

# BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 030001-EI

IN RE: FUEL & PURCHASED POWER COST RECOVERY

AND

CAPACITY COST RECOVERY

**PROJECTIONS** 

JANUARY 2004 THROUGH DECEMBER 2004

REBUTTAL TESTIMONY AND EXHIBIT

OF

WILLIAM T. WHALE

DOCUMENT ALMPER-DA

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION 1 PREPARED REBUTTAL TESTIMONY 2 3 OF WILLIAM T. WHALE 4 5 Please state your name, address, occupation and employer. 6 Q. 7 A. My name is William T. Whale. My business address is 702 8 North Franklin Street, Tampa, Florida 33602. I am employed 9 by Tampa Electric Company ("Tampa Electric" or "company") 10 as Vice President, Energy Supply - Operations. 11 12 13 Are you the same William T. Whale who filed direct testimony in this proceeding on September 12, 2003? 14 15 16 Yes, I am. 17 Have you prepared an exhibit to support your testimony? 18 19 Exhibit (WTW-2), consisting of two documents, 20 Α. was prepared under my direction and supervision. 21 Document No. 1 is titled "2000-2003 Safety Budget," and Document 22 No. 2 is "Response to Interrogatory No. 37." 23 24 What is the purpose of your rebuttal testimony? 25 Q.

A. The purpose of my rebuttal testimony is to address inaccurate statements and conclusions included in the direct testimonies of Mr. William Zaetz and Mr. Michael Majoros, testifying on behalf of the Office of Public Counsel.

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Q. Is witness Zaetz qualified to make a determination as to the safe operational capability of the Gannon units?

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A. No. The documents submitted by Mr. Zaetz in support of his expertise indicate that he was a boilermaker for 33 years and has never been a plant manager, maintenance manager or operations manager. In addition, there is no indication that he has experience in the decision-making process of determining when a unit would need to be shut whether for safety orany other Furthermore, his testimony does not indicate that he is a Certified Safety Professional or has obtained industry-recognized safety credentials.

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Q. Does Mr. Zaetz's testimony indicate that he has a basic knowledge of the operations of Tampa Electric's Gannon units?

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A. No. In fact, his testimony indicates the opposite. For

example, one safety concern Tampa Electric has cited has been the escape of harmful gases such as carbon monoxide into employee work areas. On page 5 of his testimony Mr. Zaetz suggests that carbon monoxide production is atypical event in boiler operations and that its presence Gannon units was caused by Tampa Electric's failure to perform adequate maintenance. In harmful gases, including carbon monoxide, are produced as a normal part of the combustion process that takes place in boilers. Therefore, any leaks in the boiler walls and ductwork create a safety concern because they allow the gases to escape.

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Q. On page 3, lines 13 through 16 of his testimony, Mr. Zaetz makes the statement that neither safety nor reliability was a factor in Tampa Electric's decision to shut down Gannon Units 1 through 4 in 2003. Is that correct?

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A. No, it is not correct. Tampa Electric arrived at the decision to shut down the Gannon units in 2003 after consideration of many complex factors including safety, reliability and other issues. As I stated on page 11 of my direct testimony, by late 2002 it became apparent that the units needed to be shut down in 2003 due primarily to four factors: the declining availability and reliability

of the units; the significant expenditures that would need to be incurred in an effort to keep the units running reliably; the potential for safety incidents; and, the short window of time until the units would be required to shut down under the Consent Final Judgment ("CFJ") and Consent Decree ("CD"), regardless of how much the company might invest in an effort to keep them operating. A formalized plan was developed that took into account all of these considerations. As a result of that plan, on February 6, 2003, Tampa Electric notified its employees that it planned to shut down Gannon Units 1 and 2 on March 15, 2003 and Gannon Units 3 and 4 in September 2003. Tampa Electric also began implementation of the final stages of its employee retraining and transition plan.

Q. On pages 7 and 8 of his testimony, Mr. Zaetz cites lack of bowl mill maintenance as a cause of the carbon monoxide that was escaping from Gannon Station through leaks in casings and ductwork. Is his statement correct?

