

Please place the attached copies of certain objections and responses to Staff's interrogatories from FPL, GULF, PEF, and TECO in the above-referenced docket file.

LCB/th Attachments

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Fuel and purchase power cost recovery clause with generating performance incentive factor

Docket No: 120001-EI

Date: May 1, 2012

FLORIDA POWER & LIGHT COMPANY'S OBJECTIONS AND RESPONSES TO THE STAFF OF THE FLORIDA PUBLIC SERVICE <u>COMMISSION'S THIRD SET</u> OF INTERROGATORIES (NOS. 14-37)

Florida Power & Light Company ("FPL"), pursuant to Rule 1.340, Florida Rules of Civil Procedure, Rule 28-106.206, Florida Administrative Code, and Order No. PSC-12-0061-PCO-El, submits the following Objections and Responses to the Staff of the Florida Public Service Commission's ("Staff") Third Set of Interrogatories (Nos. 14-37).

I. General Objections

FPL objects to each and every discovery request that calls for information protected by the attorney-client privilege, the work product doctrine, the accountant-client privilege, the trade secret privilege, or any other applicable privilege or protection afforded by law, whether such privilege or protection appears at the time response is first made or is later determined to be applicable for any reason. FPL in no way intends to waive any such privilege or protection. The nature of the documents, if any, will be described in a privilege log prepared and provided by FPL.

FPL is a large corporation with employees located in many different locations. In the course of its business, FPL creates numerous documents that are not subject to Florida Public Service Commission or other governmental record retention requirements. These documents are kept in numerous locations and frequently are moved from site to site as employees change jobs or as business is reorganized. Therefore, it is possible that not every relevant document may have been consulted in developing FPL's responses to the discovery requests. Rather, these responses provide all of the information that FPL obtained after a reasonable and diligent search

conducted in connection with these discovery requests. To the extent that the discovery requests propose to require more, FPL objects on the grounds that compliance would impose an undue burden or expense on FPL.

FPL objects to each discovery request to the extent that it seeks information that is duplicative not relevant to the subject matter of this docket and is not reasonably calculated to lead to the discovery of admissible evidence.

FPL objects to each and every discovery request to the extent it is vague, ambiguous, overly broad, imprecise, or utilizes terms that are subject to multiple interpretations but are not properly defined or explained for purposes of such discovery requests. Any responses provided by FPL will be provided subject to, and without waiver of, the foregoing objection.

FPL also objects to each and every discovery request to the extent it calls for FPL to prepare information in a particular format or perform calculations or analyses not previously prepared or performed as purporting to expand FPL's obligations under applicable law.

FPL objects to providing information to the extent that such information is already in the public record before the Florida Public Service Commission and available to the requesting Party through normal procedures.

FPL objects to each and every discovery request that calls for the production of documents and/or disclosure of information from NextEra Energy, Inc. and any subsidiaries and/or affiliates of NextEra Energy, Inc. that do not deal with transactions or cost allocations between FPL and either NextEra Energy, Inc. or any subsidiaries and/or affiliates. Such documents and/or information do not affect FPL's rates or cost of service to FPL's customers. Therefore, those documents and/or information are irrelevant and not reasonably calculated to lead to the discovery of admissible evidence. Furthermore, FPL is the party appearing before the Florida Public Service Commission in this docket. To require any non-regulated entities to

participate in irrelevant discovery is by its very nature unduly burdensome and overbroad. Subject to, and without waiving, any other objections, FPL will respond to the extent the request pertains to FPL and FPL's rates or cost of service charged to FPL's customers. To the extent any responsive documents contain irrelevant affiliate information as well as information related to FPL and FPL's rates or cost of service charged to its customers, FPL may redact the irrelevant affiliate information from the responsive documents.

Where any discovery request calls for production of documents, FPL objects to any production location other than the location established by FPL, at FPL's Tallahassee Office located at 215 South Monroe Street, Suite 810, Tallahassee, Florida.

FPL objects to each and every discovery request and any instructions that purport to expand FPL's obligations under applicable law.

In addition, FPL reserves its right to count discovery requests and their sub-parts, as permitted under the applicable rules of procedure, in determining whether it is obligated to respond to additional requests served by any party.

FPL expressly reserves and does not waive any and all objections it may have to the admissibility, authenticity or relevancy of the information provided in its responses.

II. <u>Responses</u>

Attached hereto are FPL's answers to Interrogatory Nos. 14 through 37 of Staff's Third Set of Interrogatories consistent with its objections, together with the affidavits of the persons providing the answers.

> R. Wade Litchfield, Esq. Vice President and General Counsel John T. Butler, Esq. Assistant General Counsel-Regulatory Maria J. Moncada, Esq. Principal Attorney Florida Power & Light Company 700 Universe Boulevard Juno Beach, FL 33408 Telephone: (561) 304-5795 Facsimile: (561) 691-7135

By:

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Maria Jøse Moncada Florida Bar No. 0773301

CERTIFICATE OF SERVICE Docket No. 120001-EI

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by electronic mail and United States Mail on this 1st day of May 2012 to the following:

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By:

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Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 14 Page 1 of 1

Q.

For purposes of questions 14 through 18, all references to "budget" mean the Company's budget that existed at the time that the Company prepared and filed its Generating Performance Incentive Factor (GPIF) Target and Ranges for January through December 2012 period. If no such budget existed or if no such details exist, please explain why.

Did the Company's budget include an assessment of the preventative maintenance activity impacts on GPIF points, rewards and/or penalties for the January through December 2012 period? If so, please list all documents, procedures, or instructions that memorialize the Company's practices and identify all analyses and reports the Company relied on in its response to this question. If the Company's records are not sufficiently detailed to provide the requested information, please explain why.

Α.

The Company's budget did not directly reflect an assessment of preventive maintenance activity impacts on GPIF points, rewards and/or penalties for the January through December 2012 period. As part of its corporate commitment to excellence, FPL strives to achieve a high level of system availability (EAF) and efficiency (Heat Rate) for its generation fleet through programs such as preventive maintenance. These programs are fully aligned with the GPIF's objectives and the GPIF reward/penalty system reinforces FPL's commitment to excellence.

The GPIF was adopted in 1980 as an integral part of the Commission's then-new projected fuel cost recovery mechanism. In Order No. 9273, the Commission stated that "We are convinced that a well-designed projected clause would serve to improve the function of recovering fuel costs. We are equally convinced, however, that an explicit incentive feature is as important an objective, and we are committed to the task of designing a clause that successfully includes both of these elements." In Order No. 9558, the Commission adopted the GPIF as its preferred form of explicit incentive feature: "We find and conclude that the GPIF plan encompassed with the staff's final recommendation is consistent with the evidence received during this proceeding, represents the best elements of the ideas advanced by the parties, and provides the promise of fulfilling our objective of an explicit incentive in the area of operating efficiency." FPL believes that the GPIF remains an appropriate mechanism for the Commission to reinforce the importance of maintaining high availability and efficiency for utility generation fleets.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 15 Page 1 of 1

Q.

For purposes of questions 14 through 18, all references to "budget" mean the Company's budget that existed at the time that the Company prepared and filed its Generating Performance Incentive Factor (GPIF) Target and Ranges for January through December 2012 period. If no such budget existed or if no such details exist, please explain why.

