

Analysis of All Requirements Project Exit Alternatives

1. Introduction

WHH has been engaged by the Ft. Pierce Utilities Authority to review certain options contained in the bulk power supply contract with the Florida Municipal Power Agency's All Requirements Project. WHH's engagement includes a review of the All Requirements Project contract, the development of an economic analysis of the future cost of bulk power supply under various scenarios including exercising the Contract Rate of Delivery (CROD) option, a discussion of bulk power supply alternatives and a recommendation for a course of action. This report presents the analysis.

2. Background

The Fort Pierce Utilities Authority (FPUA) is a participant in the Florida Municipal Power Agency's All Requirements Project. This project provides for all of the bulk power supply requirements for FPUA. Bulk power supply typically represents approximately 75 percent of the total costs associated with retail electric service. Thus, the cost of bulk power supply is an important element in the success of FPUA.

The Florida Municipal Power Agency (FMPA) was formed in 1978 with the objective of providing competitively priced bulk power supply and other services to municipal electric utilities. FMPA's first project was participation in the St. Lucie nuclear unit. Subsequently, FMPA created the All Requirements Project (ARP). This project supplied the entire bulk power supply requirements for the five initial participants in ARP. These were Bushnell, Green Cove Springs, Jacksonville Beach, Leesburg and Ocala. All of these cities had purchased their power from other providers and did not generate any power themselves. The ARP commenced delivering power to these initial participants in 1986. Subsequently, after successful legal action to obtain access to Florida's electric transmission grid, the ARP expanded to include the following cities. The year in which they became a participant in the ARP is also indicated.

City of Clewiston	1991
Cities of Vero Beach and Starke	1997
Ft. Pierce Utilities Authority and City of Key West	1998
Cities of Ft. Meade and Newberry, Town of Havana	2000
Kissimmee Utility Authority and City of Lake Worth	2002

Analysis of All Requirements Project Exit Alternatives

The utilities of Vero Beach, Ft. Pierce Utilities Authority, Kissimmee Utility Authority and Lake Worth were all generating utilities as opposed to the founding members. At the end of 2009, the membership totaled 15 municipal utilities and represented retail load of almost 1500 MW.

During recent years, the ARP rates have exceeded the market prices for bulk power supply. WHH notes comparative prices of bulk power supply for other similarly situated entities in the table below. The city of Winter Park has a peak load of approximately 120 MW and the city of Bartow has a peak load of about 80 MW. FPUA's peak load is about 115 MW. Both cities are presently served by Progress Energy Florida. Seminole Electric Cooperative supplies all the electric cooperatives in peninsula Florida with the exception of Florida Keys Electric Cooperative (FKEC). Seminole Electric Cooperative is similar to FMPA in that they are the bulk power supplier to their members. The ten electric cooperatives supplied by Seminole have over 900,000 customers in peninsula Florida. Florida Keys Electric Cooperative (FKEC) is the only cooperative in peninsula Florida not supplied by Seminole Electric. FKEC serves the upper keys and is headquartered in Tavernier. FKEC has a peak load of approximately 115 MW and bulk power supply is provided by Florida Power and Light. WHH believes these entities are representative of the bulk power supply market in Florida.

Table 2.1
Historical Bulk Power Supply Costs

	2010	2009	2008
City of Winter Park	\$81.81 ⁽¹⁾	\$80.95	\$81.19
City Of Bartow	\$86.70 ⁽²⁾	\$87.60	\$86.62
Seminole Electric Cooperative	\$80.50 ⁽²⁾	\$80.32	\$74.51
Florida Keys Electric Cooperative	??\$69.00 ⁽³⁾	\$77.87	\$89.28
Peer Group Average	\$83.00	\$81.89	\$82.90
FPUA⁽¹⁾	\$91.15	\$99.03	\$92.73

Table Notes:

1. Fiscal year data (October thru September)
2. January – September actual, October – December WHH estimate
3. WHH estimate

As indicated in the table, bulk power costs for the peer group have been below the cost for FPUA during recent years.

WHH believes this situation is likely to continue. As an indicator of the future prices of bulk power supply, WHH has reviewed all competitive solicitations for bulk power supply issued by

Analysis of All Requirements Project Exit Alternatives

municipal electric systems in 2010. The results of these solicitations with the expected cost for 2011 are tabulated below. As is evident, the prices obtained from the recent solicitations are attractive relative to historical prices and reflect the declining price of natural gas and the excess capacity that currently exists in the market. The average of estimated 2011 prices is \$70.26 per MW-hr.

Table 2.2
Recent Bulk Power Supply Solicitations

City	Bartow	Winter Park	Quincy	Alachua ⁽¹⁾
Successful Bidder	Orlando Utilities Commission	Joint Venture Progress Energy Florida & Seminole Electric Co-op	FMPA	Gainesville Regional Utilities
Term of New Contract	7 years	3 years	5 years	10 years
Peak Capacity	80 MW	110 MW	20 MW	26 MW
Estimated 2011 Price	\$71.10	\$69.22	\$69.68	\$71.05

Table Notes:

1. Solicitation occurred in 2009 but contract was negotiated in 2010.

As a result of the high prices of bulk power supply from ARP, some ARP members have responded by withdrawing. In 2007, the City of Vero Beach notified FMPA that the City was exercising the Contract Rate of Delivery (CROD) option and effective January 2010, would not be obligated to purchase any of its bulk power supply requirements from ARP. Vero Beach's bulk power supply costs have declined approximately 15% as a result of exercising CROD effective January 2010.

Subsequently, the City of Lake Worth also notified FMPA that the City was exercising its CROD option and effective January 2014 the City of Lake Worth will not be purchasing any of its bulk power supply requirements from ARP. Additionally, the Cities of Starke, Green Cove Springs and Ft. Meade have notified FMPA that they are not renewing the ARP contract and their participation in ARP will be terminated effective in 2036, 2037 and 2038 respectively. The City of Ft. Meade also advised FMPA that the City is exercising the CROD option effective 2015.

Analysis of All Requirements Project Exit Alternatives

thereby limiting their future purchase obligations from ARP. The bottom line is that 5 of the 15 members of ARP have effectively withdrawn from the project.

WHH believes that it is appropriate that FPUA also evaluate its options regarding the ARP.

3. FMPA ARP Contract Provisions Relating to Withdrawal

The primary contract between FMPA and the Ft. Pierce Utilities Authority (FPUA) is the All Requirements Power Supply Contract. This contract basically obligates FPUA to purchase all capacity and energy necessary for their electric system from Florida Municipal Power Agency (FMPA) All Requirements Project (ARP) during the term of the contract.

Based on a review of the All Requirements Power Supply Contract, there are three means by which a participant in the ARP can withdraw or lessen its obligations to purchase all capacity and energy from FMPA. Each is discussed below.

1. Provide Notice of Termination of the Contract. The contract is a 30 year contract. The contract automatically is extended for an additional year on 1 October of each year unless the participant has provided notice one year prior to the 1 October automatic extension date. This provision was modified by Amendment 1 to the original All Requirements Power Supply Contract. The exact wording of the Section 2 Term, is provided below:

This Contract shall become effective upon a date to be determined by the Board. Subject to the provisions for withdrawal in Section 29, this Contract shall remain in effect until October 1, 2030. On each October 1st this contract shall automatically extend for an additional one year period unless either party hereto, at least one year prior to such automatic extension date, shall notify the other party in writing of its decision not to extend this Contract.

Pursuant to the terms of this paragraph, on October 1, 2010, the contract between FMPA and FPUA was extended an additional year to October 1, 2041. If FPUA provides notice of cancelation to FMPA prior to October 1, 2011, the contract can be terminated on October 1, 2042.

This option is available to FPUA at any time; however, due to the length of time between the date of the notice to withdraw and the date that the withdrawal becomes effective (31 years), this action provides no immediate relief from high bulk power prices. This option will be considered later in concert with other actions.

2. Section 29 Immediate Withdrawal Option. The second means of exiting the ARP contract involves notice of early termination. This is governed by Section 29 in the ARP contract. This provision provides that each participant can withdraw from the FMPA ARP at any time short of the termination date of the contract subject to certain conditions.

Analysis of All Requirements Project Exit Alternatives

The first condition is that the participant must give FMPA and all other ARP participants three years notice of its intent to withdraw. Additionally, the withdrawal date must be September 30. For example, if an ARP participant gave its notice at this time (December 2010) the withdrawal date would be September 30, 2014.

The second and most onerous provision is that the Participant incurs two payment obligations to exercise the withdrawal right.

The first payment obligation is that the withdrawing participant must pay in cash to FMPA an amount equal to the pro rata portion of outstanding bonds. The pro rata share is equal to the participant's load relative to the total FMPA load on the withdrawal date or the date of the withdrawal notice, whichever is greater.

Section 29 also includes a second payment obligation. This second provision is much more uncertain. This provision requires that the withdrawing participant deposit an amount equal to the present value of all additional costs that FMPA may incur in the anticipation of serving the withdrawing participant. This provision has strong wording that favors FMPA in the determination of these costs. However, one must assume that FMPA will be reasonably equitable in the estimation of these costs. The exact wording of this provision is reproduced below:

“The Project participant shall on the anticipated date of withdrawal date pay to FMPA an amount in cash equal to the present value calculated at 6 percent per annum of all of the additional costs reasonably paid or incurred, reasonably anticipated to be paid or incurred, or reasonably projected to be incurred by FMPA (as determined by FMPA in its sole discretion) as a result of the withdrawal of the Project Participant, over the term specified in such Project Participant's All-Requirements Power Supply Project Contract (as determined on the anticipated withdrawal date). Such costs shall be determined on the assumption that, during the remaining term of such Project Participant's All-Requirements Power Supply Project Contract, FMPA was unable to make use of or sell any generating, transmission or other resources (or portions thereof) which FMPA had anticipated would be used to supply, or had acquired with the intention of supplying, all or any portion of the withdrawing Project Participant's electric load.”

FPUA requested that FMPA prepare an estimate of the withdrawal costs pursuant to these provisions. In a letter dated 10 September 2010, FMPA responded and concluded that FPUA

Analysis of All Requirements Project Exit Alternatives

would owe approximately \$98 million for the pro rata allocation of FMPA debt and \$207.8 million for the pro rata allocation of future fixed O&M costs. The exit payments total \$306 million. FPUA staff reviewed the exit payment analysis prepared by FMPA and concluded that this option was not a viable alternative. This analysis was presented to the FPUA Board which concurred with the findings of staff.

WHH also reviewed FMPA's analysis of withdrawal costs. Although WHH takes exception to some of the assumptions used by FMPA in the estimation of these costs, the bottom line is that this provision is prohibitively expensive as it was intended to be. WHH has also dismissed Section 29 Immediate Withdrawal Option as a viable alternative for further consideration.

The third means to exit or lessen the purchase obligation is the exercising of the Contract Rate of Delivery (CROD) option which is discussed in the next section.

Analysis of All Requirements Project Exit Alternatives

4. Contract Rate Of Delivery Option

The third means by which an ARP participant may lessen its purchase obligations is by exercising the Contract Rate of Delivery (CROD) provision as detailed in Section 3 of the contract. This provision means that an ARP participant can limit their obligation to purchase capacity and energy from ARP in the future to a fixed amount by providing notice five years in advance. This amount, the Contract Rate of Delivery, is basically the current peak load of the exercising participant during the 12 months preceding the date upon which CROD becomes effective (five years after the notice) less all participant owned resources or excluded resources. This amount may be adjusted by FMPA at its sole discretion by plus or minus 15 percent.

FPUA Owned Resources. Upon exercising this provision, all capacity owned by a participant in the ARP that had previously been assigned to FMPA is returned to the participant exercising CROD. These resources are tabulated below. Note that the St. Lucie capacity includes FPUA's allocation of the additional capacity resulting from the upgrade of this unit. The total capacity owned by Ft. Pierce independent of the ARP is 49.0 MW.

Table 4.1
FPUA Owned Generating Resources

Project	Underlying Generating Unit	FPUA Owned Capacity
Stanton Project	Stanton1 Coal	15.4 MW
Tri Cities Project	Stanton1 Coal	5.1 MW
Stanton 2 Project	Stanton 2 Coal	16.4 MW
St. Lucie Project	St. Lucie 2 Nuclear	12.1 MW
Total Excluded Resources		49.0 MW

Since a primary source of potential savings to a participant in ARP is access to a lower cost bulk power supply for at least a portion of the system requirement, accurately estimating the future purchase obligation to the ARP (i.e. CROD) is required.

Assuming a notification to exercise CROD is communicated to FMPA prior to January 1, 2011, the amount of CROD will be determined based on the coincident peak load during the period of 1 December 2014 through 30 November 2015. Based on the load forecast presented in the following section, the expected coincident peak load during this period of time is 114.5 MW. The amount of capacity owned by FPUA is subtracted from the coincident peak load to determine CROD. Since FPUA owns 49 MW of capacity, the amount of CROD based on the

Analysis of All Requirements Project Exit Alternatives

provisions of Section 3 of the contract and the forecasted coincident peak for 2015, is 65.5 MW (114.5 MW less 49.0 MW).

