and escalation rates.

**Utility Response 7:**

Please see attached file “TURN\_Data Request R-047\_Q7\_DSEC Lease Agreement.pdf” (section 3.1 and 3.2 of the Lease Agreement).

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8. Please provide the amount spent on the Desert Star lease in each year from 2012-2017 recorded.

**Utility Response 8:**

Please see attached file "TURN\_Data Request-047\_Q8\_DSEC Lease Payments.xlsx



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9. Please identify the number of operating hours, hot starts, cold starts and MWh for each year from 2012-2017 recorded for each combustion turbine and each steam turbine at each of the Palomar, Desert Star, Miramar, Cuyamaca Peak plants. Provide for Otay Mesa if available.

**Utility Response 9:**

Refer to the attached file “TURN Data Request-047-Q9 Plants Hours, Starts, MWh-CONFIDENTIAL.xlsx” for requested operating data for the Palomar, Desert Star, Miramar, Cuyamaca, and OMEC power plants. **The highlighted portions of this file are considered to be Confidential Pursuant to PU Code Section 583, General Order 66-D and D.17-09-023.**

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10. Please identify each type of overhaul required to combustion turbines and steam turbines at Palomar, Desert Star, and Otay Mesa, the periods between overhauls, the dates of any overhauls that have occurred since 2010 on a recorded basis, and the projected dates of such overhauls expected in 2018 through 2021.

**Utility Response 10:**

Refer to the attached file “TURN Data Request-047-Q10 Overhauls-CONFIDENTIAL.pdf”.

The highlighted portions of the file, containing overhaul information for the Palomar and Desert Star plants, are considered to be Confidential Pursuant to PU Code Section 583, General Order 66-D and D.17-09-023. Since the Otay Mesa power plant is not owned and operated by SDG&E, the overhaul information for Otay Mesa is not available.

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11. Please provide the terms of Long Term Service Agreements for 2012-2017 for Desert Star (costs per start and per hour run, and annual escalation mechanisms, and costs paid at the time of various types of inspection and maintenance events) and similar forecast LTSA terms and costs for Otay Mesa.

**Utility Response 11:**

DSEC LTSA terms for 2012-2017 have been renegotiated twice during the reporting period 2012-2017. The first negotiation took effect July 2014, and covered all date ranges until July 2016, when the second negotiation took effect.

Please see attached file “TURN\_DR-047\_Q11\_DSEC LTSA-CONFIDENTIAL.xlsx” for terms, rates, and escalation. **This file is considered Confidential Pursuant to PU Code Section 583, General Order 66-D and D.17-09-023.**

In response to the request to provide costs paid at the time of various types of inspection and maintenance events, this would include various items that Desert Star is contractually obligated to provide to conduct the various LTSA inspection and maintenance events. These items would include scaffold building and teardown, insulation removal and installation, cranes and crane operators, and instrumentation and electrical support, and break trailer rental, to name just a few. Since all of these items and activities also have charges to Desert Star for the other outage activities that are not related to the LTSA activities during all maintenance events, it would not be possible to separate the LTSA required costs for these items.

With respect to Otay Mesa, SDG&E does not own or operate the Otay Mesa plant, so SDG&E does not have access to the Otay Mesa LTSA, if one even exists for the plant.

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12. Please disaggregate the forecast LTSA costs for Otay Mesa from other plant costs.

**Utility Response 12:**

See SDG&E's response to Question 11 above with respect to Otay Mesa.

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13. For each of Palomar and Desert Star, please identify the total cost paid for LTSAs in each year from 2012 to 2017 in real and nominal dollars.

**Utility Response 13:**

Please refer to below amounts for total cost paid for LTSAs for Years 2012 to 2017.

<u>Plant</u>	<u>Year</u>	<u>Nominal Dollars</u>	<u>Real Dollars</u>
Palomar	2012	\$7,833,438	\$8,009,719
	2013	\$6,944,776	\$7,016,864
	2014	\$1,547	\$1,547
Desert Star	2012	\$10,063,849	\$10,290,322
	2013	\$10,270,349	\$10,376,957
	2014	\$7,195,120	\$7,197,277
	2015	\$8,596,648	\$8,604,021
	2016	\$5,599,652	\$5,599,652
	2017	\$5,276,210	\$5,201,471

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14. For Palomar, please identify the changes in costs that resulted from terminating the LTSA in 2014 (SDG&E-16-CWP 25 references the termination).