What budget preparation reviews, if any, include assessments of GPIF rewards and/or penalties? Please list all documents that affirm assessment of GPIF rewards and penalties in the budget preparation process that existed at the time the Company prepared and filed its GPIF Target and Ranges for January through December 2012. If the Company's records are not sufficiently detailed to provide the requested information, please explain why.

Α.

The Company's budget preparation reviews do not focus specifically on GPIF rewards and/or penalties. See answer to question 14 for further explanation.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 16 Page 1 of 1

Q.

For purposes of questions 14 through 18, all references to "budget" mean the Company's budget that existed at the time that the Company prepared and filed its Generating Performance Incentive Factor (GPIF) Target and Ranges for January through December 2012 period. If no such budget existed or if no such details exist, please explain why.

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Please describe the changes, if any, to FPL's budgeting process that would be required if the GPIF program did not exist. Please list all documents, procedures or instructions that memorialize the Company's practices and identify all analyses and reports the Company relied on in its response to this question.

Α.

No changes to FPL's budgeting process would be required if the GPIF program did not exist. See answer to question 14 for further explanation.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 17 Page 1 of 1

Q.

For purposes of questions 14 through 18, all references to "budget" mean the Company's budget that existed at the time that the Company prepared and filed its Generating Performance Incentive Factor (GPIF) Target and Ranges for January through December 2012 period. If no such budget existed or if no such details exist, please explain why.

Please identify all expenses that would not have been incurred or budgeted if the GPIF program had not existed at the time that the Company prepared and filed its GPIF Target and Ranges for January through December 2012. If the Company's records are not sufficiently detailed to provide the requested information please explain why.

Α.

FPL cannot identify any expenses that would not have been incurred or budgeted if the GPIF program had not existed at the time that the Company prepared and filed its GPIF Target and Ranges for January through December 2012. See response to question 14 for further explanation.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 18 Page 1 of 1

Q.

For purposes of questions 14 through 18, all references to "budget" mean the Company's budget that existed at the time that the Company prepared and filed its Generating Performance Incentive Factor (GPIF) Target and Ranges for January through December 2012 period. If no such budget existed or if no such details exist, please explain why.

What planned and budgeted activity, if any, was undertaken during and prior to the January through December 2011 period that were planned and budgeted for the purpose of achieving the GPIF targets in 2011? Please list all documents that memorialize the Company's planned and budgeted activities, including budgeted amounts, which were specifically directed at achieving the GPIF target metrics. If the Company's records are not sufficiently detailed to provide the requested information please explain why.

Α.

No planned and budgeted activity was undertaken during and prior to the January through December 2011 period specifically for the purpose of achieving the GPIF targets in 2011. See answer to question 14 for further explanation.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 19 Page 1 of 1

Q.

Please provide the annual average or composite GPIF Equivalent Availability Factor (EAF) and heat rate (Btus per kWh) for the years 1997 through 2011.

Α.

	Projected EAF (%)	Projected ANOHR* (Btu/kWh)	Projected ANOHR without GAF** (Btu/kWh)
2011	81.3	8,598	8,598
2010	84.8	8,274	8,459
2009	87.6	8,346	8,542
2008	87.5	8,924	9,056
2007	85.2	9,010	9,149
2006	86.9	8,469	8,642
2005	86.5	9,399	9,481
2004	86.0	9,087	9,1 84
2003	88.7	9,556	9,605
2002	89.6	9,187	9,235
2001	88.2	9,841	9,867
2000	88.1	9,473	9,530
1999	Data not available***		
10/1998 - 12/1998	Data not available***		
10/1997 - 9/1998	D	ata not availal	ble***

* As filed with the FPSC

** As explained in Carmine A. Priore III GPIF testimony in Docket No. 100001-EI, in 2010, FPL discontinued the use of the Gas Adjustment Factor (GAF) for the newer combined cycle units and removed it when calculating their ANOHR heat rates beginning in 2011. The 2000-2010 composite system ANOHR projections, which would have resulted without the GAF, are shown here in order to be able to represent all the data on the same basis.

*** Due to a recent computer data storage equipment failure, historical data prior to 2000 is not available.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 20 Page 1 of 1

Q.

For each plant in the GPIF targets for 2012, please identify what EAF and heat rate projections were used when the Company filed its need determination petitions.

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	Heat Rate* (Btu/kWh)	EAF** (%)
Ft. Myers 2	No need determination required	
Manatee 3	6,850	97%
Martin 8	6,850	97%
Sanford 4	No need determination required	
Scherer 4	No need determination required	
St. Lucie 1	Not_applicable***	
St. Lucie 2	Not applicable***	
Turkey Point 3	Not applicable***	
Turkey Point 4	Not applicable***	
Turkey Point 5	6,835	97%

* Based on very specific conditions: base operation (excludes duct firing, peaking operation, etc) At 75^{0} F ambient temperature and 100% output. Consequently, this heat rate is not comparable to the GPIF heat rate targets and actuals which are based on varying actual unit dispatch conditions.

** Excludes maintenance outage factor and consequently is not comparable to the GPIF EAF targets and actuals.

*** All four nuclear units began construction prior to 1980 when Florida Statute 403.519 was enacted requiring a determination of need for new power plants.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 21 Page 1 of 1

Q.

The GPIF methodology was established in 1980 by Order No. 9558. Commission staff's records reflect that from 1980 to the present, the overall generation mix for Florida's investor-owned utilities has changed. Commission staff is reviewing data to determine if the change in generation mix warrants changes to GPIF program.

a. Do you agree with Commission staff's assertion that the overall generation mix for Florida's investor-owned utilities has changed from 1980 to present?

b. How has FPL's generation mix changed from 1980 to 2011.

c. Are FPL's 2011 Equivalent Availability Factors and heat rate more efficient than in 1980? Explain.

Α.

a. FPL cannot speak for the state of Florida. The assertion is correct for FPL's generation fleet. b. FPL's generating mix has changed from a generation fleet of primarily conventional steam boilers burning heavy oil in 1980 to a generation fleet of primarily highly efficient combined cycle units burning natural gas in 2011.

c. FPL does not have EAF or heat rate data back to 1980. The earliest year available is 1990. Comparing FPL's 1990 EAF of 73.9% to its 2011 EAF of 85.3% shows that FPL's EAF has improved. Likewise, when comparing FPL's 1990 heat rate of 10,213 Btu/kWh to its 2011 heat rate of 8,560 Btu/kWh shows that FPL's heat rate is more efficient.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 22 Page 1 of 1

Q.

In 2011, the generating mix for Florida's investor-owned utilities is much different than it was in 1980, and natural gas as a generating fuel has a much higher profile than it had in 1980. Do you agree with this assertion? If not, explain.

Α.

FPL cannot speak for the state of Florida. The assertion is correct for FPL's generation fleet.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 23 Page 1 of 1

Q.

Do you agree that natural gas combined cycle units have a higher availability than heavy oil generating units? Explain your response.

A.