The amount of capacity and energy that FPUA is obligated to purchase from ARP each month is the ratio of CROD and the peak load for the previous twelve months times the actual monthly demand or actual monthly energy requirements of the FPUA system. Note that the St. Lucie capacity and energy is not included in the determination of the monthly peak requirement or monthly energy requirement. The formula is depicted below:

$$\text{Monthly Capacity Purchase Obligation} = \frac{\text{CROD}}{\text{Coincident Peak Load prior 12 Months}} \times \text{Monthly Peak Requirement}$$

$$\text{Monthly Energy Purchase Obligation} = \frac{\text{CROD}}{\text{Coincident Peak Load prior 12 Months}} \times \text{Monthly Energy Requirement}$$

For example, if during some future month, the coincident peak load for the prior twelve months is 130 MW, during that month FPUA would be required to purchase 55.56 percent (65.5 MW CROD divided by monthly peak of 130.0 MW less 12.1 MW of St. Lucie) of the billing months capacity from ARP and FPUA would be required to purchase 55.56 percent of the energy delivered during that month to FPUA from ARP. Note that assuming that the FPUA load continues to increase in the future, the purchase obligation would decline as the ratio of CROD (which remains fixed) and the peak demand (which presumably increases) becomes smaller. This purchase obligation would continue until FPUA terminates the ARP contract as discussed in Section 2 of this report.

Note that FMPA has the unilateral option to increase or decrease CROD by 15 percent. Assuming the above referenced forecast is accurate and based on FMPA actions, CROD could range between 55.7 MW and 75.3 MW. The contract is clear that this adjustment is at FMPA's sole discretion. WHH notes that presumably FMPA will act in the interests of the remaining ARP participants and therefore if the current ARP prices are below market prices, FMPA will likely discount the amount of CROD by 15 percent thereby preserving this lower priced capacity and energy for its remaining participants. However if the price of ARP capacity and energy is above market prices, FMPA will likely adjust CROD upward by 15 percent so as to obligate FPUA to purchase a greater amount of the capacity and energy. In either case, the interests of the other ARP participants are adverse to the interests of FPUA.

Lastly, depending on FMPA's current plans for additional capacity, it may be determined that lowering the CROD amount would delay the need for expansion and thereby reduce the costs to

Analysis of All Requirements Project Exit Alternatives

remaining ARP participants. WHH suggests that FPUA attempt to negotiate the amount of CROD prior to exercising the CROD option.

WHH notes that from a practical standpoint, this provision of the contract is poorly conceived. A member exercising the CROD option must give notice five years prior to the effective date of CROD. Yet FMPA will determine the CROD based on actual load data experienced by the withdrawing participant in the “twelve months preceding the date one month prior to the date such limitation shall commence as determined by FMPA adjusted up or down by not more than 15% reserve margin ...”.

An example may be clearer than the actual contract wording. If FPUA provided notice to FMPA prior to January 1, 2011 that CROD was being exercised, the effective date of the commencement of CROD will be January 1, 2016. CROD will then be determined based on FPUA peak load during the period of December 1, 2014 through November 30, 2015. FMPA can adjust this amount by plus or minus 15 percent. Then presumably FMPA will notify FPUA of its determination of the amount of CROD; however, the contract does not provide a date for this notice. Regardless, the notice will be provided sometime during the month of December 2015. This puts FPUA in a position of soliciting proposals from the bulk power supply market with less than 30 days’ notice. WHH typically allows 8-12 months to issue, receive, evaluate, award and negotiate a bulk power supply contract. Just arranging for transmission service can require as much as six months. Based on the WHH analysis, FPUA will require between 2 and 25 MW of additional capacity in the five years following the exercise of CROD. It will be difficult to solicit bulk power supply proposals if future requirements are not known with more accuracy.

Since the economics of exercising the CROD option is significantly influenced by the actual amount of CROD, WHH believes that FMPA should be required to advise the participant of the amount of CROD upon notification that a participant is considering this option. Then the participant could more accurately estimate the economic impact of exercising CROD since the amount of CROD would be known with certainty. Additionally, WHH believes that notification of the amount of CROD would provide the participant sufficient time to solicit, evaluate and award bulk power supply contracts and arrange for transmission service.

5. FPUA Electric Load Forecast

In February 2010, RW Beck performed a forecast for FMPA which included electric demand and energy forecasts for each ARP member. The forecast includes monthly demand and energy forecasts through 2029. WHH has used this forecast as the base case forecast for this analysis. The forecast is duplicated on the following page.

WHH notes that the forecast includes both non-coincident and coincident forecasted peaks for FPUA. WHH notes that the forecast anticipates modest growth in both peak demand and energy for the next 20 years averaging about 1.2 percent. Additionally, WHH notes that the forecast did not anticipate any change in the system load factor over the forecast period. Lastly, WHH notes that RW Beck forecasts basically equal winter and summer peaks. Over the past eleven years, FPUA has peaked 5 times in the winter and 6 times in the summer. The RW Beck forecast ended with year 2029. Since the model used to evaluate CROD was a 15 year model extending through 2030, WHH extended the RW Beck forecast an additional one year using the same growth rate.

WHH has considered two alternative cases to evaluate the sensitivity with growth in electrical demand. The Low Growth scenario assumes no load growth over the forecast period and that both demand and energy equal the weather normalized forecasted value for 2011. The High Growth Case forecasts load growth at 4 percent from the 2010 load forecast. It is the intent that these two scenarios will serve as lower and upper bounds of all likely outcomes.

Based on the above, the electric load forecast used by WHH in this analysis is tabulated on the following pages. The Low Growth Case was not tabulated as all loads for future years are identical to the Base Case for Year 2011 loads since this case assumes zero growth.

WHH notes that both the Low Growth and High Growth Cases are unlikely. These cases are intended to serve as lower and upper bounds for any reasonably foreseeable outcomes and are used to test the sensitivities of the analysis to scenarios of lower and higher growth than the Base Case.

Analysis of All Requirements Project Exit Alternatives

Table 5.1
FPUA Load Forecast – Base Case

BASE CASE			
Calendar Year	Peak Non-Coincident Load MW	Peak Coincident Load MW	System Energy Requirement MW-hrs
2011	107.7	106.8	551,658
2012	109.7	108.9	562,148
2013	111.7	110.9	572,602
2014	113.7	112.8	582,628
2015	115.4	114.5	591,858
2016	117.0	116.1	600,033
2017	118.4	117.5	607,576
2018	119.8	118.9	614,874
2019	121.2	120.3	622,088
2020	122.6	121.7	629,253
2021	124.0	123.0	636,337
2022	125.3	124.4	643,276
2023	126.7	125.7	650,093
2024	128.0	127.0	656,797
2025	129.2	128.2	663,410
2026	130.5	129.5	669,922
2027	131.7	130.7	676,341
2028	133.0	131.9	682,685
2029	134.2	133.2	688,962
2030	135.5	134.4	695,581

Analysis of All Requirements Project Exit Alternatives

Table 5.2
FPUA Load Forecast – High Growth Case

HIGH GROWTH CASE (3.0%)			
Calendar Year	Peak Non-Coincident Load	Peak Coincident Load	System Energy Requirement
	MW	MW	MW-hrs
2011	109.5	108.6	564,102
2012	112.8	111.8	581,025
2013	116.2	115.2	598,456
2014	119.6	118.6	616,410
2015	123.2	122.2	634,902
2016	126.9	125.9	653,949
2017	130.7	129.6	673,567
2018	134.7	133.5	693,775
2019	138.7	137.5	714,588
2020	142.9	141.6	736,025
2021	147.1	145.9	758,106
2022	151.6	150.3	780,849
2023	156.1	154.8	804,275
2024	160.8	159.4	828,403
2025	165.6	164.2	853,255
2026	170.6	169.1	878,853
2027	175.7	174.2	905,218
2028	181.0	179.4	932,375
2029	186.4	184.8	960,346
2030	192.0	190.4	989,157

Analysis of All Requirements Project Exit Alternatives

6. Ft. Pierce Utilities Authority Owned Resources Price Forecast

As previously noted, FPUA owns portions of four projects which were previously assigned to the ARP. These resources will be reassigned to FPUA and will be used to partially satisfy the FPUA system requirements upon exercising CROD. These resources are:

Table 6.1
FPUA Owned Generating Resources

Project	Underlying Generating Unit	FPUA Owned Capacity
Stanton Project	Stanton1 Coal	15.4 MW
Tri Cities Project	Stanton1 Coal	5.1 MW
Stanton 2 Project	Stanton 2 Coal	16.4 MW
St. Lucie Project	St. Lucie 2 Nuclear	12.1 MW
Total Excluded Resources		49.0 MW

A forecast of the prices for each resource will be required to evaluate the economics of exercising CROD. Each is developed below.

Stanton Project. The historical costs plus the budgeted costs for 2011 through 2012 of this project are tabulated below.

Table 6.2
Historical Costs Stanton Project

Year	Fuel Costs per MW-hr	Debt Service Costs x \$1000	Other Costs x \$1000
FY 2005	\$21.11	\$7,719	\$6,596
FY 2006	\$25.39	\$6,409	\$5,624
FY 2007	\$28.58	\$6,520	\$6,487
FY 2008	\$30.59	\$6,889	\$6,382
FY 2009	\$32.82	\$7,442	\$6,466
FY 2010	\$36.77	\$8,012	\$8,248
FY 2011 Budget	\$31.85	\$9,303	\$7,032
FY 2012 Forecasted	\$36.19	\$9,305	\$7,586

Other costs include operating and maintenance costs, transmission costs and FMPA relate administrative costs. The average annual increase in project costs per MW-hr delivered from FY 2005 actual to FY 2012 budgeted is equal to 3.58 percent.

Analysis of All Requirements Project Exit Alternatives

WHH has considered the following factors in estimating future costs of the Stanton Project. Generally much of the costs associated with the project, excluding fuel and debt service, will track inflation. WHH has assumed that O&M costs, transmission costs and FMPA related costs should generally track inflation. The portion of total project expenses included in these categories has averaged 23.6 percent during the past six years of actual cost plus the two years of budgeted costs. Fuel, which is considered separately, has averaged 44.9 percent of project expenses and debt service has averaged 31.5 percent of project expenses.

WHH has assumed an overall inflation rate of 2.4 percent in this analysis which is consistent with the inflation assumption used by RW Beck in the Integrated Resource Plan. WHH applied this rate to the O&M, FMPA costs and transmission costs. WHH has also assumed that debt service would remain fixed for the period of this analysis and therefore assumed no escalation on debt service costs. The Energy Information Administration has projected the price of coal in the reference case (base case) to remain fixed in real terms. Therefore, WHH has assumed that the coal price escalation is equal to inflation for the Stanton Project.

Applying these escalation estimates to the 2012 budgeted project costs results in a the following forecast of project costs. These costs have been allocated to FPUA based on the ownership of the Stanton Project and were used in the pro forma to evaluate CROD.

Table 6.3
Forecasted Costs Stanton Project

Stanton Project Forecasted Costs			
Year	Fuel Costs per MW-hr	Debt Service Costs x\$1000	Other Costs X \$1000
2012	\$36.19	\$9,305	\$7,586
2013	\$37.06	\$9,305	\$7,768
2014	\$37.95	\$9,305	\$7,954
2015	\$38.86	\$9,305	\$8,145
2016	\$39.79	\$9,305	\$8,341
2017	\$40.75	\$9,305	\$8,541
2018	\$41.72	\$9,305	\$8,746
2019	\$42.73	\$9,305	\$8,956
2020	\$43.75	\$9,305	\$9,171
2021	\$44.80	\$9,305	\$9,391
2022	\$45.88	\$9,305	\$9,616
2023	\$46.98	\$9,305	\$9,847
2024	\$48.10	\$9,305	\$10,084

Analysis of All Requirements Project Exit Alternatives

Stanton Project Forecasted Costs (continued)			
2025	\$49.26	\$9,305	\$10,326
2026	\$50.44	\$9,305	\$10,573
2027	\$51.65	\$9,305	\$10,827
2028	\$52.89	\$9,305	\$11,087
2029	\$54.16	\$9,305	\$11,353
2030	\$55.46	\$9,305	\$11,626

Tri Cities Project. The historical costs plus the budgeted costs for 2011 through 2012 of this project are tabulated below.

Table 6.4
Historical Costs Tri Cities Project

Year	Fuel Costs per MW-hr	Debt Service Costs x\$1000	Other Costs X \$1000
FY 2005	\$22.18	\$3,185	\$2,837
FY 2006	\$27.37	\$3,528	\$2,195
FY 2007	\$23.55	\$3,539	\$2,552
FY 2008	\$30.59	\$3,474	\$2,468
FY 2009	\$32.59	\$3,509	\$2,549
FY 2010	\$36.71	\$3,406	\$3,269
FY 2011 Budget	\$31.87	\$3,768	\$2,800
FY 2012 Forecasted	\$36.20	\$3,767	\$2,860

The average annual increase in project costs from FY 2005 actual to FY 2012 budgeted is equal to 1.98 percent.

Using an identical approach that was used in the Stanton Project above, WHH developed the following forecast of project costs. These costs have been allocated to FPUA based on the ownership of the Stanton Project and were used in the pro forma to evaluate CROD.

Analysis of All Requirements Project Exit Alternatives

Table 6.5
Forecasted Costs Tri-Cities Project

Tri Cities Project Forecasted Costs			
Year	Fuel Costs per MW-hr	Debt Service Costs x \$1000	Other Costs x \$1000
2012	\$36.19	\$3,767	\$2,860
2013	\$37.06	\$3,767	\$2,929
2014	\$37.95	\$3,767	\$2,999
2015	\$38.86	\$3,767	\$3,071
2016	\$39.79	\$3,767	\$3,145
2017	\$40.75	\$3,767	\$3,220
2018	\$41.72	\$3,767	\$3,297
2019	\$42.73	\$3,767	\$3,376
2020	\$43.75	\$3,767	\$3,458
2021	\$44.80	\$3,767	\$3,541
2022	\$45.88	\$3,767	\$3,625
2023	\$46.98	\$3,767	\$3,712
2024	\$48.10	\$3,767	\$3,802
2025	\$49.26	\$3,767	\$3,893
2026	\$50.44	\$3,767	\$3,986
2027	\$51.65	\$3,767	\$4,082
2028	\$52.89	\$3,767	\$4,180
2029	\$54.16	\$3,767	\$4,280
2030	\$55.46	\$3,767	\$4,383

Stanton 2 Project. The historical costs plus the budgeted costs for 2011 through 2012 of this project are tabulated below.

