



State of Rhode Island  
Department of Administration / Division of Purchases  
One Capitol Hill, Providence, Rhode Island 02908-5855  
Tel: (401) 574-8100 Fax: (401) 574-8387

## ADDENDUM # 1

BID # 7458372

BID TITLE: JOHN O. PASTORE CENTER ENERGY FACILITY  
OPERATION AND MAINTENANCE

OPENING DATE AND TIME: 1/29/13 10AM

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THIS ADDENDUM POSTS SIGN IN SHEET FROM MANDATORY PRE BID HELD 1/11/13 AT 10AM.

THIS ADDENDUM ANSWERS QUESTIONS SUBMITTED THROUGH EMAIL TO  
[BIINFO@PURCHASING.RI.GOV](mailto:BIINFO@PURCHASING.RI.GOV).

PLEASE NOTE ON PAGE 6 OF BID SPECIFICATIONS:

**THE SELECTED SERVICE PROVIDER MUST BE QUALIFIED AND LISTED ON MPA # 436 PRIOR TO THE TIME OF AWARD. INTERESTED PARTIES NOT QUALIFIED UNDER MPA 436 MAY APPLY FOR A QUALIFICATIONS REVIEW UNDER CONTINUOUS RECRUITMENT # 23 (CR-23).**

**QUESTIONS SUBMITTED THROUGH EMAIL:**

1. A draft Operations and Maintenance Agreement is not attached to the RFP or included in the Zip file. Is the previously issued Agreement (Bid No. 7449681) valid for use in this bid response?

**YES, OPERATIONS AND MAINTENANCE IS THE SAME. COPY ATTACHED.**



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2. Is the Bid Bond amount minimum (no less than 5% of the bid price) calculated at 5% of the Initial Fixed Cost as defined in the previously issued sample Agreement?

**BOND IS TO BE CALCULATED AT 5% OF THE INITIAL FIXED COST.**

3. What is the schedule for award following the 29-January-2013 bid submittal?

**ONCE OPENED, BID HAS TO GO THROUGH EVALUATION PROCESS AND BE REVIEWED BY ACCOUNTS AND CONTROLS. PURCHASING IS UNABLE TO GIVE A SPECIFIC TIME LINE OTHER THAN TO SAY PRIORITY WILL BE GIVEN TO THIS BID AWARD.**

4. Are the questions and answers generated in the previous bid for this work, (Bid No. 7449681) still applicable?

**QUESTIONS AND ANSWERS FROM ORIGINAL SOLICITATION ARE STILL APPLICABLE. ATTACHED.**

**NO FURTHER QUESTIONS WILL BE TAKEN.**

# STATE of RHODE ISLAND

## DEPARTMENT of ADMINISTRATION DIVISION of PURCHASES

### MANDATORY PRE-BID CONFERENCE ATTENDANCE SHEET JOHN O. PASTORE CENTER ENERGY FACILITY OPERATION & MAINTENANCE

BID # 7458372

DATE 01/11/13

TIME STARTED

10:02

TIME ENDED

10:45

NAME	COMPANY NAME	EMAIL (OR PHONE)
<u>IRVING SILVERMAN</u>	<u>Source One / Nolia Energy</u>	<u>ISILVERMAN@S1INE.com</u> <u>617-399-6146</u>
<u>ELMERT LIEBSCH</u>	<u>NORESCO</u>	<u>ELIEBSCH@NORES.CO.COM</u>
<u>DOUG WALWORTH</u>	<u>NORESCO</u>	<u>dwalworth@noresco.com</u>
<u>Dan Sinael</u>	<u>JCI</u>	<u>daniel.sinael@jci.com</u>
<u>Michael Poirier</u>	<u>ENE Systems</u>	<u>MPoirier@ENESystems.com</u>
<u>PATTY CLAPP</u>	<u>ENE SYSTEMS</u>	<u>pclapp@enesystems.com</u>
<u>PAUL CARMI</u>	<u>PURCHASING</u>	
<u>J. Jermey</u>	<u>DOA-FIM</u>	