Yes. In general, natural gas combined cycle units have a higher availability due primarily to improved reliability associated with a lower forced outage rate. Also, additional maintenance outage time may be required on equipment associated with burning heavy oil.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 24 Page 1 of 1

Q.

Do you agree that natural gas combined cycle units have a lower heat rate than heavy oil generating units. Explain your response.

Α.

Yes. In general, natural gas combined cycle (CC) units convert the fuel energy to electrical energy more efficiently than heavy oil generating units due to the CC thermal cycle design which uses waste heat from the combustion turbine to generate additional electricity.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 25 Page 1 of 1

Q.

Should the Commission eliminate the Generating Performance Incentive Factor? Please explain your response.

Α.

No. As part of its corporate commitment to excellence, FPL strives to achieve a high level of system availability (EAF) and efficiency (Heat Rate) for its generation fleet through programs such as preventive maintenance. These programs are fully aligned with the GPIF program and reinforce FPL's commitment to excellence. The GPIF objectives and the GPIF reward/penalty system remains an appropriate mechanism for the Commission to reinforce the importance of maintaining high availability and efficiency for utility generation fleets.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 26 Page 1 of 1

Q.

If your response to Interrogatory 25 is no, do you believe the Generating Performance Incentive Factor program should be modified. Please identify all changes FPL believes are appropriate for the Commission to consider in the GPIF program prospectively.

Α.

No. FPL believes the GPIF program is functioning as intended and no changes to the program are necessary.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 27 Page 1 of 1

Q.

Should the EAF and heat rate measures used in setting GPIF targets be higher, the same, or lower than similar metrics the Company has used for petitions for need determinations? Please explain your answer.

Α.

The current methodology of calculating annual GPIF targets for EAF and heat rate should be continued. The GPIF target methodology reflects a unit's planned outages for the period and incorporates recent historical actual performance to establish annual targets. This methodology establishes realistic annual operating performance targets for a unit upon which a reward or penalty can be assessed.

The need determination EAF and heat rate measures are a static number for the life of the project and are used in the RFP process for bid solicitation. This allows all bidders to bid on the project using the same assumptions. The use of a single static number as the GPIF target for the life of the project would not take into account changes in annual planned outage requirements and heat rate degradation as a unit wears. The need determination EAF and heat rate measures are not a realistic annual operating performance measure for GPIF units.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 28 Page 1 of 1

Q.

Please identify what EAF and heat rate measures are in the Company's current "standard offer contracts" for co-generators.

A.

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The current FPL approved "standard offer contract" for co-generators has a 94% EAF and a 6,362 Btu/kWh heat rate measure, based on a 2021 avoided unit (Combined Cycle Unit 1,262 MW).

FPL's revised "standard offer contract" for co-generators, submitted to the Commission for approval on April 2, 2012, has a 94% EAF and a 13,000 Btu/kWh heat rate measure, based on the potential avoidance of a 2021 power purchase agreement (250 MW of peaking capacity).

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 29 Page 1 of 1

Q.

Should the EAF and heat rate measures used in setting GPIF targets be higher, the same, or lower than similar metrics the Company has used in "standard offer contracts" for cogenerators? Please explain your answer.

Α.

The current methodology of calculating annual GPIF targets for EAF and heat rate should be continued. The GPIF target methodology reflects a unit's planned outages for the period and incorporates recent historical actual performance to establish annual targets. This methodology establishes realistic annual operating performance targets for a unit upon which a reward or penalty can be assessed. The "standard offer contract" EAF and heat rate measures are based on a future avoided unit that has no relationship to the current operational performance of FPL's GPIF units.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 30 Page 1 of 1

Q.

Please explain how the Company's GPIF methodology would have to be changed in order to align EAF and heat rate measures used in setting GPIF targets with similar metrics the Company has used in petitions for need determinations or with "standard offer" contracts?

Α.

To align the GPIF targets with metrics used in need determinations or "standard offer" contracts, the GPIF methodology for setting targets would have to be de-coupled from the use of recent historical actual performance and re-aligned to use long-term projected performance in setting the near-term (one-year-out) GPIF targets. This would result in comparing unit performance to a target based on a projected need. The two are not comparable, so FPL does not recommend this approach.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 31 Page 1 of 1

Q.

Should the Company's GPIF methodology be modified to include North American Electric Reliability Corporation (NERC) average generating availability for the same class and size of power plant for the purpose of setting GPIF targets? If so, how? If not, why not?

Α.

The current methodology of calculating annual GPIF targets for EAF and heat rate should be continued. The GPIF target methodology reflects a unit's planned outages for the period and incorporates recent historical actual performance to establish targets. This methodology establishes a realistic operating performance target for a unit upon which a reward or penalty can be assessed. Furthermore, there can be up to a three-year time lag between the NERC published data and the target setting period. Setting targets based on data with such time period differential would negate the inclusion of the most recent and specific unit operating performance gains and the utility's most recent operating experience of each unit in which to base the expected performance of the unit.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 32 Page 1 of 1

Q.

Should the Company's GPIF reward amount be zero if the Company has not made any investments or incurred any expenses directed at achieving the Company's EAF and heat rate targets? Why or why not? Please explain your answer.

Α.

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No. The GPIF program is properly focused on results achieved. However, FPL does budget and incur expenses annually for planned preventive maintenance activities to maintain the reliability and efficiency of its generation fleet. Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 33 Page 1 of 1

Q.

Does the Company, for its own purposes apart from the GPIF program, set heat rate, EAF, and/or similar performance targets? If so, and if Company's internal performance data is different from the plant-specific data in the GPIF program, please explain the differences.

Α.

Yes. FPL sets heat rate and EAF targets apart from the GPIF program. The main difference between the two is that FPL's internal EAF does not include allowance for maintenance outages ("MOF"), because those are outages that would only be performed as system conditions permit.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 34 Page 1 of 1

Q.

In consideration of the data provided in response to Interrogatory 19 above, would the EAF for each of the Company's GPIF units be any different if the GPIF program did not exist? Why or why not? Please explain your answer.

Α.

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FPL cannot speculate what could or could not have happened. However, as part of its corporate commitment to excellence, FPL strives to achieve a high level of system availability (EAF) and efficiency (Heat Rate) for its generation fleet through programs such as preventive maintenance. These programs are fully aligned with the GPIF's objectives and the GPIF reward/penalty system reinforces FPL's commitment to excellence.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 35 Page 1 of 1

Q.

In consideration of the data provided in response to Interrogatory 19 above, would the heat rate for each of the Company's GPIF units be any different if the GPIF program did not exist? Why or why not? Please explain your answer.

Α.

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See response to question 34 of Staff's Third Set of Interrogatories.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 36 Page 1 of 1

Q.

In consideration of the data provided in response to Interrogatory 19 above, would the Company's fuel savings based on the GPIF units be any different if the GPIF program did not exist? Why or why not? Please explain your answer.

Α.

See response to question 34 of Staff's Third Set of Interrogatories.

Florida Power & Light Company Docket No. 120001-EI Staff's 3rd Set of Interrogatories Question No. 37 Page 1 of 1

Q.