Table 6.6
Historical Costs Stanton 2 Project

Year	Fuel Costs per MW-hr	Debt Service Costs x \$1000	Other Costs x \$1000
FY 2005	\$17.80	\$12,632	\$8,832
FY 2006	\$25.01	\$13,744	\$7,521
FY 2007	\$23.89	\$14,113	\$9,646
FY 2008	\$28.74	\$14,391	\$10,928
FY 2009	\$31.77	\$13,717	\$8,632
FY 2010	\$35.90	\$13,475	\$10,513
FY 2011 Budget	\$31.19	\$14,166	\$10,375
FY 2012 Forecasted	\$35.43	\$14,554	\$10,336

Analysis of All Requirements Project Exit Alternatives

The average annual increase in project costs from FY 2005 actual to FY 2012 budgeted is equal to 5.52 percent.

Using an identical approach that was used in the two other Stanton Projects above, WHH developed the following forecast of project costs. These costs have been allocated to FPUA based on the ownership of the Stanton Project and were used in the pro forma to evaluate CROD.

Table 6.7
Forecasted Costs Stanton 2 Project

Stanton 2 Project Forecasted Costs			
Year	Fuel Costs per MW-hr	Debt Service Costs x\$1000	Other Costs X \$1000
2012	\$35.43	\$14,554	\$10,366
2013	\$36.28	\$14,554	\$10,615
2014	\$37.15	\$14,554	\$10,870
2015	\$38.04	\$14,554	\$11,130
2016	\$38.95	\$14,554	\$11,398
2017	\$39.89	\$14,554	\$11,671
2018	\$40.85	\$14,554	\$11,951
2019	\$41.83	\$14,554	\$12,238
2020	\$42.83	\$14,554	\$12,532
2021	\$43.86	\$14,554	\$12,832
2022	\$44.91	\$14,554	\$13,140
2023	\$45.99	\$14,554	\$13,456
2024	\$47.09	\$14,554	\$13,779
2025	\$48.22	\$14,554	\$14,109
2026	\$49.38	\$14,554	\$14,448
2027	\$50.57	\$14,554	\$14,795
2028	\$51.78	\$14,554	\$15,150
2029	\$53.02	\$14,554	\$15,514
2030	\$54.29	\$14,554	\$15,886

St. Lucie Project. The historical costs plus the budgeted cost for 2010 through 2012 of this project are tabulated on the following page.

Analysis of All Requirements Project Exit Alternatives

Table 6.8
Historical Costs St. Lucie Project

Year	Cost per MW-hr
FY 2005	\$68.59 per MW-hr
FY 2006	\$73.64 per MW-hr
FY 2007	\$72.10 per MW-hr
FY 2008	\$88.20 per MW-hr
FY 2009	\$86.10 per MW-hr
FY 2010	\$74.72 per MW-hr
FY 2011 Budget	\$86.83 per MW-hr
FY 2012 Forecasted	\$86.84 per MW-hr

The average annual increase in project costs from FY 2005 actual to FY 2012 budgeted is equal to 3.43 percent.

Since the St. Lucie project has the lowest variable costs and will be dispatched at full load all hours of the year, the project costs can be analyzed on the basis of costs per MW-hr. Using a similar approach that was used in the Stanton units, all project cost components were escalated at the assumed inflation rate of 2.4 percent except for fuel and debt service. Fuel which has averaged 9.3 percent of total project costs was escalated at 3.1 percent annually and debt service costs were not escalated. The fuel escalation rate is consistent with the Integrated Resource Plan developed by FMPA staff. This results in a composite escalation rate of 1.16 percent. Applying this rate to the FY 2012 budgeted cost yields the following forecast of prices for the St. Lucie Project.

Analysis of All Requirements Project Exit Alternatives

Table 6.9
Forecasted Costs St. Lucie Project

St. Lucie Project Forecasted Costs	
Fiscal Year	Forecasted All in Cost
FY 2012	\$86.84 per MW-hr
FY 2013	\$87.85 per MW-hr
FY 2014	\$88.87 per MW-hr
FY 2015	\$89.90 per MW-hr
FY 2016	\$90.94 per MW-hr
FY 2017	\$91.99 per MW-hr
FY 2018	\$93.06 per MW-hr
FY 2019	\$94.14 per MW-hr
FY 2020	\$95.23 per MW-hr
FY 2021	\$96.34 per MW-hr
FY 2022	\$97.46 per MW-hr
FY 2023	\$98.59 per MW-hr
FY 2024	\$99.73 per MW-hr
FY 2025	\$100.89 per MW-hr
FY 2026	\$102.06 per MW-hr
FY 2027	\$103.24 per MW-hr
FY 2028	\$104.44 per MW-hr
FY 2029	\$105.65 per MW-hr
FY 2030	\$106.87 per MW-hr

These price forecasts for all FPUA owned resources were used in the pro forma in the analysis of bulk power supply costs under the CROD alternative.

Analysis of All Requirements Project Exit Alternatives

7. Price Forecast for FMPA ARP Project

WHH has used the FMPA staff forecast for the delivered cost of capacity and energy supplied by ARP to FPUA. This forecast was included in the August 2010 Executive Committee meeting of FMPA and therefore it reflects current estimates of the prices of capacity and energy supplied by ARP. The FMPA staff forecasts for the years 2016 through 2029 were used without any adjustment. Since the period of WHH's analysis extends through 2030, WHH escalated the FMPA staff forecast to 2030 using the average rate of escalation for the years of 2016 through 2029. This rate was 2.87 percent which WHH believes is reasonable given a base inflation rate assumption of 2.4 percent.

The all in prices of ARP supplied energy used in the analysis are tabulated below.

**Table 7.1
FMPA ARP Price Forecast**

Year	All in Forecasted Price \$/MW-hr
2016	\$106.67
2017	\$108.85
2018	\$109.52
2019	\$112.51
2020	\$116.57
2021	\$120.54
2022	\$124.31
2023	\$127.86
2024	\$132.22
2025	\$134.60
2026	\$138.54
2027	\$143.49
2028	\$149.26
2029	\$154.12
2030	\$158.54

These prices were used in the analysis for the cost of ARP supplied energy and capacity in all cases.

Analysis of All Requirements Project Exit Alternatives

8. Cost of Peaking Capacity

Upon exercising the CROD option, FMPA ARP would no longer be responsible for the entire bulk power supply requirements of FPUA. Therefore, it will be FPUA's responsibility to plan and acquire the bulk power supply sufficient to provide for the retail customers of FPUA. Based on current forecasts in 2016, the first year after the election of the CROD option, FPUA's forecasted peak demand will be 117 MW in the Base Case. Utilities need resources to provide for the forecasted demand plus a reserve margin of 15 to 20 percent. Most utilities provide for 15 percent reserves. The purpose of reserves is to provide additional generating capacity in the event that peak demand exceeds the forecasted amount generally caused by unseasonable weather, plus to provide some margin in the case that some generating capacity is unavailable due to unplanned failure or maintenance and lastly, to serve as a buffer in the event that the load forecast was in error.

The required purchases of FMPA ARP (CROD) has reliability equal to native load and therefore includes reserves. Including a reserve margin of 15 percent, FPUA would need resources totaling 126 MW in 2016 as developed in the table below.

The resources available to FPUA in 2016 are totaled below.

Table 8.1
Capacity Requirements Analysis

Forecasted Peak 2016 (Base Case)	117.0 MW
Required Purchase from FMPA ARP CROD Amount	66.4 MW
FPUA Required Capacity	50.6 MW
FPUA Required Capacity plus 15% Reserves	58.2 MW
FPUA Owned Capacity (Stanton & St. Lucie)	49.0 MW
Additional Capacity Required 2016	9.2 MW
Total Capacity Required	126.2 MW

As the FPUA system grows, additional capacity will be required.

Although the prices of the additional bulk power supply obtained from the market is important, the evaluation of exercising CROD is relatively independent of the prices. Purchases from the market would only constitute less than two percent of FPUA's total cost of bulk power supply during the first five years following commencement of CROD.

Analysis of All Requirements Project Exit Alternatives

WHH considers the cost of these incremental purchases of capacity below.

The bulk power supply market in Florida is robust with prices somewhat dependent on the magnitude of excess capacity that utilities have at any given time. The following utilities routinely engage in responding to bulk power supply requests for proposals.

1. Florida Power and Light
2. Progress Energy Florida
3. Tampa Electric Company
4. Seminole Electric Cooperative
5. JEA (formally Jacksonville Electric Authority)
6. Orlando Utilities Commission
7. Gainesville Regional Utilities
8. City of Tallahassee
9. City of Lakeland

Each of these is discussed below.

Florida Power and Light. FPL is Florida's largest electric utility and has installed capacity and purchased power resources of over 25,000 MW. FPL serves retail load in the eastern and southwestern portion of the state including the area around the FPUA service area. FPL is active in the bulk power supply market and has wholesale contracts with the City of Key West, Florida Keys Electric Cooperative, Lee County Electric Cooperative and Seminole Electric. FPL has recently responded to request for proposals issued by Bartow, Winter Park and Quincy. Although FPL was not the low bidder in any of these cases, FPL did offer competitive proposals. WHH notes that FPL did secure a portion of the Lee County Electric Cooperative load from Seminole Electric Cooperative commencing in 2010 and will provide all of LCEC's bulk power supply commencing in 2014. Although WHH is not privy to the terms of this contract, WHH is assuming that the FPL offering is at least competitive with SEC and SEC prices are known to be competitive. Based on financial reports from FPL and Florida Keys Electric Cooperative, WHH estimates that FPL provided bulk power supply to FKEC in 2009 for about \$80 per MW-hr.

WHH notes that FPL is the only potential bulk power supplier that is directly connected to FPUA facilities. Whereas FPL will only have to transmit any purchased power over its own transmission system to deliver power to FPUA, all other potential suppliers will have to transmit power over at least two transmission systems and this imposes a cost burden of about 7 to 8 percent of the total cost of power to all suppliers other than FPL.

Analysis of All Requirements Project Exit Alternatives

Progress Energy Florida. PEF is the second largest electric utility in Florida and serves about 1.6 million customers in west central Florida. PEF has about 11,500 MW of bulk power supply resources including firm purchased power contracts. PEF is the most active investor owned utility in the bulk power supply market. PEF currently supplies the total bulk power supply to the following cities with municipal electric systems.

Table 8.2
Progress Energy All Requirements Customers

Bartow	Quincy
Chattahoochee	Williston
Mt. Dora	Winter Park

PEF has additional bulk power sales contracts with other Florida municipalities for partial requirements services including FMPA. As a result of recent bulk power supply solicitations, PEF will lose Quincy and Bartow as customers effective January 2011. Based on information filed with FERC, PEF prices ranged from about \$81 to \$88 per MW-hr in 2009, with the larger cities (Winter Park and Bartow) having the lower prices. WHH notes that FPUA is larger than Bartow and about equal in size to Winter Park.

PEF responded to all four bulk power supply solicitations issued or negotiated in 2010 and was successful in the Winter Park solicitation. WHH considers PEF a competitive candidate for bulk power supply to FPUA.

Tampa Electric Company. TEC is Florida's third largest investor owned utility and has bulk power supply resources totaling over 5,000 MW. TEC has an all requirements contract with the City of Wauchula and has other partial requirements contracts with Reedy Creek Improvement District and Orlando Utilities Commission. TEC frequently responds to solicitations for bulk power supply from municipalities and should be considered a potential supplier for additional capacity that FPUA may need. WHH notes that since TEC is not directly connected to FPUA, FPUA will be required to pay for transmission service to both TEC and FPL. This imposes a cost penalty of about 7 to 8 percent.

Seminole Electric Cooperative. SEC provides for the bulk power supply of its member electric cooperatives. SEC is similar to FMPA ARP in that its only purpose is to provide for the bulk power supply for its member electric cooperatives. It is governed by representatives from each member cooperative as is FMPA ARP which is governed by representative from each ARP participant. The electric cooperatives served by SEC represent about 900,000 customers which is larger than JEA and OUC combined. The peak load served by SEC was 4,663 MW in 2009.

Analysis of All Requirements Project Exit Alternatives

Recent all-in prices of bulk power supply delivered to its members are tabulated in the table below.

Table 8.3
Historical Bulk Power Prices to SEC Members

Calendar Year	Price Delivered to SEC Members
2011	\$79.00 per MW-hr ⁽¹⁾
2010	\$80.50 per MW-hr ⁽²⁾
2009	\$80.32 per MW-hr
2008	\$74.51 per MW-hr
2007	\$69.20 per MW-hr

Table Notes

1. WHH Estimate
2. Jan thru Sept actual, Oct thru Dec WHH estimate

During a very recent solicitation by Winter Park (fall 2010), a combined proposal from SEC and Progress Energy Florida was evaluated as the low bidder for bulk power supply commencing in January 2011 against very competitive proposals by FPL and OUC. WHH considers SEC as a competitive potential supplier for FPUA.