QUESTIONS FOR JOHN O. PASTORE CENTER ENERGY FACILITY OPERATION AND MAINTENANCE

RFQ #7449681

1. Do the Site workers need to be Union or Non Union Worker?  
*The present workers are non union.*
2. When will the contract be awarded?  
*Approximately 3 – 6 months after the submission deadline.*
3. How many workers are required to Man the site?  
*The work force and staffing plan is up to bidder and staffing plan to part of the proposal.*
4. Who makes the decision on who wins the contract award?  
*The DOA/Energy Office submits a written evaluation of the proposals received and recommends an awardee. The State Purchasing Agent makes the final award decision.*
5. What is the value of existing contract?  
*FY 2007 – FY 2012\* = \$15,820,254 in personnel and consumables  
\*Q4 of FY 2012 Estimated*
6. Are records or copy's available of the Plants fuel costs and rates  
*Yes*
7. Are records or copy's available of overall expenses and consumable Items of Plant  
*Yes*
8. Can we monitor Plants operations from a remote site  
*Plant is operated by Allen Bradley PLC platform and can be monitored.*
9. Are blueprints and schematics made available of plant layout  
*Yes*
10. Are schematics made available of turbines and boilers  
*yes*
11. If the workers that are on site now are in a union what union are they affiliated with.  
*Current workforce is not unionized.*

END

RFP #7449681

**John O. Pastore Center Energy Facility Operation & Maintenance Project**

**Answers to Questions and Clarifications**

1. **Section 1 – Submission Requirements – Item 10, Initial Fixed Cost**

- a. Should the Initial Fixed Cost include costs to maintain the Solar Combustion Turbine packages currently covered in the Extended Service Agreement between the State and Solar Turbines?

Answer - State of RI is responsible to contract for and pay the LSTA on the Solar gas combustion turbines.

- b. In addition to the Initial Fixed Cost, will the State accept alternative pricing proposals that will incorporate the Contractor's entire scope of work (as defined by the RFP) but may offer the State cost savings compared to a full fixed price structure.

Answer – State of RI will entertain all proposals

2. **Section 1 – Submission Requirements – Attached Agreement to the RFP**

- a. The last sentence of Section 1 of the RFP states

*"The selected service provider shall be required to execute the Agreement attached to this RFP"*

Will the Contractor award winner and Owner negotiate final terms and conditions to the Draft Operation and Maintenance Agreement attached to the RFP?

Answer – State of RI will entertain all proposals, the draft contract is our proposed contract

3. Draft Operation And Maintenance Agreement – Article 1 – “Points of Delivery”

- a. Exhibit 1 of the Agreement does not include any discussion or documentation that addresses Points of Delivery. Please provide the required information.

Answer – State of RI expects the following as incoming and outgoing Points of Delivery.

Water – Incoming - service piping within the perimeter of the plant. Outgoing – piping at perimeter of the plant.

Steam – Outgoing – piping within perimeter of the plant.

Condensate - Incoming – piping within perimeter of the plant.

Waste water - Outgoing – connection piping to Cranston Sewer line after pretreatment.

Electricity - Incoming – Cable from and including HV transformer at plant. Outgoing – Switch boards 1, 2, & 3 cable and wiring inside perimeter of the plant.

Gas – from Meters to all equipment.

Fuel Oil – From inlet fill of all fuel tanks.



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## ADDENDUM # 5

BID # 7449681

BID TITLE: PASTORE CENTER ENERGY FACILITY OPERATION  
AND MAINTENANCE

OPENING DATE AND TIME: 7/20/12 @ 10AM

**Q1. Cap on Liability. The RFP contains 2 caps, one for liquidated damages amounting to \$3 M/year and another for \$3 M. It is not clear if the liquidated damages cap is to stand alone from the overall cap of \$3M. Please clarify the State of RI's intent in regards to these caps. Is there a total cap of \$3M/year, or are there two separate caps?**

A1. the limits are separate for liquidated damages and limits for liability as liquidated damages may result without negligence on the part of the contractor while liability results from negligence on the part of the contractor for which an "injury" whether bodily or to property results. I draw this conclusion from (l) of paragraph 3 in which proceeds of insurance shall not serve to reduce aggregate liability of the contractor.