In Docket No. 120015-EI, FPL witness Reed asserts that FPL has improved its thermal efficiency since 2001 and that FPL is a top performer regarding plant availability (see pages 29-30 of Reed testimony in Docket No. 120015-EI). On Page 48 of witness Dewhurst's testimony in Docket No. 120015, witness Dewhurst refers to witness Reeds assertions.

a. In testifying regarding FPL's performance and for a performance adder of 25 basis points, did witnesses Reed and Dewhurst consider that Florida IOUs, including FPL, are rewarded for thermal efficiency and plant availability through the GPIF? Please explain.

b. Would the performance adder be double-counting the performance FPL is rewarded for through the GPIF? Please explain.

a.

Mr. Reed's Direct Testimony compares the operating performance of FPL's fossil and nuclear fleet to industry averages. Mr. Reed makes no assertions as to a performance adder or its relationship to the Generating Performance Incentive Factor ("GPIF") in the fuel clause proceeding. The ROE performance adder proposed by FPL witness Dewhurst takes into account the full range of FPL's excellent performance, from generation through transmission, distribution and customer service, that delivers clean, reliable energy to customers at the lowest typical residential bill in the state. The operational performance of FPL's generating units is only one of many factors that make possible FPL's excellent performance.

b.

No. A performance adder of 25 basis points would not represent a double counting of the performance reward through the GPIF. The proposed 25 point ROE adder is contingent on FPL maintaining the lowest typical residential 1,000 kilowatt-hour bill in the state. The ability to accomplish this goal is dependent on many cost-based variables, not just generation-based metrics, and would presumably be measured against the residential rates of other Florida electric utilities. The GPIF is designed to provide an incentive for the efficient operation of specific generating units as measured against the Commission approved targets for heat rate and availability. Therefore, these mechanisms should be viewed as complementary and not duplicative.

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STATE OF FLORIDA

COUNTY OF PALM BEACH

I hereby certify that on this <u>24</u> day of <u>Apri</u>, 2012, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared J. Carine Bullock who is personally known to me, and she acknowledged before me that she provided the answers to interrogatory numbers 14 through 36 from STAFF'S THIRD SET OF INTERROGATORIES TO FLORIDA POWER & LIGHT COMPANY (NOS. 14-37) in Docket No. 120001-EI, and that the responses are true and correct based on her personal knowledge.

J. Carine Bullock

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this $\underline{\partial \gamma^{+}}_{}$ day of $\underline{\partial \gamma^{-}}_{}$, 2012.



Notary Public

State of Florida, at Large

My Commission	Expires:
1-14	- (3

AFFIDAVIT

COMMONWEALTH OF MASSACHUSETTS) COUNTY OF MIDDLESEX)

I hereby certify that on this 26th day of April, 2012, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared John Reed, who is personally known to me, and he acknowledged before me that he provided the answer to interrogatory number 37 from STAFF'S THIRD SET OF INTERROGATORIES TO FLORIDA POWER & LIGHT COMPANY (NOS. 14-37) in Docket No. 120001-EI, and that the responses are true and correct based on her personal knowledge.

John-Reed

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 26th day of April, 2012.



Notary Public Commonwealth of Massachusetts

My Commission Expires: October 15, 2015



Susan D. Ritenour Secretary and Treasurer and Regulatory Manager

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May 2, 2012

Ms. Martha Barrera, Senior Attorney Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

Re: Docket No. 120001-EI

Dear Ms.Barrera:

Attached is Gulf Power Company's response to the Commission Staff's Third Set of Interrogatories (Nos. 16-38) in the above referenced docket.

Sincerely,

Susan D. Rotenous

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Attachments

cc: Beggs & Lane Jeffrey A. Stone, Esq.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Fuel and Purchased Power Cost Recovery) Clause with Generating Performance) Incentive Factor. Docket No. 120001-EI

Date Filed: May 2, 2012

GULF POWER COMPANY'S RESPONSES TO STAFF'S THIRD SET OF INTERROGATORIES (NOS. 16-38)

GULF POWER COMPANY ("Gulf Power", "Gulf", or "the Company"), by and

through its undersigned counsel, hereby submits the Company's responses to

Staff's Third Set of Interrogatories (Nos. 16-38) on the following pages.

Respectfully submitted by electronic mail the 2nd day of May, 2012,

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JEFFREY A. STONE Florida Bar No. 325953 RUSSELL A. BADDERS Florida Bar No. 007455 STEVEN R. GRIFFIN Florida Bar No. 0627569 BEGGS & LANE P. O. Box 12950 Pensacola FL 32591-2950 (850) 432-2451 Attorneys for Gulf Power Company

Staff's Third Set of Interrogatories Docket No. 120001-El GULF POWER COMPANY May 2, 2012 Item No. 16 Page 1 of 1

16. Did the Company's budget include an assessment of the preventative maintenance activity impacts on GPIF points, rewards and/or penalties for the January through December 2012 period? If so, please list all documents, procedures, or instructions that memorialize the Company's practices and identify all analyses and reports the Company relied on in its response to this question. If the Company's records are not sufficiently detailed to provide the requested information, please explain why.

ANSWER:

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No. Gulf's budgeting process does not include assessments of the impact that various preventive maintenance activities would have on GPIF points, rewards and/or penalties. Gulf looks at both operating efficiencies and reliability without specific consideration of any impacts on the GPIF mechanism when budgeting resources to maintain its generating units. The GPIF mechanism serves as an independent process to assess Gulf's generating units operating performance.
Staff's Third Set of Interrogatories Docket No. 120001-El GULF POWER COMPANY May 2, 2012 Item No. 17 Page 1 of 1

17. What budget preparation reviews, if any, include assessments of GPIF rewards and/or penalties? Please list all documents that affirm assessment of GPIF rewards and penalties in the budget preparation process that existed at the time the Company prepared and filed its GPIF Target and Ranges for January through December 2012. If the Company's records are not sufficiently detailed to provide the requested information, please explain why.

ANSWER:

As indicated in Gulf's response to Interrogatory No. 16, Gulf's budgeting process does not include an assessment of GPIF rewards and/or penalties.

Staff's Third Set of Interrogatories Docket No. 120001-El GULF POWER COMPANY May 2, 2012 Item No. 18 Page 1 of 1

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18. Please describe the changes, if any, to GULF's budgeting process that would be required if the GPIF program did not exist. Please list all documents, procedures or instructions that memorialize the Company's practices and identify all analyses and reports the Company relied on in its response to this question.

ANSWER:

Because Gulf's budgeting process and the GPIF mechanism operate independently of each other, no changes to Gulf's budgeting process would be required if the GPIF program did not exist.

Staff's Third Set of Interrogatories Docket No. 120001-El GULF POWER COMPANY May 2, 2012 Item No. 19 Page 1 of 1

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19. Please identify all expenses that would not have been incurred or budgeted if the GPIF program had not existed at the time that the Company prepared and filed its GPIF Target and Ranges for January through December 2012. If the Company's records are not sufficiently detailed to provide the requested information please explain why.

ANSWER:

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None.