JEA. JEA was formerly the Jacksonville Electric Authority and after acquiring the water and wastewater utilities changed its name to JEA. JEA is the largest municipal electric utility in Florida and one of the largest in the nation. JEA has over 400,000 electric customers in northeast Florida and has a total generating capacity of over 3,000 MW. JEA conducts most of its bulk power sale activities through a separate entity, The Energy Authority (TEA). TEA was formed by seven large municipal utilities located throughout the country. Southeastern US members in addition to JEA include Gainesville Regional Utilities, Municipal Electric Authority of Georgia and South Carolina Public Service Authority. WHH considers JEA as a potential supplier to FPUA.

Orlando Utilities Commission (OUC). OUC provides electric and water service in Orlando and portions of surrounding Orange County and provides electric service to the city of St. Cloud. OUC has over 200,000 electric customers and has about 1,550 MW of generating capacity. FPUA participates in the OUC managed Stanton Energy Center. OUC is active in the bulk power market and has responded to most of the recent solicitations from other municipalities. As previously noted, OUC was successful in acquiring the city of Bartow's all requirements contract

Analysis of All Requirements Project Exit Alternatives

commencing in January 2011. Additionally, OUC is a partial requirements supplier to neighboring Vero Beach.

Other Municipal Systems. Other generating municipal systems may from time to time have excess capacity that might be available to FPUA. These systems are Lakeland, Tallahassee and Gainesville Regional Utilities. The peak load of these systems is about 500 MW, and they may have 20 - 50 MW or so excess capacity on occasion. Since FPUA's third party purchase requirements only amounts to 10 to 20 MW for the next decade, these systems are viable alternatives to consider when purchasing bulk power supply.

Additionally, there are several independent power producers in Florida that respond to requests for proposals. Given the modest amount of the FPUA requirement, most of the above listed companies would at times have sufficient excess requirement to supply FPUA and should be considered potential suppliers.

Results of Recent Bulk Power Supply Solicitations. During 2010, three municipal electric systems issued RFP's for bulk power supply. Additionally, the City of Alachua issued a solicitation in 2009 and negotiations with the respondents continued into 2010. The results of these solicitations provide some insight into the bulk power supply market. Relevant information is tabulated below.

Table 8.4
Results of Recent Bulk Power Supply Solicitations in Florida

City	Peak Load	Respondents to RFP	Low Evaluated Bidder	Contract Term	Evaluated Price 2011
Alachua	27 MW	GRU, PEF	GRU	10 years	\$71.05
Bartow	77 MW	FPL, OUC, PEF	OUC	7 Years	\$71.10
Quincy	20 MW	FPL, FMPA, PEF, CCG ¹	FMPA	5 Years	\$69.68
Winter Park	100 MW	PEF, SEC, FPL, OUC	PEF-SEC Joint Proposal	3 Years	\$69.22
Average					\$70.26

Table Notes

1. CCG is Constellation Commodities Group which conducts wholesale operations for Constellation Energy. Constellation Energy owns power plants throughout the US.

As is evident, the attractive prices reflect the excess capacity in the market and also the decline in natural gas prices. WHH notes the average price is about \$19 per MW-hr below the price currently forecasted by FMPA in their Integrated Resource Plan for 2011.

Analysis of All Requirements Project Exit Alternatives

Marginal Cost of New Capacity. The marginal cost of new capacity can be used as an indicator of the upper bound of the price of peaking capacity. Arguably, if a purchaser is willing to pay the full cost of new capacity, then sellers will provide the capacity to satisfy the demand. Presently, all FPUA owned capacity can be classified as base load capacity (capacity with low marginal costs) and FMPA CROD capacity can be considered intermediate load type of capacity. Therefore, FPUA capacity needs are classified as peaking type of capacity (lower cost capacity with higher marginal costs).

WHH has reviewed the current market prices of simple cycle combustion turbines and based on the inputs in the following table, has calculated the likely selling price of this capacity.

Table 8.5
Cost New Peaking Capacity

Capital Cost Simple Cycle Gas Turbine	\$710 per kW
Return on Rate Base	7.75%
Unit Life	25 years
Fixed O&M	\$0.60 per kW-month
Variable O&M	\$4 per kW-hr

Note that the demand charge for peaking capacity based on the above inputs should approximate \$6,000 MW-month not including transmission. WHH believes that this price represents a ceiling and if FPUA should issue a solicitation for its peaking capacity needs, it would likely receive proposals below the costs derived above. WHH notes that FMPA ARP demand rates have ranged between \$16.18 and \$18.23 during the last four months of FY 2010 which is substantially greater than the estimated costs of peaking capacity purchased from the market.

Lastly, WHH considered the current price that FMPA was paying member utilities for peaking capacity owned by those utilities. Presumably this price is reflective of current market conditions and therefore can serve as another input into estimating the cost of peaking capacity to FPUA. FMPA revises the prices annually. FMPA purchases peaking capacity from Keys Energy Services and the City of Lake Worth. These ARP members have eleven different peaking resources which include both simple cycle gas turbines and diesel generators. The demand prices paid by ARP for these resources range from a low of \$1,910 per MW-month to a high of \$3,040 per MW-month and average \$2,350 per MW-month. Escalation of the average price to 2016 at the average escalation rate for ARP energy (2.87%) results in a forecasted capacity price of peaking capacity in 2016 of \$2,707 per MW-month.

Analysis of All Requirements Project Exit Alternatives

Summary. WHH concludes that there is a robust bulk power supply market in Florida and that FPUA should be able to obtain competitive prices for any bulk power needs beyond capacity and energy supplied by FPUA owned resources, and capacity and energy furnished under CROD. Based on recent bids and analysis of the marginal cost of new capacity, WHH believes that FPUA can obtain bulk power supply from third parties at a cost significantly below the currently forecasted costs from the FMPA ARP. WHH has assumed the following capacity prices in the pro forma for purchases of additional capacity:

Demand Charge	\$5,000 per MW-month
Variable O&M	\$15 per MW-hr

Additionally, FPUA will also have the option to jointly participate in the units being constructed by other municipalities such as FPUA did with the Stanton units or to construct and operate smaller units either alone or in concert with Vero Beach. Lastly, WHH notes that the cost of this incremental capacity and energy is but a small portion of the FPUA system requirement and therefore has little influence on the economics of exercising CROD.

9. Model Development and Results

WHH prepared an economic model to estimate the costs of bulk power supply under various assumptions.

Model Description. The model developed by WHH estimates the cost of bulk power supply for FPUA for each of the next 15 years. Upon exercising CROD, FPUA will receive bulk power supply from three sources. These are:

- 1 Output from FPUA owned resources (Stanton coal plant and St. Lucie nuclear plant). In the base case, the output from these units initially represents about 39 percent of the system requirements for FPUA in 2016 and gradually increase to about 45 percent over the twenty year period as the FPUA load grows.
- 2 Required CROD purchases from ARP. The amount of these purchases remains constant as long as FPUA is a participant in ARP. Under the base case with no FMPA adjustment to CROD, these required purchases initially represent about 57 percent of the system requirement and decrease to about 49 percent over the fifteen year period as the system load grows.
- 3 Purchases of peaking capacity from third parties. These purchases supply the difference between the FPUA system requirement and the FPUA owned resources and required ARP purchases. In the base case, these amounts are very small initially (less than one percent of system requirements) and increase to about 2.5 percent over the fifteen year period.

The model uses the estimated cost of each resource as developed in the previous sections of this report. WHH used RW Beck forecasts of ARP costs as presented in the ARP 2010 Integrated Resource Planning Process Report (Base Case page 23) for the price of required purchases from ARP. The RW Beck forecast of ARP costs did not include a breakdown into capacity and energy costs, however since the load factor remained constant during the period of the analysis, the use of ARP costs expressed as energy costs is not a problem.

WHH has developed a cost estimate for the peaking resources to be purchased from third parties that will be necessary for FPUA to maintain sufficient capacity to satisfy peak loads plus a reserve margin. WHH based its estimate on the cost of new peaking capacity, recent bids for bulk power supply received by other municipalities plus a review of RW Beck developed capacity credits for peaking resources.

Analysis of All Requirements Project Exit Alternatives

Other key assumptions are discussed below.

Inflation Rate. WHH used 2.4 percent as the general rate of inflation. This estimate is identical to the estimate used by RW Beck in their recently completed Integrated Resource Plan report provided to FMPA in September 2010. Since WHH used some other estimates from this report, the use of the same inflation estimate insures that the analysis is consistent.

Load Duration Data. This data is used to estimate the dispatch of FPUA resources. WHH reviewed hourly load data from January 2007 through September 2010. Although the data was generally consistent, the data reflected a reduction in hourly loads from 2007 to 2008. WHH noted that the load duration data for the twelve months ending September 2010 fell between the data for calendar year 2007 and calendar year 2009. WHH therefore concluded that this data was representative of FPUA hourly loads and was used in the analysis. Hourly loads were increased at the RW Beck forecasted growth rates to develop hourly load data for future years or in the case of the High and Low Growth Case, the hourly loads were adjusted based on the assumptions for the particular case.

CROD. Based on RW Beck's forecasts, the amount of CROD was estimated to be 66.4 MW. This amount was used in the Base Case. This amount was adjusted up and down by 15 percent (to 76.4 MW and 56.4 MW) to reflect the contract provisions permitting FMPA to unilaterally adjust CROD in the High CROD Case and the Low CROD Case.

Economy Transactions. The total of required CROD purchases plus FPUA owned resources exceeds the load of FPUA during many hours of the year. Since FPUA owned resources have low marginal costs, the model assumes the sale of this excess capacity at a price equal to combined cycle capacity marginal costs. Also during periods that FPUA owned resources are unavailable, the model assumes that economy purchases will be made to replace the FPUA owned capacity that was unavailable. These transactions are netted and are referenced in the model as Economy Transactions.

The outputs of each model are attached to this report. The cost of each source of bulk power supply is estimated for each year. In every case, the cost of continuing to purchase all power from the ARP is compared to the costs of bulk power supply if the CROD option is exercised. Each output is formatted identically. The results are summarized at the bottom of each output. The summary cost of bulk power supply if CROD is exercised is depicted in blue highlighted cells and the costs if FPUA remains a full participant in ARP are depicted in the light red highlighted cells. The difference in cost is depicted in the yellow highlighted cells.

Analysis of All Requirements Project Exit Alternatives

Model Results WHH used two model outputs to express the savings associated with exercising CROD: These are:

1. Present Value of Bulk Power Supply Cost Savings 2016 thru 2030. These savings were discounted to 2015 using a discount rate of 5.0%.
2. Average Bulk Power Supply Costs Savings over the Fifteen Year Period. This is the arithmetic average of the difference in bulk power costs per MW-hr over the fifteen year period of the analysis.

The following table provides the savings that result from exercising CROD in the Base Case (no FMPA adjustment to CROD), the High CROD Case (FMPA adjusts CROD up by 15%) and the Low CROD Case (FMPA adjusts CROD down by 15%)

Table 9.1
Bulk Power Costs Savings with CROD Adjustment

Model Output	Base Case	High CROD	Low CROD
PV Bulk Power Supply Costs 2016-2030 if CROD Exercised	\$742 million	\$764 million	\$717 million
PV Bulk Power Supply Costs 2016-2030 if CROD NOT Exercised	\$816 million	\$816 million	\$816 million
PV Bulk Power Supply Cost Savings 2016-2030 if CROD Exercised	\$74.2 million	\$52.2 million	\$99.8 million
Average Bulk Power Supply Cost Savings \$/MW-hr if CROD Exercised	\$11.89 per MW-hr	\$8.60 per MW-hr	\$15.84 per MW-hr

The results indicate that regardless of any adjustment by FMPA to the amount of CROD, FPUA will realize savings by exercising CROD. This is not unexpected. In the Base Case, FMPA ARP costs are above market and FPUA owned resources (Stanton coal and St. Lucie nuclear) are cheaper than FMPA ARP costs. The difference between FMPA and ARP cost increases over time as FPUA is able to more fully utilize the Stanton coal resources. Initially, the average difference in costs between the FMPA ARP cost and the cost of FPUA owned resources is about \$5 per MW-hr, however this increases to over \$40 per MW-hr in 2030.

The model also clearly indicates the effect of FMPA's unilateral adjustment to CROD. In the High CROD Case, FPUA is required to purchase more power from the ARP (about 50,000 MW-hrs more annually) and this increases costs to FPUA since FMPA ARP prices are above market.

Analysis of All Requirements Project Exit Alternatives

Additionally in the High CROD Case, FPUA is less able to utilize the FPUA owned resources which have lower costs. The difference in the present value of the savings between the Base Case and the High CROD Case is \$22 million.

In the Low CROD Case, FPUA is obligated to purchase less from the ARP and is able to more fully utilize the cheaper FPUA owned resources. As expected, the present value of the savings increase dramatically by \$25 million.

WHH also used the model to evaluate the impact of growth in sales on the economics of exercising CROD. WHH considered two cases. In the High Growth Case WHH increased the sales of electricity by 3 percent per year from 2010 through 2030. In the Low Growth Case, WHH assumed that there was not any growth in sales beyond 2015 and the electric sales remained constant at the levels forecasted by RW Beck for 2015. It was assumed that FMPA did not adjust CROD up or down in both cases.

Table 9.2
Bulk Power Cost Savings Various Growth Cases

Model Output	Base Case	High Growth	Low Growth
PV Bulk Power Supply Costs 2016-2030 if CROD Exercised	\$742 million	\$898 million	\$705 million
PV Bulk Power Supply Costs 2016-2030 if CROD NOT Exercised	\$816 million	\$1,016 million	\$746 million
PV Bulk Power Supply Cost Savings 2016-2030 if CROD Exercised	\$74.2 million	\$117.8 million	\$40.5 million
Average Bulk Power Supply Cost Savings if CROD Exercised	\$11.89 per MW-hr	\$14.91 per MW-hr	\$7.15 per MW-hr

The results are consistent with earlier cases. Cases that involve greater utilization of FPUA resources and market resources provide more savings than cases in which FPUA is required to purchase a larger percentage of their system requirements from FMPA ARP. In the High Growth Case FPUA purchases 44.3 percent of its system requirement from FMPA ARP over the 15 year period analyzed. In the Base Case FPUA purchases 49.0 percent of its system requirement from FMPA ARP, 5 percent more than in the High Growth Case. The reduced purchases from FMPA ARP in the High Growth Case are the primary reason for increased savings over the Base Case.