**Q2. Indemnification. Although indemnification is mutual and negligence based, JCI's obligation is not limited to 3rd party claims. JCI requires mutual indemnification, will this present a problem?**

**A2. See above.**

**Q3. One-sided Waiver of Subrogation. JCI can agree to a mutual waiver of subrogation. We assume this doesn't present a problem?**

A3. One sided waiver of Subrogation The language was written in this fashion to preclude the workers compensation carrier for the contractor from seeking recovery from the state for an injury that occurred within a building and on land owned by the state on equipment that we also own that may have occurred through no negligence on the part of the state. The language does not preclude an injured worker from seeking recovery for damages for which the state was negligent and if successful the compensation carrier will receive recovery from the proceeds obtained by the injured party.



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**Q4. Termination for Convenience. JCI does not have a right to terminate this agreement for convenience. Will this be something that can be added to the contract?**

A4. Yes

**Q5. Adjustments to Price. JCI needs to guarantee that it is able to adjust its price under this RFP. RI is requiring fixed pricing on work. JCI needs to be able to adjust pricing when needed, for a) customer's failure to make capital improvements; b) changes in scope or service, in addition to the cost increases covered in exhibit 8.**

A5. If the scope or operating parameters change as determined by DOA-FM, reimbursement of extra services will be negotiated.

**Q6. HazMat. JCI will need to include JCI's standard HazMat provisions (including its waste water treatment language). We don't see this as an issue, since we believe the State of RI has the same concerns that we do with regard to the disposal of waste water, however there is currently no language in the State of RI's contract that governs this issue.**

A6. JCI's language can be reviewed by DOA Legal. I believe the contractor intends to respond to what was requested which was consistent with the hazardous chemical right to know act.



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**Q7. Repairs JCI is requesting a list of documented repairs that have been completed since the inception of the Noresco contract.**

A7. Dollar value of the repairs has previously been provided and projected O & M budget is attached.

**Q8. Equipment List: We had anticipated receiving a complete equipment list including Manufacturer name, model number, age and quantity of boilers, gas turbines, steam turbines, feed water pumps, compressors, radiators, electrical switchgear, control systems and other components. When will this list be forthcoming?**

A8. Description of operation has been provided and the plant was made available for vendor to assimilate an equipment list. None will be provided.

**Q9. Annual Subcontract costs (water treatment, generators, boilers, Solar turbine PMS, etc.) Please provide a list of approved subcontractor names along with the required Service Levels and Scope of Work**

A9. Dollar value of the repairs has previously been provided and projected O & M budget is attached.

**Q10. Capital Improvements. We assume that exhibit 7 requiring the contractor's need to submit a Capital Plan to the State means that the cost of any Capital Improvements would be born by the state. Is this an accurate assumption? What are the anticipated repairs and capital over the next 5 years? What has been spent on capital improvements over the past 5 years?**

A10. Attached is the latest Capital Project Plan in O & M budget.



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**Q11. Regulatory Compliance: To whom may we direct regulatory compliance questions within the state i.e, staffing requirements, remote monitoring, emergency response?**

A11. All questions must be sent to purchasing.

**Q12. CMMS : what system is in use? JCI requests all available CMMS records, including PM and demand work orders scheduled and completed.**

A12. CMMS system is LAND and JCI should contact CEM Service Group, Oltsville PA.

**Q13. Data Trends: JCI requests past data of electricity and steam produced to understand the trends, as well as historical failure(incident) reports of the plant to determine actual reliability, etc.**

A13. Attached is the data requested.

**Q14. Steam Output: Exhibit 9 - Product Specifications, part 2 and Exhibit 2 - Performance Guarantees, section 1d (Firm Capacity Capability Guarantee), refer to different steam outputs. Exhibit 9 refers to product output at low and medium pressure steam versus Exhibit 2 refers to High pressure. Please clarify whether high pressure steam production is required?**

A14. Med pressure and low pressure are all that are required for the Campus operation.