Staff's Third Set of Interrogatories Docket No. 120001-El GULF POWER COMPANY May 2, 2012 Item No. 20 Page 1 of 1

20. What planned and budgeted activity, if any, was undertaken during and prior to the January through December 2011 period that were planned and budgeted for the purpose of achieving the GPIF targets in 2011? Please list all documents that memorialize the Company's planned and budgeted activities, including budgeted amounts, which were specifically directed at achieving the GPIF target metrics. If the Company's records are not sufficiently detailed to provide the requested information please explain why.

ANSWER:

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None. See Gulf's response to Interrogatory No. 16.

Staff's Third Set of Interrogatories Docket No. 120001-EI GULF POWER COMPANY May 2, 2012 Item No. 21 Page 1 of 1

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21. Please provide the annual average or composite GPIF Equivalent Availability Factor (EAF) and heat rate (BTUs per kWh) for the years 1997 through 2011.

ANSWER:

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	GPIF	GPIF
	units	units
	EAF	ANOHR
Period	(%)	(BTU/KWh)
1997	80.30	10,406
1998	75.09	10,352
1999	82.28	10,218
2000	82.40	10,197
2001	84.28	10,289
2002	79.06	10,307
2003	81.82	10,119
2004	83.67	10,208
2005	77.80	10,353
2006	87.98	10,299
2007	89.75	10,373
2008	84.72	10,374
2009	85.47	10,651
2010	90.30	10,600
2011	77.24	10,759

Staff's Third Set of Interrogatories Docket No. 120001-EI GULF POWER COMPANY May 2, 2012 Item No. 22 Page 1 of 1

22. For each plant in the GPIF targets for 2012, please identify what EAF and heat rate projections were used when the Company filed its need determination petitions.

ANSWER:

The vintage of the Gulf GPIF units predate needs determination petitions under Florida Electrical Power Plant Siting Act. Therefore, documented EAF and heat rate projections for this type of analysis are not available.

Staff's Third Set of Interrogatories Docket No. 120001-El GULF POWER COMPANY May 2, 2012 Item No. 23 Page 1 of 1

- 23. The GPIF methodology was established in 1980 by Order No. 9558. Commission staff's records reflect that from 1980 to the present, the overall generation mix for Florida's investor-owned utilities has changed. Commission staff is reviewing data to determine if the change in generation mix warrants changes to GPIF program.
 - a. Do you agree with Commission staff's assertion that the overall generation mix for Florida's investor-owned utilities has changed from 1980 to present?
 - b. How has GULF's generation mix changed from 1980 to 2011?
 - c. Are GULF's 2011 Equivalent Availability Factors and heat rate-more efficient than in 1980? Explain.

ANSWER:

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- a. Gulf is unable to agree with this assertion because it does not have sufficient information to determine any changes in generation mix for utilities in Florida other than itself.
- In 1980, Gulf's fleet of generation in rate base consisted of 12 units at three plant sites with 1,380 MW of pulverized coal steam generation, 80 MW of oil/natural gas fired steam generation and 31 MW of oil fired simple cycle CT generation. Today, its fleet of generation in rate base consists of 18 units at six sites. Since 1980 Gulf has retired 80 MW of steam capacity fueled by oil/natural gas and added 531 MW of natural gas fired combined cycle; 510 MW of pulverized coal steam generation; 12 MW of natural gas fired simple cycle gas turbines; 3 MW of landfill gas fired internal combustion engines.
- c. Gulf's heat rate has improved mainly because of Smith 3's much lower heat rate and its amount of generation in 2011. The Equivalent Availability Factor is somewhat unchanged as it has fluctuated to 1982 levels in recent times and is highly dependent on Planned Outages during the year. Note: The comparison of EAF and heat rate was made using the oldest accessible year's data in the Generating Availability Database (GADS) which was 1982.

Staff's Third Set of Interrogatories Docket No. 120001-El GULF POWER COMPANY May 2, 2012 Item No. 24 Page 1 of 1

24. In 2011, the generating mix for Florida's investor-owned utilities was much different than it was in 1980, and natural gas as a generating fuel had a much higher profile than it had in 1980. Do you agree with this assertion? If not, explain.

ANSWER:

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Gulf is unable to agree with this assertion because it does not have sufficient information to determine any changes in generation mix for utilities in Florida other than itself. Gulf's generating mix has changed with the addition of one natural gas combined cycle unit to our fleet in 2002.

Staff's Third Set of Interrogatories Docket No. 120001-EI GULF POWER COMPANY May 2, 2012 Item No. 25 Page 1 of 1

25. Do you agree that natural gas combined cycle units have a higher availability than heavy oil generating units? Explain your response.

ANSWER:

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Gulf cannot make this comparison because it does not have heavy oil generating units.

Staff's Third Set of Interrogatories Docket No. 120001-EI GULF POWER COMPANY May 2, 2012 Item No. 26 Page 1 of 1

26. Do you agree that natural gas combined cycle units have a lower heat rate than heavy oil generating units. Explain your response.

ANSWER:

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See response to Interrogatory No. 25.

Staff's Third Set of Interrogatories Docket No. 120001-EI GULF POWER COMPANY May 2, 2012 Item No. 27 Page 1 of 1

27. Should the Commission eliminate the Generating Performance Incentive Factor? Please explain your response.

ANSWER:

No, the GPIF was incorporated into the Fuel and Purchased Power Recovery Clause in 1980 to provide an incentive for the efficient operation of base load generating units. The intent of this incentive is to reward utilities for performance that exceeds reasonably expected performance and to penalize utilities for performance that is less than reasonably expected.

Staff's Third Set of Interrogatories Docket No. 120001-EI GULF POWER COMPANY May 2, 2012 Item No. 28 Page 1 of 1

28. If your response to Interrogatory 27 is no, do you believe the Generating Performance Incentive Factor program should be modified. Please identify all changes GULF believes are appropriate for the Commission to consider in the GPIF program prospectively.

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ANSWER:

No, Gulf does not see a need to change the GPIF program. Our fleet of units included in the GPIF program has essentially stayed the same and the program has worked as intended for our units.

Staff's Third Set of Interrogatories Docket No. 120001-El GULF POWER COMPANY May 2, 2012 Item No. 29 Page 1 of 1

29. Should the EAF and heat rate measures used in setting GPIF targets be higher, the same, or lower than similar metrics the Company has used for petitions for need determinations? Please explain your answer.

ANSWER:

GPIF measures are unique and should not be compared to measures included in need determinations. Equivalent Availability Factors (EAF) and heat rate measures used in the GPIF target setting process are derived from historical data from Gulf units that have been in-service for a number of years. Similar performance and efficiency measures for Gulf units to be included in future needs determination filings are based on theoretical, expected performance and efficiencies dependent on the technology of the specific unit which will change as units accumulate service hours.

Staff's Third Set of Interrogatories Docket No. 120001-El GULF POWER COMPANY May 2, 2012 Item No. 30 Page 1 of 1

30. Please identify what EAF and heat rate measures are in the Company's current "standard offer contracts" for co-generators.

ANSWER:

Gulf's 2011 Renewable Standard Offer is based on a combustion turbine with an EAF of 95% and a design net heat rate of 10,294 mmBTU/kWh.