Conversely, in the Low Growth Case, FPUA will purchase 53.7 percent of its system requirement from FMPA ARP. These increased purchases result in lower savings from

Analysis of All Requirements Project Exit Alternatives

exercising CROD. However, even in this case, the savings from exercising CROD are substantial with a present value of the first 15 years of \$42 million.

WHH considered other variables that may impact the savings but concluded that the results would not be altered. For example, WHH considered the case that climate change legislation may impose a cost penalty on coal generation. In the Base Case in the year 2016, coal generation would represent 23.6 percent of its system requirement if FPUA exercised CROD. Yet FMPA ARP projects that coal would represent 19.3 percent of its system requirement. FPUA's dependence on coal generation does not significantly change whether or not CROD is exercised. Therefore WHH concludes that even if climate change legislation should become law (which appears unlikely at this time), the differential impact on FPUA if CROD was exercised would be minimal.

Other variables, such as changes in fuel prices or inflation would have minimal differential impact on savings associated with exercising CROD for FPUA.

Summary. The results of the model are clear that in every case considered, FPUA will realize savings if CROD is exercised. Only in the case of a sustained period of no growth in electric sales (which would be without precedence in the 120 year history of the industry), is the economic benefit of exercising CROD below \$52 million.

10. Recommendations

WHH recommends that FPUA consider the following actions:

1. Request delay of the deadline to exercise CROD until March 31, 2011. As noted in the report, the contract provisions as related to CROD are problematic. The timing of the notice to FPUA regarding the amount of CROD is not sufficient to allow FPUA to solicit additional capacity. WHH suggests that FMPPA and the FPUA negotiate revisions to this section of the contract that reflect reasonable time periods that allow both parties to protect their interests. WHH suggests that the following objectives are reasonable.
 - a. Reduction in the amount of notice required to exercise CROD. Given today's environment of low growth and excess capacity, five years notice is not required. WHH suggests that three years is reasonable if FMPPA has not made any firm commitments for additional capacity. Currently FMPPA does not plan any additional capacity until 2018, therefore shorter notice for CROD does not impact the ARP planning process.
 - b. Require FMPPA to establish the amount of CROD within 90 days of the notice to exercise CROD. This would allow sufficient time for the participant to properly plan for additional capacity that may be required upon the exercise of CROD. Alternatively, the parties could agree to eliminate the unilateral adjustment to CROD by FMPPA, thereby allowing the party exercising CROD a definitive determination of its purchase obligation to ARP at the time CROD is exercised.
2. Review and refine the analysis prepared by WHH to reflect the most recent data in load growth and fuel prices. Certain variables will change during the period of time from the submission of the report and the date of the decision to exercise CROD. WHH recommends that the economic model be updated periodically to reflect the most recent data.
3. Initiate discussions with Florida Municipal Power Pool (FMPP) regarding potential participation. FPUA will require some third party to perform load following services. The Florida Municipal Power Pool currently provides this service for the ARP. The FMPP has criteria for participation and FPUA should explore this alternative with current members of the FMPP.

Analysis of All Requirements Project Exit Alternatives

4. Initiate discussions with FPL for peaking capacity and load following services. In addition to FMPP, FPL can provide load following services. FPL may require that FPUA procure any additional capacity from FPL; however, FPL has a competitively priced generation portfolio and this may prove to be an attractive alternative.
5. Conduct discussions with the City of Vero Beach regarding mutually beneficial opportunities. The proximity between the two systems certainly suggests that there may be mutually beneficial opportunities. These may include the joint participation in small peaking capacity plants, joint purchasing of materials and possible savings in water and waste water utility projects.

FPUA Pro Forma BASE CASE

Assumptions

Load Ratio 2016	63.0%
CROD Amount	65.5 MW
Stanton Capacity	15.4 MW
Tri Cities Capacity	5.1 MW
St. Lucie 2 Capacity	12.1 MW
St. Lucie 2 Capacity Factor	90%
Stanton 2 Capacity	16.4
Price of CROD Energy 2016	\$106.67 per MW-hr
Escalation in price of ARP Energy post 2029	2.87%
Price Third Prty Peaking Purchases 2016	\$5,000 per MW-month
Escalation in Capacity Price of Pkg Resource	2.0%

Calendar Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Peak Load MW	115.4	117.0	118.4	119.8	121.2	122.6	124.0	125.3	126.7	128.0	129.2	130.5	131.7	133.0	134.2	135.5
FMPA Coincident Peak MW	114.5	116.1	117.5	118.9	120.3	121.7	123.0	124.4	125.7	127.0	128.2	129.5	130.7	131.9	133.2	134.5
System Requirement MW-hrs	591,858	600,033	607,576	614,874	622,088	629,253	636,337	643,276	650,093	656,797	663,410	669,622	676,341	682,685	688,962	695,852
Load Factor	58.5%	58.5%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%

Energy from FPUA Owned Resources

Stanton Energy MW-hrs	70,083	72,527	74,924	77,273	79,553	81,649	83,763	85,727	87,630	89,402	91,197	92,868	94,492	96,133	97,739
Tri Cities Energy MW-hrs	23,209	24,019	24,812	25,591	26,345	27,040	27,740	28,390	29,020	29,607	30,202	30,755	31,293	31,836	32,368
St Lucie 2 Energy MW-hrs	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396
Stanton 2 Energy MW-hrs	74,633	77,237	79,789	82,291	84,718	86,951	89,202	91,294	93,321	95,207	97,119	98,898	100,627	102,375	104,085

Total Energy FPUA Owned Resources MW-hrs	263,322	269,179	274,922	280,552	286,013	291,036	296,101	300,808	305,368	309,613	313,914	317,918	321,808	325,740	329,589
% Sys Req from FPUA Owned Resources	43.9%	44.3%	44.7%	45.1%	45.5%	45.7%	46.0%	46.3%	46.5%	46.7%	46.9%	47.0%	47.1%	47.3%	47.4%

CROD Purchases MW-hrs	317,824	317,824	317,824	317,824	317,824	317,824	317,824	317,824	317,824	317,824	317,824	317,824	317,824	317,824	317,824	317,824
ARP Purchases % of Total Supply	53.0%	52.3%	51.7%	51.1%	50.5%	49.9%	49.4%	48.9%	48.4%	47.9%	47.5%	47.0%	46.6%	46.1%	45.7%	

FPUA Economy & Pkg Purchases	18,887	20,573	22,128	23,712	25,416	27,477	29,351	31,461	33,605	35,973	37,884	40,599	43,053	45,398	48,439
------------------------------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Total Supply MW-hrs	600,033	607,576	614,874	622,088	629,253	636,337	643,276	650,093	656,797	663,410	669,622	676,341	682,685	688,962	695,852
---------------------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------

Bulk Power Supply Cost

Stanton Energy Price \$/MW-hr	\$101.41	\$100.96	\$100.66	\$100.52	\$100.52	\$100.74	\$101.02	\$101.46	\$101.46	\$102.01	\$102.69	\$103.41	\$104.26	\$105.18	\$106.13	\$107.15
Tri Cities Energy Price \$/MW-hr	\$107.22	\$106.57	\$106.10	\$105.78	\$105.63	\$105.71	\$105.86	\$106.19	\$106.63	\$107.21	\$107.84	\$108.59	\$109.43	\$109.43	\$110.31	\$111.25
St. Lucie Energy Price \$/MW-hr	\$90.94	\$91.99	\$93.06	\$94.14	\$95.23	\$96.34	\$97.46	\$98.59	\$99.73	\$100.89	\$102.06	\$103.24	\$104.44	\$105.65	\$106.87	
Stanton 2 Energy Price \$/MW-hr	\$96.06	\$95.61	\$95.31	\$95.15	\$95.14	\$95.32	\$95.57	\$95.97	\$96.47	\$97.10	\$97.76	\$98.55	\$99.40	\$100.29	\$101.24	
Avg Cost Coal Capacity	\$99.83	\$99.36	\$99.04	\$98.86	\$98.84	\$99.02	\$99.27	\$99.68	\$100.19	\$100.83	\$101.51	\$102.32	\$103.20	\$104.11	\$105.09	
Avg. Cost FPUA Owned Resources \$/MW-hr	\$96.61	\$96.75	\$96.96	\$97.26	\$97.63	\$98.14	\$98.68	\$99.33	\$100.04	\$100.85	\$101.68	\$102.59	\$103.56	\$104.56	\$105.61	

Stanton Cost	\$7,106,776	\$7,322,020	\$7,542,218	\$7,767,446	\$7,996,778	\$8,225,181	\$8,461,479	\$8,698,094	\$8,938,981	\$9,180,718	\$9,430,838	\$9,682,044	\$9,938,160	\$10,202,726	\$10,473,123
Tri Cities Cost	\$2,488,503	\$2,559,735	\$2,632,591	\$2,707,095	\$2,782,941	\$2,858,461	\$2,936,578	\$3,014,781	\$3,094,380	\$3,174,240	\$3,256,858	\$3,339,814	\$3,424,376	\$3,511,716	\$3,600,966
St. Lucie Cost	\$8,675,326	\$8,775,953	\$8,877,748	\$8,980,723	\$9,084,893	\$9,190,271	\$9,296,871	\$9,404,708	\$9,513,795	\$9,624,148	\$9,735,781	\$9,848,709	\$9,962,946	\$10,078,509	\$10,195,412
Stanton 2	\$7,168,949	\$7,384,401	\$7,604,855	\$7,830,389	\$8,060,033	\$8,288,540	\$8,525,106	\$8,761,826	\$9,002,824	\$9,244,527	\$9,494,788	\$9,745,995	\$10,002,133	\$10,266,889	\$10,537,532

ARP Price \$/MW-hr	\$106.67	\$108.85	\$109.52	\$112.51	\$116.57	\$120.54	\$124.31	\$127.86	\$132.22	\$134.60	\$138.54	\$143.49	\$149.26	\$154.12	\$158.54
Cost CROD Purchases	\$33,902,287	\$34,595,144	\$34,808,086	\$35,758,380	\$37,048,745	\$38,310,506	\$39,508,703	\$40,636,978	\$42,022,691	\$42,779,112	\$44,031,339	\$45,604,568	\$47,438,412	\$48,983,037	\$50,388,850

Cap Price Pkg Purchases MW-yr	\$60,000	\$61,170	\$62,363	\$63,579	\$64,819	\$66,083	\$67,371	\$68,685	\$70,024	\$71,390	\$72,782	\$74,201	\$75,648	\$77,123	\$78,627
Energy Price Pkg Purchases	\$87.35	\$89.38	\$91.48	\$93.64	\$95.87	\$98.18	\$100.56	\$103.02	\$105.55	\$108.17	\$110.86	\$113.65	\$116.52	\$119.49	\$122.55
Peaking Purchases MW-hr	229	1,264	2,181	3,140	4,237	5,740	7,050	8,637	10,275	12,171	13,604	15,875	17,896	19,804	22,417
Cost Peaking Purchases	\$483,505	\$684,002	\$882,035	\$1,092,226	\$1,324,364	\$1,605,963	\$1,872,480	\$2,186,555	\$2,511,285	\$2,869,564	\$3,200,415	\$3,631,746	\$4,061,626	\$4,487,653	\$5,031,302

Net Cost (Benefit) Economy Transactions	-\$512,398	-\$432,537	-\$348,266	-\$259,378	-\$166,793	-\$76,209	\$22,471	\$120,550	\$222,638	\$324,629	\$435,700	\$546,976	\$663,190	\$788,986	\$921,206
---	------------	------------	------------	------------	------------	-----------	----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Summary Exercise CROD Costs

Total Bulk Power Supply Costs \$	\$59,312,948	\$60,888,718	\$61,999,268	\$63,876,882	\$66,130,961	\$68,402,712	\$70,623,687	\$72,823,492	\$75,306,593	\$77,196,938	\$79,585,718	\$82,399,852	\$85,490,844	\$88,319,516	\$91,148,391
Bulk Power Supply Cost \$/MW-hr	\$98.85	\$100.22	\$100.83	\$102.68	\$105.09	\$107.49	\$109.79	\$112.02	\$114.66	\$116.36	\$118.85	\$121.83	\$125.23	\$128.19	\$130.99
PV Bulk Power Supply Cost 2016-2030	\$742,304,467														
Average Bulk Power Supply Costs	\$112.87														

Summary Do Not Exercise CROD Costs

ARP Cost \$	\$62,504,912	\$64,526,703	\$65,770,934	\$68,238,795	\$71,316,556	\$74,395,251	\$77,403,784	\$80,328,215	\$83,742,183	\$86,078,779	\$89,288,996	\$93,208,449	\$97,621,643	\$101,558,839	\$105,393,531
ARP Cost \$/MW-hr	\$104.17	\$106.20	\$106.97	\$109.69	\$113.34	\$116.91	\$120.33	\$123.56	\$127.50	\$129.75	\$133.34	\$137.81	\$143.00	\$147.41	\$151.46
PV Bulk Power Supply Cost 2016-2030	\$816,478,018														
Average Bulk Power Supply Costs	\$124.76														