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**Q15. Safety Training: Are there any formalized safety training programs in place? Please provide an overview.**

A15. Safety Training is the responsibility of the proposed contractor. Business Continuity Plan : The contractor appears to have confused safety with continued operations in a disaster. Section 2.2 b speaks of the obligation of the contractor to establish and maintain safety procedures for the facility and for protection of employees of the contractor, owner and all other persons in the facility. Safety policies are intended to prevent or mitigate incidents and injuries while a business continuity plan is to respond when events have occurred from which the entity or enterprise must respond in order to continue to operate. Not with standing this difference in meaning, the contractor should have a business continuity plan as well as safety policies in order that operations may continue when events potentially affecting the power plant do occur. This may not only be to events that affect the plant itself but may also apply to incidents that occur within the community that may also affect the operation of the power plant (e.g. pandemic or a hurricane) both of which could affect the staffing and operation of the plant for which the contractor is responsible. So the contractor must have a safety program and they should also have a business continuity plan ensuring the continued operation of the facility when events affecting the plant, the campus or greater community occur.

**Q16. Pre-Hire Screening: What is the policy for background checks, credit checks, drug testing and medical testing?**

A16. Pre-Hire Screening is the responsibility of the proposed contractor.

**Q17. Pre-Hire Screening Standards: Please describe expected standards for background check and drug testing for employees that will be hired?**

A17. Pre-Hire Screening is the responsibility of the proposed contractor.



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**Q18. Other: Are there any other unique requirements not included as part of background check/drug test process?**

A18. Pre-Hire Screening is the responsibility of the proposed contractor.

**Q19. Timing: When will the State upload to the Purchasing website the answers to all questions submitted? Will any follow up questions be permitted after the walk through on 6/21/12?**

**Q20.. Will our suppliers be allowed to visit the site to get firm pricing?**

A19-A20. There were three plant tours. Access to the operation has been completed.



**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS**

Department of Administration  
Operations and Energy Management Program  
Performance Summary for the Howard Complex  
Historical Performance Review