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Staff's Third Set of Interrogatories Docket No. 120001-EI GULF POWER COMPANY May 2, 2012 Item No. 31 Page 1 of 1

31. Should the EAF and heat rate measures used in setting GPIF targets be higher, the same, or lower than similar metrics the Company has used in "standard offer contracts" for co-generators? Please explain your answer.

ANSWER:

For the reasons discussed in Gulf's response to Interrogatory No. 29, EAF and heat rate measures used in setting GPIF targets should not be compared to measures included in Gulf's standard offer contracts.

Staff's Third Set of Interrogatories Docket No. 120001-EI GULF POWER COMPANY May 2, 2012 Item No. 32 Page 1 of 1

32. Please explain how the Company's GPIF methodology would have to be changed in order to align EAF and heat rate measures used in setting GPIF targets with similar metrics the Company has used in petitions for need determinations or with "standard offer" contracts?

ANSWER:

Gulf does not believe aligning GPIF EAF and heat rate measures with those included in needs determinations or standard offer contracts is appropriate. Gulf has not identified changes to the GPIF methodology for this purpose at this time.

Staff's Third Set of Interrogatories Docket No. 120001-EI GULF POWER COMPANY May 2, 2012 Item No. 33 Page 1 of 1

33. Should the Company's GPIF methodology be modified to include North American Electric Reliability Corporation (NERC) average generating availability for the same class and size of power plant for the purpose of setting GPIF targets? If so, how? If not, why not?

ANSWER:

No, there is too much variation between our own fleet's units to compare accurately to a NERC average unit. The accumulated historical data on our units, which has been documented in past GPIF Results filings outweighs speculation on a modeled composite unit that is not in service.

Staff's Third Set of Interrogatories Docket No. 120001-El GULF POWER COMPANY May 2, 2012 Item No. 34 Page 1 of 1

34. Should the Company's GPIF reward amount be zero if the Company has not made any investments or incurred any expenses directed at achieving the Company's EAF and heat rate targets? Why or why not? Please explain your answer.

ANSWER:

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No. As explained in Gulf's response to interrogatory No. 16 Gulf's budgeting process does not have a specific EAF and heat rate target as its goal. However, most of a unit's Operations and Maintenance expenses are directed to achieving reliable, low cost generation which inherently contributes to EAF and heat rate improvement.

Staff's Third Set of Interrogatories Docket No. 120001-EI GULF POWER COMPANY May 2, 2012 Item No. 35 Page 1 of 1

35. Does the Company, for its own purposes apart from the GPIF program, set heat rate, EAF, and/or similar performance targets? If so, and if Company's internal performance data is different from the plant-specific data in the GPIF program, please explain the differences.

ANSWER:

Yes, currently heat rate performance is measured on a gross basis, thus eliminating the impact of station service which varies significantly based on installed environmental equipment. Reliability metrics are Peak Season (January – February and May – September) Equivalent Forced Outage Rate (EFOR) and Annual Equivalent Unplanned Outage Factor (EUUF). Both the EFOR and EUUF are measurements in the NERC GADS system. The targets are derived using historical data.

EFOR is calculated in the following manner:

EFOR % = ((FOH + EFDH)/(FOH + SH + EFDH))*100 Where: FOH = Forced Outage Hours EFDH = Equivalent Forced Derate Hours SH = Service Hours

EUUF is calculated in the following manner:

EUUF % = ((FOH + MOH + EFDH + EMDH)/PH)*100 Where: FOH = Forced Outage Hours EFDH = Equivalent Forced Derate Hours MOH = Maintenance Outage Hours EFDH = Equivalent Maintenance Derate Hours PH = Period Hours

Staff's Third Set of Interrogatories Docket No. 120001-El GULF POWER COMPANY May 2, 2012 Item No. 36 Page 1 of 1

36. In consideration of the data provided in response to Interrogatory 21 above, would the EAF for each of the Company's GPIF units be any different if the GPIF program did not exist? Why or why not? Please explain your answer.

ANSWER:

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No. Please see Gulf's response to Interrogatory No. 16.

Staff's Third Set of Interrogatories Docket No. 120001-El GULF POWER COMPANY May 2, 2012 Item No. 37 Page 1 of 1

37. In consideration of the data provided in response to Interrogatory 21 above, would the heat rate for each of the Company's GPIF units be any different if the GPIF program did not exist? Why or why not? Please explain your answer.

ANSWER:

No. Please see Gulf's response to Interrogatory No. 16.

Staff's Third Set of Interrogatories Docket No. 120001-El GULF POWER COMPANY May 2, 2012 Item No. 38 Page 1 of 1

38. In consideration of the data provided in response to Interrogatory 21 above, would the Company's fuel savings based on the GPIF units be any different if the GPIF program did not exist? Why or why not? Please explain your answer.

ANSWER:

No. Please see Gulfs' response to Interrogatory No 16.

AFFIDAVIT

STATE OF FLORIDA COUNTY OF ESCAMBIA

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Docket No. 120001-EI

Before me the undersigned authority, personally appeared Susan D. Ritenour, Secretary and Treasurer and Regulatory Manager of Gulf Power Company, and who on behalf of said corporation, being first duly sworn, deposes, and says that pursuant to Rule 1.340(a), Florida Rules of Civil Procedure, she verifies that the foregoing answers to the interrogatories are submitted on behalf of said corporation, and that the foregoing constitute true and correct answers to the best of her knowledge, information, and belief based on the information provided by others in the course of business. She is personally known to me.

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Sysan D. Ritenour Secretary and Treasurer and Regulatory Manager

Sworn to and subscribed before me this 2nd day of May, 2012.

Notary Public, State of Florida at Large

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor

Docket No.: 120001-EI

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy of the foregoing was furnished by electronic mail this 2nd day of May, 2012 on the following:

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Fuel and purchased power cost recovery clause with generating performance incentive factor.

Docket No. 120001-EI

Submitted for Filing: May 2, 2012

PROGRESS ENERGY FLORIDA'S RESPONSES TO STAFF'S THIRD SET OF INTERROGATORIES (NOS. 13-35)

Progress Energy Florida, Inc. ("PEF"), responds to Staff's Third Set of Interrogatories to

PEF (Nos. 13-35), as follows:

INTERROGATORIES

For purposes of questions 13 through 17, all references to "budget" mean the Company's budget that existed at the time that the Company prepared and filed its GPIF Target and Ranges for January through December 2012 period. If no such budget existed or if no such details exist, please explain why.

13. Did the Company's budget include an assessment of the preventative maintenance activity impacts on GPIF points, rewards and/or penalties for the January through December 2012 period? If so, please list all documents, procedures, or instructions that memorialize the Company's practices and identify all analyses and reports the Company relied on in its response to this question. If the Company's records are not sufficiently detailed to provide the requested information, please explain why.

<u>Answer</u>: No, PEF's 2012 budget does not include an assessment of the preventative maintenance activity impacts on GPIF points, rewards and/or penalties for the January through December 2012 period.

14. What budget preparation reviews, if any, include assessments of GPIF rewards and/or penalties? Please list all documents that affirm assessment of GPIF rewards and penalties in the budget preparation process that existed at the time the Company prepared and filed its GPIF Target and Ranges for January through December 2012. If the Company's records are not sufficiently detailed to provide the requested information, please explain why.