Difference	\$3,191,964	\$3,637,984	\$3,771,667	\$4,361,913	\$5,185,596	\$5,992,538	\$6,780,097	\$7,504,723	\$8,435,589	\$8,881,841	\$9,703,277	\$10,808,598	\$12,130,798	\$13,239,324	\$14,245,139
Cumulative Savings	\$3,191,964	\$6,829,948	\$10,601,615	\$14,963,528	\$20,149,124	\$26,141,662	\$32,921,759	\$40,426,481	\$48,862,071	\$57,743,912	\$67,447,189	\$78,255,787	\$90,386,585	\$103,625,909	\$117,871,048

PV of Savings 2016-2030	\$74,173,551
-------------------------	--------------

FPUA Pro Forma

HI CROD

Assumptions

Load Ratio 2016	72.4%
CROD Amount	75.3 MW
Stanton Capacity	15.4 MW
Tri Cities Capacity	5.1 MW
St. Lucie 2 Capacity	12.1 MW
St. Lucie 2 Capacity Factor	90%
Stanton 2 Capacity	16.4
Price of CROD Energy 2016	\$106.67 per MW-hr
Escalation in price of ARP Energy post 2029	2.87%
Price Third Prty Peaking Purchases 2016	\$5,000 per MW-month
Escalation in Capacity Price of Pkg Resource	2.0%

Calendar Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Peak Load MW	115.4	117.0	118.4	119.8	121.2	122.6	124.0	125.3	126.7	128.0	129.2	130.5	131.7	133.0	134.2	135.5
FMPA Coincident Peak MW	114.5	116.1	117.5	118.9	120.3	121.7	123.0	124.4	125.7	127.0	128.2	129.5	130.7	131.9	133.2	134.5
System Requirement MW-hrs	591,858	600,033	607,576	614,874	622,088	629,253	636,337	643,276	650,093	656,797	663,410	669,622	676,341	682,685	688,962	695,852
Load Factor	58.5%	58.5%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%

Energy from FPUA Owned Resources																
Stanton Energy MW-hrs	52,237	54,748	57,263	59,784	62,310	64,717	67,249	69,663	72,071	74,333	76,670	78,854	80,966	83,102	85,199	
Tri Cities Energy MW-hrs	17,299	18,131	18,964	19,799	20,635	21,432	22,271	23,070	23,868	24,617	25,391	26,114	26,813	27,521	28,215	
St Lucie 2 Energy MW-hrs	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	
Stanton 2 Energy MW-hrs	55,629	58,303	60,982	63,666	66,357	68,919	71,616	74,187	76,751	79,160	81,649	83,974	86,223	88,498	90,731	
Total Energy FPUA Owned Resources MW-hrs	125,165	131,181	137,209	143,249	149,302	155,068	161,135	166,921	172,690	178,110	183,709	188,942	194,003	199,120	204,145	
% Sys Req from FPUA Owned Resources	36.8%	37.3%	37.8%	38.4%	38.9%	39.4%	39.9%	40.4%	40.8%	41.2%	41.7%	42.0%	42.4%	42.7%	43.0%	

CROD Purchases MW-hrs	365,498	365,498	365,498	365,498	365,498	365,498	365,498	365,498	365,498	365,498	365,498	365,498	365,498	365,498	365,498	365,498
ARP Purchases % of Total Supply	60.9%	60.2%	59.4%	58.8%	58.1%	57.4%	56.8%	56.2%	55.6%	55.1%	54.6%	54.0%	53.5%	53.1%	52.5%	

FPUA Economy & Pkg Purchases	13,974	15,501	16,771	17,945	19,057	20,375	21,247	22,278	23,213	24,406	25,019	26,505	27,788	28,948	30,813
------------------------------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Total Supply MW-hrs	600,033	607,576	614,874	622,088	629,253	636,337	643,276	650,093	656,797	663,410	669,622	676,341	682,685	688,962	695,852
---------------------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------

Bulk Power Supply Cost

Stanton Energy Price \$/MW-hr	\$122.46	\$120.51	\$118.84	\$117.43	\$116.23	\$115.38	\$114.56	\$114.03	\$113.65	\$113.52	\$113.45	\$113.61	\$113.91	\$114.28	\$114.76
Tri Cities Energy Price \$/MW-hr	\$130.25	\$127.95	\$125.95	\$124.23	\$122.75	\$121.65	\$120.59	\$119.84	\$119.26	\$118.96	\$118.71	\$118.71	\$118.87	\$119.11	\$119.46
St. Lucie Energy Price \$/MW-hr	\$90.94	\$91.99	\$93.06	\$94.14	\$95.23	\$96.34	\$97.46	\$98.59	\$99.73	\$100.89	\$102.06	\$103.24	\$104.44	\$105.65	\$106.87
Stanton 2 Energy Price \$/MW-hr	\$115.56	\$113.70	\$112.11	\$110.76	\$109.61	\$108.79	\$108.01	\$107.50	\$107.13	\$107.01	\$106.93	\$107.07	\$107.35	\$107.70	\$108.15
Avg Cost Coal Capacity	\$120.47	\$118.51	\$116.83	\$115.40	\$114.19	\$113.32	\$112.48	\$111.93	\$111.53	\$111.38	\$111.28	\$111.41	\$111.68	\$112.02	\$112.47
Avg. Cost FPUA Owned Resources \$/MW-hr	\$107.70	\$107.35	\$107.08	\$106.90	\$106.80	\$106.85	\$106.89	\$107.08	\$107.33	\$107.72	\$108.13	\$108.67	\$109.29	\$109.96	\$110.69

Stanton Cost	\$6,396,772	\$6,597,675	\$6,805,443	\$7,020,305	\$7,242,522	\$7,466,696	\$7,703,979	\$7,943,556	\$8,190,610	\$8,438,543	\$8,698,177	\$8,958,286	\$9,222,857	\$9,497,047	\$9,777,725
Tri Cities Cost	\$2,253,290	\$2,319,771	\$2,388,509	\$2,459,579	\$2,533,068	\$2,607,187	\$2,685,630	\$2,764,814	\$2,846,456	\$2,928,369	\$3,014,138	\$3,100,044	\$3,187,407	\$3,277,936	\$3,370,591
St. Lucie Cost	\$8,675,326	\$8,775,953	\$8,877,748	\$8,980,723	\$9,084,893	\$9,190,271	\$9,296,871	\$9,404,708	\$9,513,795	\$9,624,148	\$9,735,781	\$9,848,709	\$9,962,946	\$10,078,509	\$10,195,412
Stanton 2	\$6,428,652	\$6,629,150	\$6,836,644	\$7,051,370	\$7,273,596	\$7,497,693	\$7,735,285	\$7,975,095	\$8,222,522	\$8,470,686	\$8,730,866	\$8,991,356	\$9,256,310	\$9,531,102	\$9,812,463

ARP Price \$/MW-hr	\$106.67	\$108.85	\$109.52	\$112.51	\$116.57	\$120.54	\$124.31	\$127.86	\$132.22	\$134.60	\$138.54	\$143.49	\$149.26	\$154.12	\$158.54
Cost CROD Purchases	\$38,987,631	\$39,784,415	\$40,029,299	\$41,122,137	\$42,606,057	\$44,057,082	\$45,435,008	\$46,732,525	\$48,326,095	\$49,195,979	\$50,636,039	\$52,445,253	\$54,554,174	\$56,330,492	\$57,947,177

Cap Price Pkg Purchases MW-yr	\$60,000	\$61,170	\$62,363	\$63,579	\$64,819	\$66,083	\$67,371	\$68,685	\$70,024	\$71,390	\$72,782	\$74,201	\$75,648	\$77,123	\$78,627
Energy Price Pkg Purchases	\$87.35	\$89.38	\$91.48	\$93.64	\$95.87	\$98.18	\$100.56	\$103.02	\$105.55	\$108.17	\$110.86	\$113.65	\$116.52	\$119.49	\$122.55
Peaking Purchases MW-hr	66	925	1,526	2,029	2,468	3,146	3,343	3,731	4,025	4,616	4,606	5,511	6,233	6,823	8,130
Cost Peaking Purchases	\$5,808	\$82,693	\$139,558	\$269,829	\$422,360	\$604,645	\$738,436	\$905,109	\$1,060,447	\$1,245,710	\$1,380,519	\$1,615,572	\$1,847,822	\$2,065,188	\$2,391,974

Net Cost (Benefit) Economy Transactions	-\$1,271,932	-\$1,218,155	-\$1,158,582	-\$1,092,758	-\$1,020,178	-\$946,806	-\$859,694	-\$771,098	-\$674,834	-\$578,689	-\$469,416	-\$360,622	-\$247,390	-\$122,999	\$8,797
---	--------------	--------------	--------------	--------------	--------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	---------

Summary Exercise CROD Costs

Total Bulk Power Supply Costs \$	\$61,475,546	\$62,971,503	\$63,918,618	\$65,811,184	\$68,142,318	\$70,476,769	\$72,735,516	\$74,954,710	\$77,485,091	\$79,324,746	\$81,726,105	\$84,598,598	\$87,784,126	\$90,657,276	\$93,504,139
Bulk Power Supply Cost \$/MW-hr	\$102.45	\$103.64	\$103.95	\$105.79	\$108.29	\$110.75	\$113.07	\$115.30	\$117.97	\$119.57	\$122.05	\$125.08	\$128.59	\$131.59	\$134.37
PV Bulk Power Supply Cost 2016-2030	\$764,285,978														
Average Bulk Power Supply Costs	\$116.17														

Summary Do Not Exercise CROD Costs

ARP Cost \$	\$62,504,912	\$64,526,703	\$65,770,934	\$68,238,795	\$71,316,556	\$74,395,251	\$77,403,784	\$80,328,215	\$83,742,183	\$86,078,779	\$89,288,996	\$93,208,449	\$97,621,643	\$101,558,839	\$105,393,531
ARP Cost \$/MW-hr	\$104.17	\$106.20	\$106.97	\$109.69	\$113.34	\$116.91	\$120.33	\$123.56	\$127.50	\$129.75	\$133.34	\$137.81	\$143.00	\$147.41	\$151.46
PV Bulk Power Supply Cost 2016-2030	\$816,478,018														
Average Bulk Power Supply Costs	\$124.76														

Difference	\$1,029,366	\$1,555,199	\$1,852,316	\$2,427,611	\$3,174,239	\$3,918,482	\$4,668,268	\$5,373,505	\$6,257,091	\$6,754,033	\$7,562,890	\$8,609,852	\$9,837,517	\$10,901,563	\$11,889,392
Cumulative Savings	\$1,029,366	\$2,584,565	\$4,436,882	\$6,864,492	\$10,038,731	\$13,957,213	\$18,625,481	\$23,998,986	\$30,256,078	\$37,010,111	\$44,573,001	\$53,182,853	\$63,020,370	\$73,921,933	\$85,811,325

PV of Savings 2016-2030	\$52,192,040
-------------------------	--------------

FPUA Pro Forma

Lo CROD

Assumptions

Load Ratio 2016	53.5%
CROD Amount	55.7 MW
Stanton Capacity	15.4 MW
Tri Cities Capacity	5.1 MW
St. Lucie 2 Capacity	12.1 MW
St. Lucie 2 Capacity Factor	90%
Stanton 2 Capacity	16.4
Price of CROD Energy 2016	\$106.67 per MW-hr
Escalation in price of ARP Energy post 2029	2.87%
Price Third Prty Peaking Purchases 2016	\$5,000 per MW-month
Escalation in Capacity Price of Pkg Resource	2.0%

Calendar Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Peak Load MW	115.4	117.0	118.4	119.8	121.2	122.6	124.0	125.3	126.7	128.0	129.2	130.5	131.7	133.0	134.2	135.5
FMPA Coincident Peak MW	114.5	116.1	117.5	118.9	120.3	121.7	123.0	124.4	125.7	127.0	128.2	129.5	130.7	131.9	133.2	134.5
System Requirement MW-hrs	591,858	600,033	607,576	614,874	622,088	629,253	636,337	643,276	650,093	656,797	663,410	669,622	676,341	682,685	688,962	695,852
Load Factor	58.5%	58.5%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%

Energy from FPUA Owned Resources

Stanton Energy MW-hrs	85,972	87,865	89,698	91,474	93,193	94,798	96,411	97,918	99,377	100,746	102,127	103,421	104,669	105,904	107,103
Tri Cities Energy MW-hrs	28,471	29,098	29,705	30,293	30,863	31,394	31,928	32,427	32,911	33,364	33,821	34,250	34,663	35,072	35,469
St Lucie 2 Energy MW-hrs	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396
Stanton 2 Energy MW-hrs	91,554	93,570	95,523	97,414	99,244	100,954	102,672	104,276	105,830	107,288	108,758	110,137	111,466	112,781	114,057

Total Energy FPUA Owned Resources MW-hrs	301,393	305,929	310,323	314,578	318,696	322,543	326,408	330,017	333,515	336,795	340,102	343,205	346,194	349,154	352,025
% Sys Req from FPUA Owned Resources	50.2%	50.4%	50.5%	50.6%	50.6%	50.7%	50.7%	50.8%	50.8%	50.8%	50.8%	50.7%	50.7%	50.7%	50.6%

CROD Purchases MW-hrs	270,150	270,150	270,150	270,150	270,150	270,150	270,150	270,150	270,150	270,150	270,150	270,150	270,150	270,150	270,150
ARP Purchases % of Total Supply	45.02%	44.46%	43.94%	43.4%	42.9%	42.5%	42.0%	41.6%	41.1%	40.7%	40.3%	39.9%	39.6%	39.2%	38.8%