A. No, that statement is not correct. Mr. Zaetz quotes
Karen Sheffield's deposition transcript at page 35.
However, Ms. Sheffield's deposition statements were in
reference to a section of the Big Bend Station business
plan. (Deposition Transcript, p. 26, lines 2-3) The Big

Bend Station business plan contains information about the units at that station, not about the Gannon units. In actuality, the boiler of Big Bend Unit 4 is the only unit in Tampa Electric's system that has bowl mills. The boilers of Gannon Units 1 through 4 are cyclone-fired boilers, which do not have bowl mills. Gannon Units 5 and 6 have Riley turbo-fired boilers, which also do not have bowl mills.

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Q. On page 4, lines 12 through 13 of his testimony, Mr. Zaetz indicates that the increases in Tampa Electric's safety budgets for Gannon Station from 2000 to 2002 illustrate that the company's biggest concern was budgetary. How do you respond?

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The safety budget for Gannon Station increased during the period referenced by Mr. Zaetz for the implementation of a company-wide expanded safety initiative. The purpose of the initiative was to improve safety at all of the company's facilities. The initiative included the hiring of Certified Safety Professionals as safety coordinators for each location as well as purchases equipment and additional safety training. This is reflected in the costs included in the budget, shown in Document No. 1 of Exhibit (WTW-2), which included

noise monitoring, chest x-rays, audiometric testing, drug testing, confined space rescue training and a station nurse. The station's safety budget does not fund the operations and maintenance of the units.

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Q. What is your response to Mr. Zaetz's assertions on page 4, lines 5 through 9, and page 12, lines 12 through 17, that any plant can be repaired, regardless of its safety level, and that Tampa Electric's failure to repair the aging Gannon facilities demonstrates that the company's concern about continuing to operate the units was truly and solely budgetary?

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Those assertions are not correct. Α. The fact that a unit or plant may be repaired does not indicate that making the repairs is a good business decision. Given the ages and conditions of its various units and environmental and CD requirements, Tampa Electric was faced with a question of how to allocate maintenance funds prudently. Gannon Station would have to be shut down in the near term, regardless of the amounts of time and dollars spent repairing and maintaining it, Tampa Electric adopted a strategy to "patch and go" maintenance maximize benefits of its maintenance spending. The company's maintenance spending was re-focused on the activities

that would keep the Gannon units running safely for limited investment, and improve the operations of the company's other plants, which were not subject to shutdown on or before December 31, 2004.

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Q. On page 8, lines 6 and 7, Mr. Zaetz states, "Tampa Electric repeatedly disregarded reliability as an issue."

How do you respond?

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Zaetz's statement is without merit or fact. Q. Tampa Electric considered the expected reliability of Gannon units at every step of the decision-making process. The company experienced many failures with these units that were directly related to the age of the As previously stated, cost-effective investments and the units' reliability were considered, along with many other factors, in determining the shutdown schedule of Gannon Units 1 through 4.

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The statements that Mr. Zaetz quotes from the deposition transcript of Craig Cameron, Director of Finance for Tampa Electric, to reach his conclusions are taken out of context and mischaracterize Mr. Cameron's responses. Mr. Cameron was questioned about Gannon Station budget amounts that he compiled in August 2001. (Deposition

transcript, pages 31 through 32) First, August 2001 was earlier than the dates that the company began finalizing its shutdown plan for Gannon Station. Second, Mr. Zaetz ignores the fact that Mr. Cameron's role is to compile and manage the budgets created by the stations. When Mr. Cameron described his activities, he could not comment on what factors were included in setting station's budget because he is not responsible for operations nor does he make operational decisions. In reality, Mr. Cameron's testimony indicates that he was working from a set of assumptions provided by the station management. These assumptions changed over time. particularly for Gannon Station, as I have previously described. The stations were responsible for performing the analyses of safety, performance and other factors that affected the shutdown decision-making process that Mr. Cameron stated he did not perform.

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Q. On page 9, lines 13 through 15 of his testimony, is Mr.

Zaetz correct in his statement that, despite Tampa

Electric's failure to spend adequate maintenance dollars,

unit performance was not a valid reason for them to be

shut down?