	July-04 to July-05	July-05 to July-06	July-06 to July-07	July-07 to July-08	July-08 to July-09	July-09 to July-10	July-10 to July-11
<b>I. FOSSIL FUELS</b>							
<b>A.</b>							
#2 Oil (Gallons)	1,937,820	1,900,365	759,859	164,651	0	17,710	22,061
Average Cost (\$/Gal.)	\$1.41	2	\$1.78	\$3.40	\$0.00	\$2.55	\$2.55
Total Cost	\$2,741,657	3,448,303	\$1,350,801	\$559,711	\$0	\$45,161	\$58,806
MMBTU	267,419	262,250	104,851	22,723	0	2,444	3,162
\$/MMBTU	\$10.25	13	\$12.88	\$24.63	\$0.00	\$18.48	\$18.48
<b>B.</b>							
#6 Oil (Gallons)	0	0	0	0	0	0	0
Average Cost (\$/Gal.)	0	0	0	0	0	0	0
Total Cost	0	0	0	0	0	0	0
MMBTU	0	0	0	0	0	0	0
\$/MMBTU	0	0	0	0	0	0	0
<b>C.</b>							
Natural Gas (MCF)	762,724	762,927	917,583	1,050,075	1,222,884	1,197,195	1,163,641
Average Cost (\$/MCF)	\$9.83	\$13.34	\$12.46	\$12.43	\$11.11	\$7.54	\$8.26
Total Cost	\$7,495,662	10,178,417	\$11,428,498	\$13,055,509	\$13,590,221	\$9,029,883	\$9,615,117
MMBTU	768,317	762,503	938,667	1,074,227	1,251,010	1,228,261	1,228,261
\$/MMBTU	\$9.57	\$13.01	\$12.18	\$12.15	\$10.86	\$7.35	\$7.83
<b>D.</b>							
Total Fossil Fuels	1,050,736	1,044,754	1,043,528	1,096,950	1,251,010	1,230,705	1,231,443
MMBTU	\$9.74	\$13.04	\$12.25	\$12.41	\$10.86	\$7.37	\$7.86
Total Cost	\$10,237,319	13,626,720	\$12,779,259	\$13,615,220	\$13,590,221	\$9,075,044	\$9,673,523
MMBTU/sq	2,723,584	0.8686	0.8070	0.4028	0.4593	0.4519	0.4521
\$/sq.ft	\$3.952	5.003	\$4.584	\$4.599	\$4.590	\$3.332	3.552
<b>II. ELECTRICITY</b>							
<b>A.</b>							
Purchased Electricity (KWH)	6,181,059	8,252,922	7,327,485	6,109,042	7,089,631	8,357,951	6,920,919
Purchased MMBTU	21,056	21,270	19,584	20,236	18,937	20,393	18,427
Purchased KW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pur. KWH Cost	\$713,296	N/A	\$996,627	\$841,058	\$1,120,574	\$1,150,370	\$916,619
Demand Cost	\$713,296	\$1,012,560	\$996,627	\$841,058	\$1,120,574	\$1,150,370	\$916,619
TOTAL COST	\$0,1154	\$0,1227	\$0,1360	\$0,1377	\$0,1561	\$0,1376	\$0,1180
\$/KWH	\$33.82	257	\$11.80	\$0.14	\$27.36	\$28.09	\$19.94
\$/MMBTU	N/A						
\$/KW	28,773,443	28,254,784	25,055,258	27,754,007	31,367,593	29,092,746	29,955,762
Generated KWH	98,204	96,468	99,166	94,724	107,126	99,294	102,376
Generated MMBtu	34,954,502	36,517,706	36,382,743	33,863,049	38,477,224	37,450,697	36,916,701
TOTAL KWH	119,300	124,635	124,174	115,575	191,323	127,819	125,987
TOTAL Electrical MMBtu	0.0491	0.0481	0.0511	0.0446	0.0507	0.0494	0.0487
MMBTU/sq	2,589,463	\$0,3910	\$0,4102	\$0,3248	\$0,4327	\$0,4443	\$0,3154
Purchased \$/sq.ft							
<b>III.</b>							
TOTAL ENERGY	1,170,036	1,169,988	1,167,702	1,212,525	1,382,333	1,358,524	1,357,440
MMBTU	\$9.36	\$12.52	\$11.80	\$11.92	\$10.64	\$7.53	\$7.73
Total Cost	\$10,990,716	\$14,639,280	\$13,776,126	\$14,456,278	\$14,710,795	\$10,225,413	\$10,490,542
MMBTU/sq	0.4569	0.4317	0.4561	0.4474	0.5100	0.5012	0.5008
\$/sq.ft	\$4.29	\$5.39	\$5.39	\$5.32	\$5.42	\$3.78	\$3.87
<b>IV.</b>							
Steam Production							
Steam lbs.	568,735,221	560,596,049	562,745,000	608,591,854	697,179,000	689,052,000	646,842,000
MS/steam/sqft	0.234	0.206	0.219	0.223	0.256	0.253	0.237
\$/Mlbs.	\$18.00	\$24.31	\$22.37	\$22.37	\$13.17	\$12.79	\$14.96
Ave Steam l/hr	64,924	63,985	64,240	69,467	79,587	78,659	73,840



MHRH - Central Plant  
September 20, 2011

Period 1-Jul-03 thru 30-Jun-04 Back up for Percentage of Days w/ no interruption

Date FY 04	Summary of Outages				Total Loss Time
	Scheduled		Unscheduled		
	Electric	Steam	Electric	Steam	
7/18/2003	2.0	2.0			2.0
7/20/2003	6.0	8.0			8.0
10/19/2003				4.0	4.0
12/7/2003				3.0	3.0
1/11/2004					
1/22/2004					
1/29/2004				4.0	4.0
2/14/2004			0.3	0.3	0.3
2/19/2004					
2/17/2004				0.5	0.5
3/1/2004				1.5	1.5
3/22/2004					
3/28/2004		6.0			6.0
4/28/2004		9.0			9.0
May					
June					
7/10/2004					
7/22/2004		7.0			7.0