**Utility Response 14:**

The primary change in cost is there is no longer a monthly LTSA payment. However, the maintenance costs covered by the LTSA are now paid as the maintenance is needed.

To identify the change in costs resulting from the LTSA termination, costs must be compared over a complete Combustion Turbine Generators (CTGs) and Steam Turbine Generator (STG) Maintenance Cycle. The complete Maintenance Cycle include the performance of Minor and Major outages. The first Maintenance Cycle started in 2006 completing after the first Major outage in 2014. The LTSA was terminated shortly after the completion of the Major outage. The current maintenance cycle will not finish until after the next Major outages. The Major outage for the STG is forecast for 2022 and for the CTGs in 2024.

However, the comparison of costs between the LTSA Maintenance Cycle and the non-LTSA Maintenance Cycle is not a straight forward matter. There are differences due to possible variations in cost factors, such as: the costs of replacement hardware, the costs of refurbishment of turbine hardware, market competition, and the life cycles of the equipment. Refer to the response to Question 15 below that shows a reduction in overall costs for the term of the forecast.

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15. Please provide contemporaneous documentation supporting the decision to terminate the Palomar LTSA in 2014, demonstrating that such termination would be beneficial to ratepayers.

**Utility Response 15:**

For contemporaneous documentation supporting the decision to terminate the Palomar LTSA in 2014, refer to in the attached file “TURN Data Request-047-Q15 2016 GRC-SDGE-11-WP.pdf” of the 2016 GRC SDGE-Generation O&M Workpapers, Page 6-7 showing forecasted 1/3 of Maintenance Overhaul Expenses of \$6,506 (in thousands of dollars) for planned Hot Gas Path and Major outage periods for Years 2014-2016. This compares to Adjusted LTSA out of historical data costs for Years 2009-2013, referred to in the attached file “TURN Data Request-047-Q15 2016 GRC-SDGE-11-WP.pdf” of 2016 GRC SDGE-Generation O&M Workpapers, Page 9-10.

The response to ORA-DEF-024-MRL-Follow-Up, provides documentation for the forecasted 1/3 of Maintenance Overhaul Expenses for planned Hot Gas Path and Major outage periods for Years 2014-2016. Please refer to the following files in the attached file “TURN Data Request-047-Q15 SDGE’s Response to ORA-DEF-024-MRL-Follow-Up CONFIDENTIAL INFORMATION,” for this documentation. **These files are considered to be Confidential Pursuant to PU Code Section 583, General Order 66-D and D.17-09-023.**

1. CONFIDENTIAL ORA-DEF-024-MRL Follow-Up Attachment.xlsx. This file shows the summary forecast estimate of the Yearly Adjustment for Maintenance Overhaul Expenses. Refer to Worksheet “1.b.ii” and Excel cell value D7” in the file.
2. CONFIDENTIAL Outage Expense.xlsx. This file shows the detail of the annual estimate to complete balance of plant repairs. Refer to Worksheet “SVCS” and Excel cell value S47 in the file.
3. CONFIDENTIAL Palomar\_Base\_20131028.xls. This file shows the annual estimated costs for self-performed maintenance costs. Refer to Worksheet “LTSA Detail by Year” and Excel value E70 in the file.

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16. Regarding the installation of a steam turbine-generator (STG) gantry crane at Palomar in 2013 (SDG&E-16-CWP, p. 25), (a) when was it installed in 2013; (b) please identify O&M expenses for STG crane rentals in 2012-2013 at Palomar; (c) please explain why STG crane rentals in 2012-2013 should be included in the five-year average given that the new gantry crane means that those rentals will no longer occur.

**Utility Response 16:**

16. (a) The steam turbine-generator (STG) gantry crane was installed in May 2013.

(b) O&M expenses for STG crane rentals in 2012-2013 at Palomar are \$821,680, stated in nominal dollars.