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A. No. The station's equivalent availability factor ("EAF")

declined from 1998 to 2002, as shown on page 3 of Exhibit Tampa Electric took action to improve the (WMZ-1). availability of the units by operating the units during 2001, 2002 and 2003 at a reduced header pressure compared to their design specifications. The shift to a "patch and qo" style of maintenance was also designed to improve availability. This reduced the time the units were offfor planned maintenance. These actions were implemented with the knowledge that the units would be shut down due to the Consent Decree requirements and for the Bayside repowering project.

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Q. On pages 9 through 10 of his testimony, Mr. Zaetz lists four data sources, which he claims demonstrate that unit performance was not the reason for the Gannon shutdown. Please describe the inaccuracies of Mr. Zaetz's characterization of the first item listed in support of his assertion.

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A. Mr. Zaetz's first data source is a decline in the station's unplanned outage factor from 2000 to 2002. However, the information shown on page 4 of Exhibit \_\_\_\_\_ (WMZ-1) actually reflects an increase in the unplanned outage factor from 1998 to 2002. In 1998, the station's unplanned outage factor was 18.5 percent. In 2000, it

reached a five-year-period high of 35.6 percent. Zaetz chose to use the 2000 value as his basis comparison. Obviously, any time the highest value during baseline, there will period is chosen as a be Furthermore, comparative reductions in the other years. the 2000 value was high due to a specific problem with a unit generator, not due to the 1999 explosion as Mr. Zaetz alleges.

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Upon review of the data for representative a more baseline, it is clear that the actual 2001 and expected 2002 unplanned outage factors of 23.0 and 22.5 percent, respectively, were greater than the factors for 1998 and The unplanned outage factor projected for 2003 was 1999. even higher at 30.3 percent. This shows an increasing trend for the station's unplanned outage factor, which is a significant availability issue. If units increasingly experience unplanned outages, the company's ability to plan to meet generation and load requirements to serve its customers with economically priced generation and purchased significantly impacted, power is company may be forced to purchase more expensive power in the wholesale market to replace the capacity of units that were forced out of service.

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Q. Please describe the second item that Mr. Zaetz inaccurately cites in support of his allegations.

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Mr. Zaetz concludes that net capacity data included in A. the Gannon Station business plan support his position because the values do not show a large decline from 1998 However, a more thorough reading of page 6 of to 2002. Exhibit (WMZ-1) shows that it includes a definition of net capacity, "maximum dependable generation as capabilities minus service load." station capacity rating shown here is different from the typical operating capacity ratings of the Gannon units. maximum capacity is the capacity that the units could produce for a short period of time to meet peak load levels. Electric modified its operations Tampa Gannon units as maintenance for the their conditions worsened in order maximize their availability, to especially during peak periods. For example, by reducing the boiler operating pressure and thereby reducing the net capacity rating by a mere 10 Electric could experience an increase of as much as five to 10 percentage points in the unit's reliability.

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Mr. Zaetz also cites the net generation values shown on page 7 of Exhibit (WMZ-1) to support his argument.

Net generation values are tied to the time required for the maintenance completed on the units. Therefore, the data demonstrate that Tampa Electric's strategy of shifting to a "patch and go" maintenance approach, specifically to enhance the station's availability, was successful.

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Q. What is the third inaccurate statement that Mr. Zaetz made in support of his conclusion?

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Mr. Zaetz cites the station's on-peak availability A reference to the definition of the on-peak availability factor provided on page 9 of Exhibit (WMZ-1) shows that Mr. Zaetz mischaracterizes the data. On-peak availability factor is defined as, "The on-peak availability factor is based on peak hours instead of period hours. Peak hours occur when native load greater than 2,900 MW." Due to the load level criterion applied to this data, the number of hours that the data represents is necessarily small. As previously stated, Tampa Electric made a concerted effort to maximize the availability, especially during peak periods. units' Consequently, the on-peak availability factor data again simply demonstrate the success of the company's strategies.