Comments

Input from High  
Input from High  
Input from High  
Input from High  
CTG Trip  
CTG Trip  
Steam and power due to oil spill/leak  
CTG Trip due to ground fault on campus  
CTG Trip High 15 CTG B not avail due to nuzzles out for cleaning at Solar  
CTG B Trip due to low gas psi  
CTG B breaker Trip Turbine on fire then shut down due to failure on the feeders to campus  
Secured steam due to blown expansion joints  
Blank flange removal to 400 psi aysa new system 500 Temp boilers provided steam  
Repair to PRV 400/100 disconnect 100 psi between BR 3 and Steam to new side only Temp boilers provided steam  
no outages  
no outages  
CTG Trip due to gas comp trip (voltage sag)  
Steam secured to Intake other entry. Expansion joint installation

FY 04	365.00 Days	10.0	31.0	0.6	13.3	44.3 Total Hrs.
						89.49% operation
						1.6458 Days outage total

Period 1-Jul-04 thru 30-Jun-05 Back up for Percentage of Days w/ no interruption

Date FY 05	Summary of Outages				Total Loss Time
	Scheduled		Unscheduled		
	Electric	Steam	Electric	Steam	
8/4/2004			2	2	2
8/10/2004			3		3
12/22/2004			4		4
1/23/2005			0.1	6	6
7/10/2005			0.1	0.8	0.8

Comments

Gas compress trip CTG Trip Utility feeder Trip steam and elect  
Secured steam to Intake Center only for expansion joint installation  
Steam line repair to manhole B  
Steam at reduced pressure for 8 hours outage caused by utility trip  
Problem w/ breaker 11 and thunderstorms  
utility loss

FY 05	365.00 Days	0.0	7.0	2.0	2.0	11.8 Total Hrs.
						99.67% operation
						0.4917 Days outage total

Period 1-Jul-05 thru 30-Jun-06 Back up for Percentage of Days w/ no interruption

Date FY 06	Summary of Outages				Total Loss Time
	Scheduled		Unscheduled		
	Electric	Steam	Electric	Steam	
7/16/2005			0.5		0.50
8/13/2005			3	3	3.00
8/19/2005			3		3.00
8/21/2005			0.5		0.50
8/21/2005			0.5		0.50
10/25/2005			2	2	2.00
11/7/2005			0.5	1	1.00
8/20/2006			1	1	1.00
8/21/2006			1	1	1.00
8/30/2006			1	2	2.00

Comments

Problem w/ breaker 11 and thunderstorms  
Ground fault distribution  
Ground fault distribution Tracing A feeder  
Ground fault distribution Tracing A feeder  
Loss of Utility  
Loss of Utility ground fault on utility  
Loss of Utility  
Loss of Utility  
Loss of Utility

FY 06	365.00 Days	0.0	0.0	0.0	0.0	14.5 Total Hrs.
						99.63% operation
						0.6042 Days outage total

Period 1-Jul-06 thru 30-Jun-07 Back up for Percentage of Days w/ no Interruption

Date FY 07	Summary of Outages				Total Loss Time
	Scheduled		Unscheduled		
	Electric	Steam	Electric	Steam	
7/18/2006	0	0	0.2	1.5	1.50
8/27/2006	0	0	0.3	1.1	1.10
03/01/07	0	0	0.5	0	0.50

Loss of utility  
Loss of utility  
Distribution ground fault

FY 07	365.00 Days	0.0	0.0	0.0	0.0	3.1 Total Hrs.
	99.86% operation			3.1 Hrs. outage total		0.1292 Days outage total

Period 1-Jul-07 thru 30-Jun-08 Back up for Percentage of Days w/ no Interruption

Date FY 08	Summary of Outages				Total Loss Time
	Scheduled		Unscheduled		
	Electric	Steam	Electric	Steam	
7/8/2007	0	0	0.9	1	1.00
8/18/2007	0	0	0.1	1.5	1.50
12/26/07	0	0	0.4	0.8	0.80
4/24/2008	0	0	2.2	2.2	2.20
8/13/2008	0	216	0	0	0.00
8/2/2008	0	0	0.3	0.8	0.80
08/24/08	0	0	0.1	1.75	1.75

Distribution ground fault  
UTILITY ground fault loss of utility transformer  
Loss of utility  
Loss of instrument air and loss of utility  
Scheduled steam outage (DA tie in) Rental Boilers  
Loss of utility  
Loss of utility

FY 08	365.00 Days	0.0	216.0	4.0	4.1	8.1 Total Hrs.
	99.91% operation			8.1 Hrs. outage total		0.3354 Days outage total

Period 1-Jul-08 thru 30-Jun-09 Back up for Percentage of Days w/ no Interruption

Date FY 09	Summary of Outages				Total Loss Time
	Scheduled		Unscheduled		
	Electric	Steam	Electric	Steam	
7/8/2008	0	0	0	4.5	4.50
7/23/2008	0	0	5	1.7	3.00
10/28/08	0	0	2.6	0	2.60

Loss of Utility  
Loss of Utility  
Distribution system ground fault. Turbine off line utility on.