<u>Answer</u>: No budget preparation reviews took place in PEF's 2012 budget related to GPIF.

15. Please describe the changes, if any, to PEF's budgeting process that would be required if the GPIF program did not exist. Please list all documents, procedures or instructions that memorialize the Company's practices and identify all analyses and reports the Company relied on in its response to this question.

<u>Answer</u>: There would not be any required changes to PEF's budgeting process if the GPIF program did not exist.

16. Please identify all expenses that would not have been incurred or budgeted if the GPIF program had not existed at the time that the Company prepared and filed its GPIF Target and Ranges for January through December 2012. If the Company's records are not sufficiently detailed to provide the requested information please explain why.

<u>Answer</u>: Approximately 4 employees spend on average 6% of their time working on activities related to PEF's GPIF program which is approximately 480 hours per year of company employee time to prepare, review, and file PEF's GPIF filings. Estimated expenses associated with supporting the GPIF activities on an annual basis equal approximately \$30,000 per year. Actual costs for copying and filing PEF's GPIF paperwork were not material. Had the GPIF program not existed, PEF would have used the aforementioned employee hours on other tasks. 17. What planned and budgeted activity, if any, was undertaken during and prior to the January through December 2011 period that were planned and budgeted for the purpose of achieving the GPIF targets in 2011? Please list all documents that memorialize the Company's planned and budgeted activities, including budgeted amounts, which were specifically directed at achieving the GPIF target metrics. If the Company's records are not sufficiently detailed to provide the requested information please explain why.

Answer: PEF did not have any items in its 2011 planned and budgeted activity that were specifically directed at achieving GPIF target metrics, and accordingly, no such activity was either eliminated or reduced during that period.

Please provide the annual average or composite GPIF Equivalent Availability
Factor (EAF) and heat rate (Btus per kWh) for the years 1997 through 2011.

<u>Answer</u>: Please see "Attachment A" which illustrates a system composite trend of GPIF unit heat rate and EAF for FPC/PEF from 1997 through 2011. The composite heat rate was determined by dividing the sum of the MMbtus calculated from the GPIF unit heat rates and actual MWh generation by the sum of the actual generation. The composite EAF was the generation-weighted average of the GPIF unit EAFs.

19. For each plant in the GPIF targets for 2012, please identify what EAF and heat rate

projections were used when the Company filed its need determination petitions.

<u>Answer</u>: Information pertaining to Hines 3 and Hines 4 is noted below. PEF was unable to identify this information for the other units in the GPIF for which need petitions were filed prior to 2000.

Hines 3 Need Determination Proceeding:

An average summer and winter full load heat rate of approximately 6,900 Btu/kWh.

Hines 4 Need Determination Proceeding:

An average summer full load heat rate of approximately 7,079 Btu/kWh and an average winter full load heat rate of approximately 7,062 Btu/kwh.

- 20. The GPIF methodology was established in 1980 by Order No. 9558. Commission staff's records reflect that from 1980 to the present, the overall generation mix for Florida's investor-owned utilities has changed. Commission staff is reviewing data to determine if the change in generation mix warrants changes to GPIF program.
 - a. Do you agree with Commission staff's assertion that the overall generation mix for Florida's investor-owned utilities has changed from 1980 to present?
 - b. How has PEF's generation mix changed from 1980 to 2011.
 - c. Are PEF's 2011 Equivalent Availability Factors and heat rate more efficient than in 1980? Explain.

Answer:

- a. Yes.
- b. Since 1980, PEF has retired approximately 800 MW of heavy oil capacity and added 3205 MW of natural gas combined cycle generation. The Crystal River 3 nuclear plant has completed power uprates totaling 26 MW, but is not represented in the 2012 GPIF Target Setting due to the current outage. Also, the addition of environmental controls has decreased net output from PEF coal units Crystal River 4 and 5 by approximately 24 MW per unit. These were offset by turbine improvements providing an additional 14 MW per unit, a net decrease of 10 MW per unit.
- c. Please refer to the data provided in "Attachment A" for data covering the period from 1998.

Heat rate data from 1982 to present is shown in the chart below. The data set does not correspond to the units included in the GPIF in any given year, but includes units still in operation fueled with coal, residual (#6) oil, and natural gas combined cycle. The system heat rate has improved from over this period in large measure due to the addition of more efficient combined cycle units beginning in 1999. In general, it is reasonable to expect that heat rate gains made from 1980 to 1999 were modest at best as there were no significant changes in generating technology during that period.



21. In 2011, the generating mix for Florida's investor-owned utilities was much different than it was in 1980, and natural gas as a generating fuel had a much higher profile than it had in 1980. Do you agree with this assertion? If not, explain.

Answer: Yes.

22. Do you agree that natural gas combined cycle units have a higher availability than heavy oil generating units? Explain your response.

<u>Answer</u>: Yes, EAF is generally higher for combined cycle units than for heavy oil units.
23. Do you agree that natural gas combined cycle units have a lower heat rate than heavy oil generating units. Explain your response.

<u>Answer</u>: Yes, natural gas combined cycle units normally have lower heat rates than heavy oil units.

24. Should the Commission eliminate the Generating Performance Incentive Factor?

Please explain your response.

<u>Answer</u>: PEF maintains, dispatches, builds, and operates its generation fleet in the most reasonable and prudent manner possible given relevant facts and conditions at any given time. PEF takes this action without regard to the GPIF and would continue to act in this manner with or without the GPIF in place.

25. If your response to Interrogatory 24 is no, do you believe the Generating Performance Incentive Factor program should be modified. Please identify all changes PEF believes are appropriate for the Commission to consider in the GPIF program prospectively.

Answer: Not applicable. Please see PEF's response to Interrogatory 24.

26. Should the EAF and heat rate measures used in setting GPIF targets be higher, the same, or lower than similar metrics the Company has used for petitions for need determinations? Please explain your answer.

<u>Answer</u>: Unit performance for a given fuel year should not be measured against the metrics used in need determinations. A review of historical filings related to the development of the GPIF process makes it clear that the Florida Public Service Commission and the Public Staff, as well as experts who testified on the matter, understood that the conditions that influence heat rates and availability of a given unit are cyclical in nature, depending on and influenced by many factors which vary year to year. Performance expectations for units should be allowed to vary from year to year to account for recent or upcoming maintenance, outage schedules, as well as external factors such as fuel price relationships between units, resource additions, and environmental limitations.

27. Please identify what EAF and heat rate measures are in the Company's current "standard offer contracts" for co-generators.

Answer: The most recent standard offer contract for a combined cycle reflects a heat rate of 6,913 btu/KWh, and availability of 86%. These terms assume an inservice date of June 1, 2019.

28. Should the EAF and heat rate measures used in setting GPIF targets be higher, the same, or lower than similar metrics the Company has used in "standard offer contracts" for co-generators? Please explain your answer.