Q. Finally, please describe Mr. Zaetz's fourth improper characterization.

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A. page 10 of his testimony Mr. Zaetz implies because the station's performance meeting was expectations, performance was not the reason units' shutdown. In actuality, Tampa Electric adjusted its methods of operating the units as well expectations of the units' performances to more accurately reflect their aged conditions and declining reliabilities. It would be ridiculous for the company not to have adjusted its expectations. To not do so, would have meant that Tampa Electric simply ignored the reliability issues that the station experienced. Ιn fact, Tampa Electric both recognized the issues and planned and implemented strategies to respond to these reliability and availability issues.

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Q. Mr. Zaetz indicates on page 8 of his testimony that the units' reliability could have and should have been improved by simply fixing the tube leaks. Would this strategy have resolved the station's reliability issues?

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A. No. As shown in Exhibit \_\_\_\_ (WTW-1), Document No. 1,

Page 1 of my direct testimony, Tampa Electric fixed over

1,000 tube leaks in the boilers of Gannon Units 1 through 4 during 2002, and it utilized repair techniques such as pad welding, dutchmen, window welds and replacement of complete tube sections when necessary. Tampa Electric also attempted to manage and enhance reliability by running the Gannon units at reduced header pressure, which reduced the internal steam pressure in the boiler tubes and decreased the likelihood of tube failures due to material degradation and thinning that has reduced the ability to withstand pressure. Despite these actions, the frequency and number of boiler tube leaks increased. The tube metal had also degraded over time with normal use. The boiler tubes reached a point where repair procedures were no longer effective, and complete boiler component replacement was required. given that the units would be required to be shut down in the near term and due to the significant planned outage time necessary to install replacement components, this was not a cost-effective alternative.

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Q. Is it typical to conduct a hydrostatic test that requires the unit to hold one and one half times its operating pressure after boiler tube repairs are made as Mr. Zaetz asserts on page 9 of his testimony?

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The hydrostatic No, it is not typical for older units. test to determine if the unit will hold one and one half operating pressure is typical of new times its For older units, a hydrostatic test to construction. determine if the unit will merely hold its operating pressure is typical. It is not reasonable to expect like-new units of the Gannon units' ages to be in condition or to operate as if they are brand-new units.

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- Q. Did the units experience equipment reliability problems in areas other than the boiler tubes?
- Although Mr. Zaetz focuses only on the boiler tube Α. leaks, his proposed solution to that problem would not have resolved the units' other reliability problems. units were experiencing problems with several other types of equipment, including the feedwater heaters, the steam turbines, the control wiring, leaks in the duct system leading to and from the boilers and structural steel To correct these problems would have deterioration. required major capital expenditures and component Some of the items would require long lead replacements. times, up to six months, to obtain replacement equipment, along with major planned outages to complete the work. If these repairs were made, the planned outage time, in

conjunction with the shutdown requirement mandated by the Consent Decree, would have left very little time to recoup any of the benefits of that investment. As the company previously stated, the short remaining life of the units meant that large investments for repairs were no longer cost-effective.

Q. Are repair costs the only costs that Tampa Electric would have incurred in order to improve the safety and reliability of the Gannon units?

A. No. Tampa Electric would have had to spend significant time and dollars planning outages to repair and replace components, procuring replacement equipment, installing the new equipment and replacing capacity of the affected units while they were off-line for the planned outages.

Q. At page 11 of his testimony, Mr. Zaetz says that Tampa Electric's \$57 million estimate to keep Gannon running through 2004 is unrealistic. How do you respond?

A. First, Mr. Zaetz misstates the amount as \$53 million. As shown in Document No. 2 of Exhibit \_\_\_ (WTW-2), Tampa Electric stated that the expected operations and maintenance ("O&M") costs range from \$37 million to \$57

million to keep Gannon Units 1 through 4 running through 2004, assuming a 60 percent and 85 percent availability, respectively. Tampa Electric did not determine that the units were not reliable solely based on an 85 percent availability criterion. Even the expected costs maintain 60 availability percent are significant. Sinking capital into aged units that must soon be shut down is an efficient or not cost-effective use capital, which apparently Mr. Zaetz ignores. business, there are limits on the company's ability to spend, whether for maintenance orany other Consequently, Tampa Electric strives to maximize benefits of its expenditures.