(c) Most of the O&M expenses for STG crane rentals in 2012-2013 should not have been included in the five-year average. A smaller dollar amount for repair and maintenance associated with Heat Recovery Steam Generator and other steam plant not accessible by the gantry crane will continue to be performed and therefore should remain in Years 2012-2013 for calculation of the five-year average. Additional time will be needed to identify these expenses.



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17. Regarding the installation of a combustion turbine bridge crane at Palomar in 2013 (SDG&E-16-CWP, p. 25), (a) when was it installed in 2013; (b) please identify O&M expenses for CT bridge crane rentals in 2012-2013 at Palomar; (c) please explain why CT bridge crane rentals in 2012-2013 should be included in the five-year average given that the new bridge crane means that those rentals will no longer occur.

**Utility Response 17:**

17. (a) The combustion turbine bridge crane was installed in December 2013.

(b) O&M expenses for combustion turbine bridge crane rentals in 2012-2013 at Palomar are \$68,279.

(c) Most of the O&M expenses for the combustion turbine bridge crane rental should not have been included in the five-year average. A smaller dollar amount for repair and maintenance associated with other generation plant not accessible by the combustion turbine crane will continue to be performed and therefore should remain in Years 2012-2013 for calculation of the five-year average. Additional time will be needed to identify these expenses.

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18. The following questions refer to SDG&E's purchase of three sets of Palomar Energy Center combustion turbine hot gas path hardware in 2014. (SDG&E-16-CWP page 25)

- a. Have any of those sets of hardware been used yet? If so, when?
- b. If any of these sets of hardware have not been used yet, when are they expected to be used?
- c. When hot-gas path hardware was installed in the past under the LTSA, was it paid for as a separate incremental expense, or was it covered by the LTSA payments?
- d. What is the accounting treatment of hot gas path hardware purchased in 2014? Is it held in inventory and then expensed when installed, as noted in SDG&E's testimony in the 2016 TY GRC (SDG&E-11, page CSL-15), or is it included in plant-in-service and depreciated?
- e. If the hot gas path hardware is held in inventory, please confirm that the \$30 million is included in the numbers in Mr. Gentes' materials and supplies figures (Ex. SDG&E-33).
- f. What is the depreciable life of hot gas path hardware if it is included in plant in service and depreciated?

**Utility Response 18:**

Please refer to the below responses regarding to SDG&E's purchase of three sets of Palomar Energy Center combustion turbine hot gas path hardware in 2014. (SDG&E-16-CWP page 25)

- a. No.
- b. Two sets of the combustion turbine hot gas path hardware are expected to be used in 2019, and the third set will be stored as a spare set.
- c. For the 2012 – 2017 period: hot-gas path hardware was installed in 2014. This cost was included in the LTSA payments.
- d. In the 2016 GRC SDG&E-11, page CSL-15 does not state that these parts will be expensed when installed. These parts are a major unit of property and will be reclassified from inventory to plant-in-service and depreciated when installed
- e. Yes, the \$30 million is included in the numbers in Mr. Gentes' materials and supplies figures (Ex. SDG&E-33)
- f. The blades will be depreciated over the remaining life of the plant.

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19. Please identify all specific projects with a recorded cost in excess of \$500,000 in the 2012-2016 capital expenditures for Miramar. For each such project provide spending by year and the in-service date. Describe in detail the \$10,214,000 spent in 2014 at Miramar and identify any costs of a new water treatment plant included at Miramar in the 2012-2016 period.

**Utility Response 19:**

Below are specific projects with a recorded cost in excess of \$500,000 in the 2012-2016 capital expenditures for Miramar, stated in nominal dollars.

Fiscal year	2012 Amount	2013 Amount	2014 Amount	2015 Amount	2016 Amount	Overall Result Amount	In-Service Date
MEF MAINTENANCE PLATFORMS	\$ 60,638	\$ 622,788	\$ 79,891			\$ 763,318	12/13/2013
MEF II HOT SCTN & HPC BLAD UPGD			\$ 1,721,676			\$ 1,721,676	10/30/2014
MEF EMERSON OVATION HMI & CONTR			\$ 1,909,201	\$ 9,726		\$ 1,918,927	10/30/2014
MEF LM6000 PC SPRINT ENGINE EXC			\$ 6,760,083			\$ 6,760,083	09/29/2014

Below is the list of projects spent in 2014 totaling \$10,467,817, stated in nominal dollars, referenced in SDG&E-16-CWP, Page 16.