FY 09	365.00 Days	0.0	0.0	5.6	6.3	10.1 Total Hrs.
	99.88% operation			10.1 Hrs. outage total		0.4208 Days outage total

Period 1-Jul-09 thru 30-Jun-10 Back up for Percentage of Days w/ no Interruption

Date FY 10	Summary of Outages				Total Loss Time
	Scheduled		Unscheduled		
	Electric	Steam	Electric	Steam	
7/27/2009	0	0	0	2	2.00
10/24/2009	0	0	0.1	1.8	1.90
03/30/10	0	0	1	2.3	2.30
06/28/10	0	0	0.1	1.3	1.30

Lighting strike to the facility  
Loss of Utility  
Flooding causes a loss of utility and facility  
Loss of gas compressor

FY 10	365.00 Days	0.0	0.0	1.2	7.2	7.2 Total Hrs.
	99.92% operation			7.2 Hrs. outage total		0.3 Days outage total

Period 1-Jul-10 thru 30-Jun-11 Back up for Percentage of Days w/ no Interruption

Date FY 11	Summary of Outages				Total Loss Time
	Scheduled		Unscheduled		
	Electric	Steam	Electric	Steam	
7/8/2010	0	0	0.1	2	2.00
7/10/2010	0	0	0.2	1.8	1.80
05/31/11	0	0	0.1	0.35	0.35

Ground fault campus distribution  
Ground fault campus distribution  
Ground fault campus distribution

FY 11	365.00 Days	0.0	0.0	0.4	4.0	4.0 Total Hrs.
	99.89% operation			4.0 Hrs. outage total		0.1096 Days outage total

Period 1-Jul-11 thru 30-Jun-12 Back up for Percentage of Days w/ no Interruption

Date FY 11	Summary of Outages				Total Loss Time
	Scheduled		Unscheduled		
	Electric	Steam	Electric	Steam	
7/27/2011	0	0	0.1	1.1	1.20
11/17/2011	0	0	0.8	1.4	1.40
08/18/12	0	0	0	4	4.00
08/29/12	0	5	0	0	0.00

Ground fault campus distribution  
Loss of Utility  
Emergency repair feed water line  
Scheduled repair and upgrade feed water lines

FY 11	365.00 Days	0.0	0.0	1.0	5.5	12.5 Total Hrs.
	99.88% operation			12.5 Hrs. outage total		0.5325 Days outage total

Project Name: Pastore  
Location: Cranston, RI

Project Description: CCGT-Solar  
Operations Mode: Combined Cycle

Operation Scenario

OPERATING HOURS	8000
PLANT CAPACITY (MW)	10

JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
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Internal

MARGIN	1.50%
INFLATION	\$0
FEE	\$0

Cost Area

	TOTAL	% TOTAL	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
ROUTINE O&M	655,000	100.0%	\$77,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500
Section 95		0.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SOFTWARE	0	0.0%												
TOTAL O&M	655,000		\$77,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500
TOTAL O&M W/FEE	655,000													

PRE-OPERATION

OM Breakdown	TOTAL	% TOTAL
FIXED COSTS	655,000	100.0%
VARIABLE COSTS	0	0.0%
TOTAL	655,000	100%

Escalation	YEAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14
TOTAL O&M W/FEE		655,000	684,825	674,797	684,919	695,193	705,621	716,205	726,948	737,853	748,920	760,154	771,557	783,130	794,877
FEE BREAKDOWN		149,415	151,556	153,931	156,240	158,584	160,962	163,377	165,827	168,315	170,840	173,402	176,003	178,643	181,323