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Q. What is your overall assessment of Mr. Zaetz's testimony?

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Α. Mr. Zaetz reaches the erroneous conclusion that preventive boiler maintenance is a cure for all issues facing Gannon Station without demonstrating any knowledge as to the particular operational characteristics or maintenance requirements of Gannon Units 1 through 4. Mr. Zaetz also ignores the requirements of the CD and CFJ to shut down the Gannon units in the near future. He also ignores the fact that even if Tampa Electric invested large amounts in

Gannon units, there would be little time remaining for the company to recoup any of its investments, given the required outage time repairs to make and components and the shutdown deadline. Tampa Electric appropriately took into account safety, reliability and other factors in deciding to shut down the units. The company has made a prudent business decision, and Mr. Zaetz has neither the knowledge of the Gannon units nor knowledge of Tampa Electric's shutdown decision process to characterize the decision as solely budgetary and self-interested.

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Q. Does the testimony of Mr. Majoros incorrectly characterize Tampa Electric's actions?

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A. First, Mr. Majoros claims, on page 7 his testimony, that Tampa Electric's current for shutting down Gannon Units 1 through 4 in 2003 fostered by economic considerations and the desire to avoid capital or O&M expenses. As I have previously stated, Tampa Electric's decision to shut down the Gannon units in 2003 was driven primarily by four factors: the declining availability and reliability of the units; the significant expenditures that would need to be incurred in effort to keep the units running reliably;

potential for safety incidents; and, the short window of time until the units would be required to shut down, regardless of how much the company might invest in an effort to keep them operating.

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Q. How would you describe Mr. Majoros's approach in relating how Tampa Electric should have conducted its business, and in particular how the company should have operated Gannon Units 1 through 4?

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Mr. Majoros's approach appears to be that Tampa Electric should ignore such factors as safety, reliability and operational constraints and to throw whatever amount of capital may be required into operating Gannon Units 1 through 4 through December 31, 2004, without any regard to how impracticable that approach is or how inconsistent it is with the realities associated with making an orderly transition to natural gas-fired generation. although Majoros Mr. purports to have an expert perspective on this issue, his testimony does not address any specific facts relating to Gannon Station, nor does he independent any knowledge as to the reliability and other operational constraints associated with continuing to operate Gannon Units 1 through 4.

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Q. Did Tampa Electric ever have a plan to run Gannon Units 1 through 4 up to the December 31, 2004 deadline for ceasing coal-fired generation at Gannon Station?

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described in my direct testimony, No. As A. Electric is required by the Consent Decree to shut down or repower all Gannon units no later than December 31, However, the company never had a plan to operate the units until Tampa Electric always that date. recognized that the units' shutdown would require flexibility to respond to dynamic conditions the as deadline approached. The company appropriately refined the shutdown schedule and transition plan to reflect conditions, resulting in Tampa Electric's current

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Q. Mr. Majoros, at pages 8 and 9, criticizes the company's \$57 million cost estimate to keep Gannon Units 1 through 4 operating through 2004. How do you respond?

adoption of the current shutdown schedule.

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A. Tampa Electric's estimates of the O&M investments needed to keep Gannon Units 1 through 4 until December 31, 2004 show a range of costs to achieve different availability levels. The costs range from \$37 million to \$57 million, to achieve an approximate 60 percent and 85 percent

availability, respectively. As I have previously stated, keeping the units running through 2004 would be a very expensive proposition under either scenario, after which Tampa Electric would have nothing to show for the expenditures because the units would no longer be permitted to burn coal.

Q. Does this conclude your rebuttal testimony?

A. Yes it does.

EXHIBIT NO.

TAMPA ELECTRIC COMPANY

DOCKET NO. 030001-EI

(WTW-2)

FILED: 10/16/03

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## EXHIBIT TO THE REBUTTAL TESTIMONY OF WILLIAM T. WHALE

DOCUMENT NO. 1 2000 - 2003 SAFETY BUDGET

EXHIBIT NO.