Fiscal year	2014 Amount
MEF ENHANCED TRANSFRMR MONITOR	(3,388)
MEF ELECTRICAL UPGRADES	354
MEF MAINTENANCE PLATFORMS	79,891
MEF II HOT SCTN & HPC BLAD UPGD	1,721,676
MEF EMERSON OVATION HMI & CONTR	1,909,201
MEF LM6000 PC SPRINT ENGINE EXC	6,760,083
<b>Total</b>	<b>10,467,817</b>

The costs of the reverse osmosis water treatment system at Miramar during the 2012-2016 period are below, stated in nominal dollars. These costs are O&M and no capital costs were charged.

<u>Year</u>	<u>Dollar Amount</u>
2012	\$0
2013	\$0
2014	\$71,338
2015	\$119,969
2016	\$99,325

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20. Please identify all specific projects with a recorded cost in excess of \$500,000 in the 2012-2016 capital expenditures for Palomar. For each such project provide spending by year and the in-service date.

**Utility Response 20:**

Below are specific projects with a recorded cost in excess of \$500,000 in the 2012-2016 capital expenditures for Palomar, stated in nominal dollars.

Fiscal year	2012 Amount	2013 Amount	2014 Amount	2015 Amount	2016 Amount	Overall Result Amount	In-Service Date
PEC HRSG AND STACK PAINTING UPG				\$ 561,264		\$ 561,264	06/01/2015
PEC BLOWDOWN TANK DRAIN MANIFOL				\$ 19,348	\$ 627,515	\$ 646,863	10/27/2016
PEC CHILLER MKV/LE CONTROLS UPGD				\$ 304,905	\$ 378,564	\$ 683,469	06/17/2016
PEC PROGRAMMABLE LOGIC CONTROLL				\$ 24,283	\$ 679,465	\$ 703,748	06/17/2016
PEC MECHANICAL IMPROVEMENTS			\$ 154,165	\$ 155,326	\$ 467,944	\$ 777,435	Closed Monthly
PEC CTG1 CLOSED COOLING WATER	\$ 821,057					\$ 821,057	04/02/2012
PEC WATER LAB & RESTROOM	\$ 956,311					\$ 956,311	07/02/2012
GENRTN NTKW NERC/CYBER SEC UPG	\$ 609,104	\$ 190,007	\$ 299,397			\$ 1,098,508	10/07/2013
PEC HRSG ELEVATOR	\$ 428,085	\$ 758,889	\$ 2,109			\$ 1,189,082	10/28/2013
PEC SPARE GENERATOR STEPUP TRAN	\$ 1,349,071					\$ 1,349,071	04/02/2012
PEC HIGH ENERGY PIPING REPLACEM					\$ 1,724,855	\$ 1,724,855	10/27/2016
PEC EMERSON OVA TION HMI & CNTRL		\$ 80,923	\$ 2,649,086	\$ 365		\$ 2,730,374	04/08/2014
PEC COMBSTN TURBN BRIDGE CRANE	\$ 310,732	\$ 4,862,781	\$ 21,642			\$ 5,195,156	12/15/2013
PEC STG GANTRY CRANE	\$ 3,243,721	\$ 3,093,649	\$ 105,489		-\$ 9,990	\$ 6,432,869	05/28/2013
PEC STEAM TURBINE GENERATOR L-0					\$ 6,609,665	\$ 6,609,665	08/01/2016
PEC ADVANCED GAS PATH UPGRADE			\$ 30,000,000			\$ 30,000,000	10/01/2014

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20. Please identify all specific projects with a recorded cost in excess of \$500,000 in the 2012-2016 capital expenditures for Palomar. For each such project provide spending by year and the in-service date.

**Utility Response 20:**

The response to this question will be forthcoming.