FPUA Economy & Pkg Purchases	28,489	31,497	34,401	37,360	40,406	43,643	46,718	49,925	53,132	56,465	59,369	62,986	66,341	69,657	73,676
------------------------------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Total Supply MW-hrs	600,033	607,576	614,874	622,088	629,253	636,337	643,276	650,093	656,797	663,410	669,622	676,341	682,685	688,962	695,852
---------------------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------

Bulk Power Supply Cost

Stanton Energy Price \$/MW-hr	\$90.02	\$90.44	\$90.96	\$91.55	\$92.21	\$92.98	\$93.78	\$94.68	\$95.64	\$96.67	\$97.74	\$98.89	\$100.09	\$101.34	\$102.63
Tri Cities Energy Price \$/MW-hr	\$94.76	\$95.08	\$95.50	\$96.00	\$96.58	\$97.27	\$97.99	\$98.82	\$99.71	\$100.69	\$101.70	\$102.78	\$103.93	\$105.13	\$106.37
St. Lucie Energy Price \$/MW-hr	\$90.94	\$91.99	\$93.06	\$94.14	\$95.23	\$96.34	\$97.46	\$98.59	\$99.73	\$100.89	\$102.06	\$103.24	\$104.44	\$105.65	\$106.87
Stanton 2 Energy Price \$/MW-hr	\$85.50	\$85.88	\$86.34	\$86.88	\$87.48	\$88.19	\$88.92	\$89.75	\$90.64	\$91.60	\$92.59	\$93.65	\$94.77	\$95.93	\$97.13
Avg Cost Coal Capacity	\$88.67	\$89.06	\$89.53	\$90.09	\$90.71	\$91.44	\$92.21	\$93.06	\$93.98	\$94.97	\$96.00	\$97.10	\$98.26	\$99.46	\$100.71
Avg. Cost FPUA Owned Resources \$/MW-hr	\$89.39	\$89.97	\$90.62	\$91.32	\$92.07	\$92.89	\$93.74	\$94.66	\$95.62	\$96.65	\$97.70	\$98.81	\$99.96	\$101.15	\$102.38

Stanton Cost	\$7,738,930	\$7,946,879	\$8,158,585	\$8,374,090	\$8,593,473	\$8,814,213	\$9,041,659	\$9,270,684	\$9,503,989	\$9,739,440	\$9,982,064	\$10,227,078	\$10,476,377	\$10,731,899	\$10,992,376
Tri Cities Cost	\$2,697,927	\$2,766,741	\$2,836,784	\$2,908,067	\$2,980,617	\$3,053,598	\$3,128,783	\$3,204,471	\$3,281,558	\$3,359,336	\$3,439,471	\$3,520,376	\$3,602,679	\$3,687,023	\$3,772,987
St. Lucie Cost	\$8,675,326	\$8,775,953	\$8,877,748	\$8,980,723	\$9,084,893	\$9,190,271	\$9,296,871	\$9,404,708	\$9,513,795	\$9,624,148	\$9,735,781	\$9,848,709	\$9,962,946	\$10,078,509	\$10,195,412
Stanton 2	\$7,828,075	\$8,035,921	\$8,247,520	\$8,462,916	\$8,682,188	\$8,902,704	\$9,130,040	\$9,358,847	\$9,591,939	\$9,827,088	\$10,069,533	\$10,314,283	\$10,563,314	\$10,818,640	\$11,078,939

ARP Price \$/MW-hr	\$106.67	\$108.85	\$109.52	\$112.51	\$116.57	\$120.54	\$124.31	\$127.86	\$132.22	\$134.60	\$138.54	\$143.49	\$149.26	\$154.12	\$158.54
Cost CROD Purchases	\$28,816,944	\$29,405,872	\$29,586,873	\$30,394,623	\$31,491,433	\$32,563,930	\$33,582,398	\$34,541,432	\$35,719,287	\$36,362,245	\$37,426,638	\$38,763,882	\$40,322,650	\$41,635,581	\$42,830,522

Cap Price Pkg Purchases MW-yr	\$60,000	\$61,170	\$62,363	\$63,579	\$64,819	\$66,083	\$67,371	\$68,685	\$70,024	\$71,390	\$72,782	\$74,201	\$75,648	\$77,123	\$78,627
Energy Price Pkg Purchases	\$87.35	\$89.38	\$91.48	\$93.64	\$95.87	\$98.18	\$100.56	\$103.02	\$105.55	\$108.17	\$110.86	\$113.65	\$116.52	\$119.49	\$122.55
Peaking Purchases MW-hr	5,601	8,104	10,520	13,007	15,595	18,405	21,050	23,856	26,674	29,643	32,180	35,452	38,474	41,462	45,162
Cost Peaking Purchases	\$1,630,640	\$1,986,499	\$2,349,485	\$2,734,540	\$3,145,730	\$3,596,082	\$4,041,473	\$4,530,392	\$5,033,408	\$5,566,041	\$6,082,123	\$6,695,019	\$7,314,244	\$7,946,997	\$8,707,038

Net Cost (Benefit) Economy Transactions	\$163,857	\$245,180	\$329,621	\$417,288	\$508,323	\$599,887	\$698,133	\$797,189	\$900,214	\$1,004,663	\$1,116,675	\$1,230,453	\$1,348,340	\$1,472,864	\$1,602,499
---	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-------------	-------------	-------------	-------------	-------------	-------------

Summary Exercise CROD Costs

Total Bulk Power Supply Costs \$	\$57,387,842	\$58,917,866	\$60,056,994	\$61,854,957	\$63,978,334	\$66,120,798	\$68,221,223	\$70,310,533	\$72,643,976	\$74,478,299	\$76,735,611	\$79,369,347	\$82,242,212	\$84,898,649	\$87,577,275
Bulk Power Supply Cost \$/MW-hr	\$95.64	\$96.97	\$97.67	\$99.43	\$101.67	\$103.91	\$106.05	\$108.15	\$110.60	\$112.27	\$114.60	\$117.35	\$120.47	\$123.23	\$125.86
PV Bulk Power Supply Cost 2016-2030	\$716,636,855														
Average Bulk Power Supply Costs	\$108.92														

Summary Do Not Exercise CROD Costs

ARP Cost \$	\$62,504,912	\$64,526,703	\$65,770,934	\$68,238,795	\$71,316,556	\$74,395,251	\$77,403,784	\$80,328,215	\$83,742,183	\$86,078,779	\$89,288,996	\$93,208,449	\$97,621,643	\$101,558,839	\$105,393,531
ARP Cost \$/MW-hr	\$104.17	\$106.20	\$106.97	\$109.69	\$113.34	\$116.91	\$120.33	\$123.56	\$127.50	\$129.75	\$133.34	\$137.81	\$143.00	\$147.41	\$151.46
PV Bulk Power Supply Cost 2016-2030	\$816,478,018														
Average Bulk Power Supply Costs	\$124.76														

Difference	\$5,117,070	\$5,608,836	\$5,713,941	\$6,383,838	\$7,338,222	\$8,274,452	\$9,182,561	\$10,017,682	\$11,098,206	\$11,600,480	\$12,553,385	\$13,839,103	\$15,379,431	\$16,660,191	\$17,816,256
Cumulative Savings	\$5,117,070	\$10,725,906	\$16,439,847	\$22,823,684	\$30,161,907	\$38,436,359	\$47,618,920	\$57,636,602	\$68,734,809	\$80,335,289	\$92,888,674	\$106,727,776	\$122,107,208	\$138,767,398	\$156,583,655

PV of Savings 2016-2030	\$99,841,163
-------------------------	--------------

Assumptions

Load Ratio 2016	64.4%
CROD Amount	73.3 MW
Stanton Capacity	15.4 MW
Tri Cities Capacity	5.1 MW
St. Lucie 2 Capacity	12.1 MW
St. Lucie 2 Capacity Factor	90%
Stanton 2 Capacity	16.4 MW
Price of CROD Energy 2016	\$106.67
Escalation in price of ARP Energy post 2029	2.87% MW
Price Third Prty Peaking Purchases 2016	\$5,000 per MW-month
Escalation in Capacity Price of Pkg Resource	2.0%

Calendar Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Peak Load	123.2	126.9	130.7	134.7	138.7	142.9	147.1	151.6	156.1	160.8	165.6	170.6	175.7	181.0	186.4	192.0
FMPA Coincident Peak	122.3	126.0	129.8	133.7	137.7	141.8	146.0	150.4	154.9	159.6	164.4	169.3	174.4	179.6	185.0	190.6
System Requirement	632,588	651,566	671,113	691,246	711,984	733,343	755,343	778,004	801,344	825,384	850,146	875,650	901,920	928,977	956,846	985,552
Load Factor	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%

Energy from FPUA Owned Resources

Stanton Energy MW-hrs	74,229	80,732	86,726	92,259	97,346	101,992	106,196	109,868	112,947	114,668	114,668	114,668	114,668	114,668	114,668	114,668
Tri Cities Energy MW-hrs	24,582	26,736	28,721	30,553	32,238	33,777	35,169	36,385	37,404	37,975	37,975	37,975	37,975	37,975	37,975	37,975
St Lucie 2 Energy MW-hrs	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396
Stanton 2 Energy MW-hrs	79,049	85,974	92,358	98,250	103,667	108,615	113,092	117,002	120,281	122,114	122,114	122,114	122,114	122,114	122,114	122,114

Total Energy FPUA Resources	273,256	288,838	303,202	316,459	328,647	339,780	349,853	358,651	366,028	370,154	370,154	370,154	370,154	370,154	370,154	370,154
% Sys Req from FPUA Owned Resources	41.9%	43.0%	43.9%	44.4%	44.8%	45.0%	45.0%	44.8%	44.3%	43.5%	42.3%	41.0%	39.8%	38.7%	37.6%	

CROD Purchases MW-hrs	358,041	358,041	358,041	358,041	358,041	358,041	358,041	358,041	358,041	358,041	358,041	358,041	358,041	358,041	358,041	358,041
ARP Purchases % of Total Supply	55.0%	53.4%	51.8%	50.3%	48.8%	47.4%	46.0%	44.7%	43.4%	42.1%	40.9%	39.7%	38.5%	37.4%	36.3%	

FPUA Economy & Pkg Purchases	20,269	24,234	30,003	37,484	46,655	57,523	70,110	84,652	101,315	121,951	147,455	173,725	200,783	228,652	257,357
------------------------------	--------	--------	--------	--------	--------	--------	--------	--------	---------	---------	---------	---------	---------	---------	---------

Total Supply	651,566	671,113	691,246	711,984	733,343	755,343	778,004	801,344	825,384	850,146	875,650	901,920	928,977	956,846	985,552
--------------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------

Bulk Power Supply Cost

Stanton Energy Price \$/MW-hr	\$97.96	\$94.84	\$92.64	\$91.13	\$90.14	\$89.58	\$89.37	\$89.49	\$89.92	\$90.92	\$92.57	\$94.25	\$95.97	\$97.73	\$99.52
Tri Cities Energy Price \$/MW-hr	\$103.45	\$99.88	\$97.34	\$95.54	\$94.32	\$93.57	\$93.19	\$93.18	\$93.51	\$94.44	\$96.09	\$97.77	\$99.48	\$101.23	\$103.02
St. Lucie Energy Price \$/MW-hr	\$90.94	\$91.99	\$93.06	\$94.14	\$95.23	\$96.34	\$97.46	\$98.59	\$99.73	\$100.89	\$102.06	\$103.24	\$104.44	\$105.65	\$106.87
Stanton 2 Energy Price \$/MW-hr	\$92.87	\$89.94	\$87.90	\$86.49	\$85.58	\$85.06	\$84.87	\$84.99	\$85.40	\$86.33	\$87.86	\$89.42	\$91.02	\$92.65	\$94.31
Avg Cost Coal Capacity	\$96.46	\$93.36	\$91.18	\$89.68	\$88.69	\$88.12	\$87.90	\$88.00	\$88.41	\$89.37	\$90.96	\$92.59	\$94.26	\$95.95	\$97.69
Avg. Cost FPUA Owned Resources \$/MW-hr	\$94.53	\$92.91	\$91.77	\$91.02	\$90.59	\$90.43	\$90.50	\$90.82	\$91.36	\$92.33	\$93.82	\$95.34	\$96.88	\$98.45	\$100.05

Stanton Cost	\$7,271,724	\$7,656,288	\$8,034,599	\$8,407,635	\$8,775,148	\$9,136,451	\$9,490,485	\$9,831,988	\$10,156,648	\$10,425,146	\$10,614,607	\$10,807,929	\$11,005,199	\$11,206,501	\$11,411,926
Tri Cities Cost	\$2,543,148	\$2,670,473	\$2,795,709	\$2,919,180	\$3,040,803	\$3,160,351	\$3,277,472	\$3,390,423	\$3,497,774	\$3,586,500	\$3,649,022	\$3,712,803	\$3,777,870	\$3,844,251	\$3,911,977
St. Lucie Cost	\$8,675,326	\$8,775,953	\$8,877,748	\$8,980,723	\$9,084,893	\$9,190,271	\$9,296,871	\$9,404,708	\$9,513,795	\$9,624,148	\$9,735,781	\$9,848,709	\$9,962,946	\$10,078,509	\$10,195,412
Stanton 2	\$7,340,935	\$7,732,931	\$8,118,245	\$8,497,892	\$8,871,614	\$9,238,691	\$9,598,016	\$9,944,101	\$10,272,445	\$10,542,050	\$10,729,064	\$10,919,918	\$11,114,698	\$11,313,492	\$11,516,390