TAMPA ELECTRIC COMPANY
DOCKET NO. 030001-EI
(WTW-2)
DOCUMENT NO. 1
PAGE 1 OF 3
FILED: 10/16/03

Tampa Electric Company Docket No. 030001-El Late Filed Deposition Exhibit of Buddy Maye No. 2 Page 1 of 3

#### 2000-2003 Safety Budget

- Q. Provide the Gannon Station safety budget for each year since 2000, as shown for 2003 on page 1,535 of Tampa Electric's response to OPC's 1<sup>st</sup> Request for POD.
- A. The Gannon Station safety budget for each year is shown in the following tables.

## 2000 Gannon Station Safety Budget

Budget (\$)	Description	
5,000 1,200	Safety Eye Glasses Safety Supplies S.E.A.L. Program Care Team Nurse Total	

### 2001 Gannon Station Safety Budget

Budget (\$)	Description				
270,160 2,000	Safety Eye Glasses Safety Budget Operations S.E.A.L. Program Care Team Nurse Total				

EXHIBIT NO.

TAMPA ELECTRIC COMPANY
DOCKET NO. 030001-EI
(WTW-2)
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Tampa Electric Company
Docket No. 030001-El
Late Filed Deposition
Exhibit of Buddy Maye
No. 2
Page 2 of 3

## 2002 Gannon Station Safety Budget

Budget (\$)	Description
103.200	IH consultants, doctor charges, ergonomics,
	drug testing, PFT interpretations, noise
	monitoring, audiometric test follow-ups, chest x-
72.000	PDE aniromatry supply sudiametric supplies
72,000	PPE, spirometry supply, audiometric, supplies, fit testing supplies
72 420	Luminometer, safety rewards, prescriptions,
72,120	safety glasses, 4-gas monitors, pager, cell
	phone, thermometers for heat stress, confined
	space rescue equipment
5,500	Travel expense
4,100	Miscellaneous expense
13,200	Meals expense
900	Personal auto reimbursement
65,000	Care Team Nurse
336,320	Total

EXHIBIT NO.

TAMPA ELECTRIC COMPANY
DOCKET NO. 030001-EI
(WTW-2)
DOCUMENT NO. 1
PAGE 3 OF 3
FILED: 10/16/03

Tampa Electric Company Docket No. 030001-El Late Filed, Deposition Exhibit of Buddy Maye No. 2 Page 3 of 3

2003 Gannon Station Safety Budget

Budget (\$)	Description
75,000	IH consultants, doctor charges, ergonomics, drug testing, PFT interpretations, noise monitoring, audiometric test follow-ups, chest x-rays
24,000	PPE, spirometry supply, audiometric, supplies, fit testing supplies
57,000	Luminometer, safety rewards, prescriptions, safety glasses, 4-gas air monitors, pager, cell phone, thermometers for heat stress, confined space rescue equipment
2,000	Travel expense
1,000	Miscellaneous expense
	Meals expense
•	Personal auto reimbursement
70,000	Care Team Nurse
240,000	Total

Based on actual spending in 2001 and 2002, the 2003 budget was refined to more accurately reflect an appropriate budget level.

TAMPA ELECTRIC COMPANY
DOCKET NO. 030001-EI
FILED: 10/16/03

## EXHIBIT TO THE REBUTTAL TESTIMONY OF WILLIAM T. WHALE

DOCUMENT NO. 2
RESPONSE TO INTERROGATORY NO. 37

EXHIBIT NO.

TAMPA ELECTRIC COMPANY
DOCKET NO. 030001-EI
(WTW-2)
DOCUMENT NO. 2
PAGE 1 OF 3
FILED: 10/16/03

TAMPA ELECTRIC COMPANY DOCKET NO. 030001-EI STAFF'S 4<sup>th</sup> SET OF INTERROGATORIES INTERROGATORY NO. 37 PAGE 1 OF 3 FILED: SEPTEMBER 9, 2003

- 37. Please list, describe, and indicate the cost for all maintenance tasks required to keep Gannon Units 1 4 in operation until December 2004.
- A. The great number of years that these units have been in service has resulted in their operations being difficult to predict. Therefore, there is much more uncertainty than is typically associated with Tampa Electric's estimates of both the work required and the cost for the maintenance tasks required to keep Gannon Units 1 4 in operation until December 2004. Tampa Electric provides its best estimates of the information requested in the attached table. The total estimated maintenance cost to keep Gannon Units 1 4 in operation until December 2004 with expected reliability near historical levels is approximately \$57.4 million. This total includes costs for major activities required to restart or keep the units operating as well as for planned maintenance activities. The attached table also includes a brief description of the activities required.