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21. Please identify all specific projects with a recorded cost in excess of \$500,000 in the 2012-2016 capital expenditures for Desert Star. For each such project provide spending by year and the in-service date. Identify any specific projects (and their costs) that were undertaken after the change in ownership because SDG&E believed that the initial plant configuration needed to be changed to be consistent with utility ownership (similar to projects that SDG&E has identified at Otay Mesa).

**Utility Response 21:**

Below are specific projects with a recorded cost in excess of \$500,000 in the 2012-2016 capital expenditures for Desert Star, stated in nominal dollars.

Fiscal year	2012 Amount	2013 Amount	2014 Amount	2015 Amount	2016 Amount	Overall Result Amount	In-Service Date
DSEC SPRING HANG HRSG REHEATER		\$ 558,326.17				\$ 558,326.17	04/09/2013
DSEC CONDITION BASED MONITORS		\$ 591,479.61	\$ 19,344.94			\$ 610,824.55	12/20/2013
DSEC-UPG A/C CONDSND FAN BLADES	\$ 680,464.00	-\$ 4,330.59				\$ 676,133.41	12/07/2012
RFS GSU MPT 1 INST GSU MPT 1A/B		\$ 1,218,958.76				\$ 1,218,958.76	07/31/2013
DSEC HRSG SH/RH CONDENSATE DETE					\$ 1,273,475.97	\$ 1,273,475.97	11/04/2016
DSEC CT INSULATION SYSTEM UPGRD				\$ 485,224.50	\$ 1,019,662.49	\$ 1,504,886.99	11/23/2015
DSEC SPARE 250MVA GSU TRANSFRMR		\$ 121,863.22	\$ 3,180,618.77	\$ 207,458.68		\$ 3,509,940.67	03/14/2015

In 2011 a project was started to upgrade Desert Star plant security systems. This project could be considered as undertaken after the change of ownership because SDG&E believed this was needed to be consistent with utility ownership. Capital spend for this security system upgrade was \$977 in 2011 and \$479,712 in 2012.

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22. Please identify all specific projects with a recorded cost in excess of \$500,000 in the 2012-2016 capital expenditures for Cuyamaca Peak. For each such project provide spending by year and the in-service date. For all projects in excess of \$1 million, please explain whether such projects are likely to recur.

**Utility Response 22:**

Below are specific projects with a recorded cost in excess of \$500,000 in the 2012-2016 capital expenditures for Cuyamaca Peak, stated in nominal dollars.

	2012	2013	2014	2015	2016	Overall Result	In-Service
Fiscal year	Amount	Amount	Amount	Amount	Amount	Amount	Date
CPEP MICRONET CONTROL SYS UPGRD				\$ 570,021	\$ 1,131,547	\$ 1,701,568	08/31/2017
CPEP ENGINE A&B TURBINE ENHNCMNT					\$ 3,429,033	\$ 3,429,033	04/17/2017

For the CPEP Micronet Control System Upgrade project, it will not recur, though other equipment and system upgrades may occur in the future. For the CPEP Engine A&B Turbine Enhancement project, this work may or may not recur, however there could be other repairs or upgrades to the turbines that may occur in future years.

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23. Please identify all specific projects with a recorded cost in excess of \$500,000 in the 2017 recorded capital expenditures for each type of fossil generating plant. Identify projects completed in 2017. For those projects not completed in 2017, identify projected spending in 2018 and beyond and the in-service date.

**Utility Response 23:**

Below are specific projects with a recorded cost in excess of \$500,000 in the 2017 capital expenditures for each type of fossil plant, stated in nominal dollars.

Plant	Project	2017 Amount	In-Service Date
CUYAMACA PEAK ENERGY PLANT OPER ENHANCE	PEP ENGINE A&B TURBINE ENHNCMNT	\$ 3,096,443	04/17/2017
DESERT STAR ENERGY CTR OPER. ENHANCE	DSEC HRSG AMMONIA INJECTION GRI	\$ 1,293,673	11/20/2017
PALOMAR PLANT OPERATIONAL ENHANCEMENTS	PALOMAR HP WYE-STOP CHECK VALVE	\$ 728,330	08/31/2017
PALOMAR PLANT OPERATIONAL ENHANCEMENTS	PEC HOT PIPE REHEAT WELD RPL	\$ 662,390	08/31/2017

The projects listed above have been completed and no projected spending in 2018 and beyond is anticipated.