ARP Price \$/MW-hr	\$106.67	\$108.85	\$109.52	\$112.51	\$116.57	\$120.54	\$124.31	\$127.86	\$132.22	\$134.60	\$138.54	\$143.49	\$149.26	\$154.12	\$158.54
Cost CROD Purchases	\$38,192,214	\$38,972,743	\$39,212,630	\$40,283,172	\$41,736,818	\$43,158,240	\$44,508,054	\$45,779,099	\$47,340,157	\$48,192,294	\$49,602,974	\$51,375,277	\$53,441,172	\$55,181,250	\$56,764,952

Cap Price Pkg Purchases MW-yr	\$60,000	\$61,170	\$62,363	\$63,579	\$64,819	\$66,083	\$67,371	\$68,685	\$70,024	\$71,390	\$72,782	\$74,201	\$75,648	\$77,123	\$78,627
Energy Price Pkg Purchases	\$87.35	\$89.38	\$91.48	\$93.64	\$95.87	\$98.18	\$100.56	\$103.02	\$105.55	\$108.17	\$110.86	\$113.65	\$116.52	\$119.49	\$122.55
Peaking Purchases MW-hr	507	2,740	6,914	12,921	20,738	30,369	41,837	55,402	71,245	91,253	116,283	142,194	168,987	196,654	225,201
Cost Peaking Purchases	\$653,694	\$1,134,050	\$1,820,206	\$2,716,231	\$3,834,095	\$5,189,126	\$6,799,663	\$8,709,483	\$10,957,833	\$13,771,381	\$17,284,593	\$21,075,514	\$25,160,718	\$29,556,221	\$34,280,517

Net Cost (Benefit) Economy Transactions	-\$335,942	-\$69,993	\$193,261	\$454,705	\$713,875	\$969,755	\$1,220,825	\$1,460,492	\$1,682,904	\$1,849,470	\$1,938,113	\$2,023,192	\$2,105,440	\$2,186,602	\$2,267,755
---	------------	-----------	-----------	-----------	-----------	-----------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------

Summary Exercise CROD Costs

Total Bulk Power Supply Costs \$	\$64,677,042	\$66,942,439	\$68,859,137	\$71,804,833	\$75,343,370	\$79,073,129	\$82,970,561	\$87,059,801	\$91,738,651	\$96,141,518	\$101,616,041	\$107,740,149	\$114,462,602	\$121,180,226	\$128,081,175
Bulk Power Supply Cost \$/MW-hr	\$99.26	\$99.75	\$99.62	\$100.85	\$102.74	\$104.69	\$106.65	\$108.64	\$111.15	\$113.09	\$116.05	\$119.46	\$123.21	\$126.65	\$129.96
PV Bulk Power Supply Cost 2016-2030	\$897,883,383														
Average Bulk Power Supply Costs	\$110.78														

Summary Do Not Exercise CROD Costs

ARP Cost \$	\$68,001,925	\$71,442,690	\$74,135,223	\$78,352,952	\$83,450,344	\$88,740,286	\$94,151,789	\$99,667,148	\$106,032,777	\$111,213,403	\$117,832,123	\$125,576,717	\$134,383,209	\$142,845,193	\$151,323,546
ARP Cost \$/MW-hr	\$104.37	\$106.45	\$107.25	\$110.05	\$113.79	\$117.48	\$121.02	\$124.38	\$128.46	\$130.82	\$134.57	\$139.23	\$144.66	\$149.29	\$153.54
PV Bulk Power Supply Cost 2016-2030	\$1,015,688,687														
Average Bulk Power Supply Costs	\$125.69														

Difference	\$3,324,883	\$4,500,251	\$5,276,085	\$6,548,119	\$8,106,974	\$9,667,157	\$11,181,228	\$12,607,347	\$14,294,127	\$15,071,884	\$16,216,082	\$17,836,568	\$19,920,607	\$21,664,967	\$23,242,371
Cumulative Savings	\$3,324,883	\$7,825,133	\$13,101,219	\$19,649,338	\$27,756,312	\$37,423,468	\$48,604,696	\$61,212,043	\$75,506,170	\$90,578,054	\$106,794,136	\$124,630,704	\$144,551,311	\$166,216,278	\$189,458,650

PV of Savings 2016-2030	\$117,805,304
-------------------------	---------------

Assumptions

Load Ratio 2016	64.0%
CROD Amount	65.5 MW
Stanton Capacity	15.4 MW
Tri Cities Capacity	5.1 MW
St. Lucie 2 Capacity	12.1 MW
St. Lucie 2 Capacity Factor	90%
Stanton 2 Capacity	16.4 MW
Price of CROD Energy 2016	\$106.67 per MW-hr
Escalation in price of ARP Energy post 2029	2.87%
Price Third Prty Peaking Purchases 2016	\$5,000 per MW-month
Escalation in Capacity Price of Pkg Resource	2.0%

Calendar Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Peak Load	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4
FMPA Coincident Peak	114.5	114.5	114.5	114.5	114.5	114.5	114.5	114.5	114.5	114.5	114.5	114.5	114.5	114.5	114.5	114.5
System Requirement	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390
Load Factor	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	58.6%

Energy from FPUA Owned Resources

Stanton Energy MW-hrs	67,128	67,128	67,128	67,128	67,128	67,128	67,128	67,128	67,128	67,128	67,128	67,128	67,128	67,128	67,128	67,128
Tri Cities Energy MW-hrs	22,231	22,231	22,231	22,231	22,231	22,231	22,231	22,231	22,231	22,231	22,231	22,231	22,231	22,231	22,231	22,231
St Lucie 2 Energy MW-hrs	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396	95,396
Stanton 2 Energy MW-hrs	71,487	71,487	71,487	71,487	71,487	71,487	71,487	71,487	71,487	71,487	71,487	71,487	71,487	71,487	71,487	71,487

Total Energy FPUA Resources	256,242	256,242	256,242	256,242	256,242	256,242	256,242	256,242	256,242	256,242	256,242	256,242	256,242	256,242	256,242	256,242
% Sys Req from FPUA Owned Resources	43.3%	43.3%	43.3%	43.3%	43.3%	43.3%	43.3%	43.3%	43.3%	43.3%	43.3%	43.3%	43.3%	43.3%	43.3%	43.3%

CROD Purchases	317,901	317,901	317,901	317,901	317,901	317,901	317,901	317,901	317,901	317,901	317,901	317,901	317,901	317,901	317,901	317,901
ARP Purchases % of Total Supply	53.7%	53.7%	53.7%	53.7%	53.7%	53.7%	53.7%	53.7%	53.7%	53.7%	53.7%	53.7%	53.7%	53.7%	53.7%	53.7%

FPUA Economy & Pkg Purchases	18,247	18,247	18,247	18,247	18,247	18,247	18,247	18,247	18,247	18,247	18,247	18,247	18,247	18,247	18,247	18,247
------------------------------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Total Supply	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390	592,390
--------------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------

Bulk Power Supply Cost

Stanton Energy Price \$/MW-hr	\$104.12	\$105.80	\$107.51	\$109.25	\$111.03	\$112.84	\$114.68	\$116.56	\$118.47	\$120.42	\$122.41	\$124.43	\$126.49	\$128.59	\$130.73
Tri Cities Energy Price \$/MW-hr	\$110.19	\$111.87	\$113.57	\$115.31	\$117.09	\$118.89	\$120.72	\$122.59	\$124.50	\$126.44	\$128.41	\$130.42	\$132.47	\$134.56	\$136.69
St. Lucie Energy Price \$/MW-hr	\$90.94	\$91.99	\$93.06	\$94.14	\$95.23	\$96.34	\$97.46	\$98.59	\$99.73	\$100.89	\$102.06	\$103.24	\$104.44	\$105.65	\$106.87
Stanton 2 Energy Price \$/MW-hr	\$98.57	\$100.09	\$101.64	\$103.21	\$104.82	\$106.46	\$108.12	\$109.82	\$111.55	\$113.32	\$115.11	\$116.94	\$118.81	\$120.71	\$122.65
Avg Cost Coal Capacity	\$102.49	\$104.10	\$105.74	\$107.41	\$109.11	\$110.84	\$112.60	\$114.40	\$116.23	\$118.10	\$120.00	\$121.93	\$123.90	\$125.91	\$127.96
Avg. Cost FPUA Owned Resources \$/MW-hr	\$98.19	\$99.59	\$101.02	\$102.47	\$103.94	\$105.44	\$106.96	\$108.51	\$110.09	\$111.69	\$113.32	\$114.97	\$116.66	\$118.37	\$120.11

Stanton Cost	\$6,989,215	\$7,102,050	\$7,216,972	\$7,334,026	\$7,453,256	\$7,574,706	\$7,698,423	\$7,824,454	\$7,952,847	\$8,083,650	\$8,216,916	\$8,352,694	\$8,491,037	\$8,632,000	\$8,775,637
Tri Cities Cost	\$2,449,558	\$2,486,862	\$2,524,842	\$2,563,510	\$2,602,881	\$2,642,969	\$2,683,790	\$2,725,358	\$2,767,689	\$2,810,799	\$2,854,704	\$2,899,421	\$2,944,967	\$2,991,359	\$3,038,615
St. Lucie Cost	\$8,675,326	\$8,775,953	\$8,877,748	\$8,980,723	\$9,084,893	\$9,190,271	\$9,296,871	\$9,404,708	\$9,513,795	\$9,624,148	\$9,735,781	\$9,848,709	\$9,962,946	\$10,078,509	\$10,195,412
Stanton 2	\$7,046,372	\$7,155,045	\$7,265,732	\$7,378,476	\$7,493,321	\$7,610,312	\$7,729,493	\$7,850,911	\$7,974,615	\$8,100,651	\$8,229,071	\$8,359,925	\$8,493,266	\$8,629,146	\$8,767,619

ARP Price \$/MW-hr	\$106.67	\$108.85	\$109.52	\$112.51	\$116.57	\$120.54	\$124.31	\$127.86	\$132.22	\$134.60	\$138.54	\$143.49	\$149.26	\$154.12	\$158.54
Cost CROD Purchases	\$33,910,501	\$34,603,526	\$34,816,519	\$35,767,043	\$37,057,721	\$38,319,788	\$39,518,275	\$40,646,824	\$42,032,872	\$42,789,477	\$44,042,007	\$45,615,617	\$47,449,906	\$48,994,905	\$50,401,058

Cap Price Pkg Purchases MW-yr	\$60,000	\$61,170	\$62,363	\$63,579	\$64,819	\$66,083	\$67,371	\$68,685	\$70,024	\$71,390	\$72,782	\$74,201	\$75,648	\$77,123	\$78,627
Energy Price Pkg Purchases	\$87.35	\$89.38	\$91.48	\$93.64	\$95.87	\$98.18	\$100.56	\$103.02	\$105.55	\$108.17	\$110.86	\$113.65	\$116.52	\$119.49	\$122.55
Peaking Purchases MW-hr	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376
Cost Peaking Purchases	\$385,900	\$393,549	\$401,356	\$409,326	\$417,461	\$425,765	\$434,242	\$442,896	\$451,729	\$460,747	\$469,953	\$479,352	\$488,946	\$498,741	\$508,742

Net Cost (Benefit) Economy Transactions	-\$638,160	-\$671,115	-\$705,976	-\$742,826	-\$781,748	-\$822,830	-\$866,164	-\$911,844	-\$959,967	-\$1,010,637	-\$1,063,958	-\$1,120,039	-\$1,178,996	-\$1,240,945	-\$1,306,009
---	------------	------------	------------	------------	------------	------------	------------	------------	------------	--------------	--------------	--------------	--------------	--------------	--------------

Summary Exercise CROD Costs

Total Bulk Power Supply Costs \$	\$59,456,872	\$60,516,984	\$61,103,169	\$62,433,104	\$64,109,533	\$65,763,811	\$67,361,094	\$68,895,150	\$70,693,547	\$71,869,473	\$73,548,432	\$75,555,717	\$77,831,068	\$79,824,660	\$81,687,083
Bulk Power Supply Cost \$/MW-hr	\$100.37	\$102.16	\$103.15	\$105.39	\$108.22	\$111.01	\$113.71	\$116.30	\$119.34	\$121.32	\$124.16	\$127.54	\$131.38	\$134.75	\$137.89
PV Bulk Power Supply Cost 2016-2030	\$705,123,098														
Average Bulk Power Supply Costs	\$124.81														

Summary Do Not Exercise CROD Costs

ARP Cost \$	\$61,689,606	\$62,873,679	\$63,308,459	\$64,897,444	\$67,019,407	\$69,097,848	\$71,078,113	\$72,950,277	\$75,226,255	\$76,519,452	\$78,589,239	\$81,162,284	\$84,144,173	\$86,675,123	\$88,990,349
ARP Cost \$/MW-hr	\$104.14	\$106.14	\$106.87	\$109.55	\$113.13	\$116.64	\$119.99	\$123.15	\$126.99	\$129.17	\$132.66	\$137.01	\$142.04	\$146.31	\$150.22
PV Bulk Power Supply Cost 2016-2030	\$745,640,320														
Average Bulk Power Supply Costs	\$133.88														

Difference	\$2,232,734	\$2,356,695	\$2,205,290	\$2,464,340	\$2,909,874	\$3,334,037	\$3,717,019	\$4,055,126	\$4,532,708	\$4,649,980	\$5,040,807	\$5,606,566	\$6,313,105	\$6,850,464	\$7,303,266
Cumulative Savings	\$2,232,734	\$4,589,428	\$6,794,718	\$9,259,058	\$12,168,932	\$15,502,969	\$19,219,988	\$23,275,115	\$27,807,823	\$32,457,803	\$37,498,609	\$43,105,176	\$49,418,280	\$56,268,744	\$63,572,010

PV of Savings 2016-2030	\$40,517,222
-------------------------	--------------