EXHIBIT NO.
TAMPA ELECTRIC COMPANY
DOCKET NO. 030001-EI
(WTW-2)
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TAMPA ELECTRIC COMPANY
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STAFF'S 4<sup>th</sup> SET OF INTERROGATORIES
INTERROGATORY NO. 37
PAGE 2 OF 3
FILED: SEPTEMBER 9, 2003

#### Gannon Units 1-4 Costs for Operating Through December 31, 2004 (\$000)

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Major Repair or Replacement Activities	Unit 1	Unit 2	Unit 3	Unit 4	Other	Total
Cyclone Replacements ( 49 day outage )	4,500	4,500	6,000	6,000	-	21,000
Furnace Tube Work: Unit 4 East&West Wall Repair; Header Flush and Clean; Unit 2 Rear Wall Replacement	-	2,300	_	500	-	2,800
Replace Expansion Joints	60	60	60	60		240
Replace Insulation and Lagging	300	300	200	200	-	1,000
Slag Tanks: Unit 1 Top of Slag Tank; Unit 3 Slag Tank Neck	60	-	150	-	<del>-</del>	210
Coal Field Equipment: Bulldozer Maintenance; Crusher Maintenance (Hammer Change); Belt Replacement; Dock Maintenance		<u>-</u>	-	_	500	500
Structural Repairs to Unit 3 Stack	-	-	70	-	_	70
Transmission: New Lines Required for Bayside 2C/2D if Gannon Unit 4 Generator Lead Line is Not Available	-	4		950	-	950
Pond Dredge	-	-	_	-	600	600
Water Treatment: Reverse Osmosis Rental; Clarifier Rental; Portable Demineralization Trailers	-			-	1,000	1,000
Replace Control Room Annunciators	-	•	30	30	-	60
Total Major Activities Costs	4,920	7,160	6,510	7,740	2,100	28,430

EXHIBIT NO.

TAMPA ELECTRIC COMPANY

DOCKET NO. 030001-EI

(WTW-2)

DOCUMENT NO. 2

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FILED: 10/16/03

TAMPA ELECTRIC COMPANY DOCKET NO. 030001-EI STAFF'S 4<sup>th</sup> SET OF INTERROGATORIES INTERROGATORY NO. 37 PAGE 3 OF 3

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Gannon Units 1-4 Costs for Operating Through December 31, 2004, Continued (\$000)						
2003 Maintenance Costs						
2003 45-day Planned Outage	400	400	-	-	_	800
2003 28-day Planned Outage	<u>-</u>	. •	500	500	-	1,000
2003 Additional Staff and Benefits Costs	-		<del>-</del>	-	3,200	3,200
Stevedoring	-	-	-	-	400	400
Additional Costs for Water, Chemicals, Environmental Fees, Equipment Repairs and Inspections, Stores; Other Required Preventive Maintenance Activities; etc.	-	-	<del>-</del>	_	1,600	1,600
Total 2003 Maintenance Costs	400	400	500	500	5,200	7,000
2004 Maintenance Costs						
2004 10-day Planned Outage	250	250	-	-	-	500
2004 28-day Planned Outage	<u>-</u>		500	500	-	1,000
2004 Staff and Benefits Cost	-	<u>-</u>	-	-	12,200	12,200
Stevedoring	_	<u>-</u>	_	_	1,200	1,200
Additional Costs for Water, Chemicals, Environmental Fees, Equipment Repairs and Inspections, Stores; Other Required Preventive Maintenance Activities; etc.	-	<del>-</del>	-	<u>-</u>	7,100	7,100
Total 2004 Maintenance Costs	250	250	500	500	20,500	22,000
Total 2003-2004 Major Activity and Maintenance Costs	5,570	7,810	7,510	8,740	27,800	57,430