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24. Please provide the capital costs by year associated with modifying the storm water drain system at Palomar.

**Utility Response 24:**

The Palomar Modification of the Storm Water Drain System project costs for Year 2017, stated in nominal dollars, is \$19,740. There were no charges to this project in Years 2012-2016.

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25. Please provide any capital costs by year associated with the cooling tower chemical control at Palomar.

**Utility Response 25:**

There were no capital costs associated with the cooling tower chemical control at Palomar.

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26. Please provide any capital costs by year associated with installing the plant cycling damage monitoring & diagnostics tool at Desert Star.

**Utility Response 26:**

There were zero capital dollars spent on the plant cycling damage monitoring & diagnostics tool. During the 2012-2017 period, \$8,873 of non-capital O&M dollars were spent on this project in 2017.

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27. Please provide the latest capital budgets for each of the combined cycle and combustion turbine plants including the periods from 2017-2019 or any portion of them. Identify all individual projects with a budgeted cost in excess of \$500,000.

**Utility Response 27:**

The Year 2017 capital budget for each of the combined cycle and combustion turbine plants are listed below, stated in 2017 nominal dollars and include loadings except for Allowance For Funds Used During Construction:

<b><u>Budget by Power Plant</u></b>	<b>2017</b>	<b><u>Plan Amount</u></b>
Capital Tools & Test Equipment	✔	<b>\$231,004</b>
Miramar Energy Facility	✔	<b>\$430,000</b>
Palomar Energy Facility	✔	<b>\$4,583,496</b>
Desert Star Energy Facility	✔	<b>\$2,682,500</b>
Cuyamaca Peak Energy Plant	✔	<b>\$400,000</b>
<b>Total</b>	✔	<b>\$8,327,000</b>

The individual capital budget projects for Year 2017 in excess of \$500,000 for the combined cycle and combustion turbine plants are listed below, stated in 2017 nominal dollars and include loadings except for Allowance For Funds Used During Construction:

<b>Power Plant</b>	<b>Project Description</b>	<b>2017 (in dollars)</b>
Palomar	Upgrade Exciter to Ovation	\$ 587,500
Palomar	Replace HP Wye-Stop Check Valve	\$ 500,000
Palomar	CTG Bushing Seismic Upgrade	\$ 600,000
Palomar	Inlet Filter Housing Stairs & Doors	\$ 600,000
Palomar	Cooling Tower Fan & Fan Supports Upgrade	\$ 600,000
Desert Star	MS Non-Return Valve Upgrades	\$ 690,000
Desert Star	Medium Voltage Switchgear Upgrade	\$ 600,000

SDG&E's highly market sensitive draft 2018 capital budget information is not publicly available at this time.

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28. Please identify any capital costs included in the figures on SDG&E-16-CWP-24 that were incurred in 2012 or thereafter for either of the two projects at Palomar that were disallowed in D.13-05-010, pp. 64-65 (closed cooling water system upgrade project, and: cooling water biocide upsize project).

**Utility Response 28:**

During research for this data request SDG&E has found that the capital-related cost for these two projects was not included in the revenue requirement during the 2012-2015 period, but was added beginning 2016. SDG&E is calculating any overcollection and will update the response to this data request after doing so and identify a procedural vehicle for returning any overcollection to ratepayers.

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29. Is any portion of the capital cost of either of the two projects at Palomar that were disallowed in D.13-05-010, pp. 64-65 (closed cooling water system upgrade project, and: cooling water biocide upsize project) included in gross plant for this rate case? If so, please provide gross plant, accumulated depreciation, and accumulated deferred income taxes for each of these two plant items.

**Utility Response 29:**

During research for this data request SDG&E has found that the capital-related cost for these two projects was not included in the revenue requirement during the 2012-2015 period, but was added beginning 2016. SDG&E is calculating any overcollection and will update the response to this data request after doing so and identify a procedural vehicle for returning any overcollection to ratepayers.