Answer: GPIF targets should not be tied to the metrics of standard offer contracts. The two processes (standard offer and GPIF) are different in both purpose and design. The GPIF process is directly linked to the unit conditions expected to affect the customers during the respective specific fuel filing year. As noted above, the most recently filed standard offer terms are for a combined cycle unit with an inservice date of June 1, 2019. The technology at that time would obviously be different than most of the existing GPIF units on our system, and the terms of heat rate and availability for a 2019 standard offer have no bearing on the fuel filing for 2012. Also, with respect to heat rate, the 6.913 btu/KWh term of the standard offer assumes continuous full load operation, while GPIF targets assume that the units will undergo cycling and load following which adversely affect heat rate performance. With respect to EAF, the 86% target assumes a purchased resource for which PEF would have no practical control over the timing of their planned outages. The optimal duration of an outage for a PEF GPIF on the other hand is a function of how it fits into the system economics relative to the maintenance needs of other units in a given year and also the availability and cost of outage resources during the given maintenance period.

29. Please explain how the Company's GPIF methodology would have to be changed in order to align EAF and heat rate measures used in setting GPIF targets with similar metrics the Company has used in petitions for need determinations or with "standard offer" contracts?

<u>Answer</u>: Since standard offer and GPIF processes were created for very different purposes and with different designs, it does not appear that it would be possible or practical to apply the standard offer terms in a way that would be fair to both utilities and customers, considering the obligation to optimize total costs over the long term. Creating an equitable process would necessarily require variation of performance targets from year to year based on the operating profile and economic demand for the unit in the forecast period. This would seem to be essentially recreating the current GPIF process.

30. Should the Company's GPIF methodology be modified to include North American Electric Reliability Corporation (NERC) average generating availability for the same class and size of power plant for the purpose of setting GPIF targets? If so, how? If not, why not?

<u>Answer</u>: No, GPIF targets should not be based on or tied to industry average data. Differences can exist beyond class and size of the unit. Specifically, the economic operating profile of units can have a direct effect on heat rate and availability. The economic operating profile can vary between utilities based on the makeup of their fleet and where a given unit falls in economic priority as well as the load factor and cycling demands for the utility. For example, a utility with low daily minimum loads relative to their peak loads will have to cycle units more often and the average loading of the units will be lower. Both of these factors can adversely affect heat rates and EAF performance.

31. Should the Company's GPIF reward amount be zero if the Company has not made any investments or incurred any expenses directed at achieving the Company's EAF and heat rate targets? Why or why not? Please explain your answer.

Answer: No, under the current GPIF process. The fact that there are processes other than GPIF that guide investment decisions should not prohibit a reward for GPIF performance. For instance, there are heat rate monitoring processes that help the operators to identify and correct controllable losses in thermal efficiency. We also have separate processes to monitor unit availability and provide a proxy for the opportunity costs of unavailability. These non-GPIF feedback mechanisms were developed to provide more timely and tangible feedback to the company, since the GPIF true-up results were produced much later (typically in March of the following year).

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32. Does the Company, for its own purposes apart from the GPIF program, set heat rate, EAF, and/or similar performance targets? If so, and if Company's internal performance data is different from the plant-specific data in the GPIF program, please explain the differences.

<u>Answer</u>: As noted in response to Interrogatory 31 above, the company does monitor controllable efficiency losses, which aids improvement in heat rates. This process does not involve a specific heat rate target, but it does have the same general goal to reduce customer fuel cost through improved heat rate performance. We also have a monitoring process for availability which compares unit availability performance relative to a target. The target is set based on a combination of factors, e.g., typically 5 years of EFOR history, planned outages, and a given number of maintenance outage days. These same factors are effectively represented in the GPIF process through the review of historical data (3 years instead of 5 year) and the inclusion of planned outage information available at the time. Also, the timing for the internal target setting process occurs about 5 months later, so the information could differ based on that. 33. In consideration of the data provided in response to Interrogatory 18 above, would the EAF for each of the Company's GPIF units be any different if the GPIF program did not exist? Why or why not? Please explain your answer.

Answer: Please see response to Interrogatory 24 above.

34. In consideration of the data provided in response to Interrogatory 18 above, would the heat rate for each of the Company's GPIF units be any different if the GPIF program did not exist? Why or why not? Please explain your answer.

Answer: Please see response to Interrogatory 24 above.

35. In consideration of the data provided in response to Interrogatory 18 above, would the Company's fuel savings based on the GPIF units be any different if the GPIF program did not exist? Why or why not? Please explain your answer.

Answer: Please see response to Interrogatory 24 above.

PEF Response to Q. 18 Staff 3rd Set of Rogs (13-35) Docket No. 12D001-EI Page 1 of 1

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
EAF Composite by Year	Not available	86 69	86.33	85.25	86.26	88.48	89.99	90.64	88.56	89.67	88.40	87.94	83.35	83.44	84.63
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	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
HR Composite by Year	Not available	9,830	9,797	9,711	9,683	9,783	9,489	9,620	9,543	9,791	9,678	9,441	9,168	8,942	8.615





BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

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In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor DOCKET NO. 120001-EI FILED: MAY 2, 2012

TAMPA ELECTRIC COMPANY'S

ANSWERS TO THIRD SET OF INTERROGATORIES (NOS. 14-36)

OF

FLORIDA PUBLIC SERVICE COMMISSION STAFF

Tampa Electric files this its Answers to Interrogatories (Nos. 14-36) propounded and served on April 2, 2012, by the Florida Public Service Commission Staff.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI INDEX TO STAFF'S THIRD SET OF INTERROGATORIES (NOS. 14-36)

Number	Witness	Subject	Bates
<u>Itteritoer</u>			<u>Stamped</u> <u>Page</u>
14	Buckley	Did the Company's budget include an assessment of the preventative maintenance activity impacts on GPIF points, rewards and/or penalties for the January through December 2012 period? If so, please list all documents, procedures, or instructions that memorialize the Company's practices and identify all analyses and reports the Company relied on in its response to this question. If the Company's records are not sufficiently detailed to provide the requested information, please explain why.	1
15	Buckley	What budget preparation reviews, if any, include assessments of GPIF rewards and/or penalties? Please list all documents that affirm assessment of GPIF rewards and penalties in the budget preparation process that existed at the time the Company prepared and filed its GPIF Target and Ranges for January through December 2012. If the Company's records are not sufficiently detailed to provide the requested information, please explain why.	2
16	Aldazabal / Buckley	Please describe the changes, if any, to TECO's budgeting process that would be required if the GPIF program did not exist. Please list all documents, procedures or instructions that memorialize the Company's practices and identify all analyses and reports the Company relied on in its response to this question.	3
17	Buckley	Please identify all expenses that would not have been incurred or budgeted if the GPIF program had not existed at the time that the Company prepared and filed its GPIF Target and Ranges for January through December 2012. If the Company's records are not sufficiently detailed to provide the requested information please explain why.	4
18	Buckley	What planned and budgeted activity, if any, was undertaken during and prior to the January through December 2011 period that were planned and budgeted for the purpose of achieving the GPIF targets in 2011? Please list all documents that memorialize the Company's planned and budgeted activities, including budgeted amounts, which were specifically directed at achieving the GPIF target metrics. If the Company's records are not	5

		sufficiently detailed to provide the requested information please explain why.		
19	Buckley	Please provide the annual average or composite GPIF Equivalent Availability Factor (EAF) and heat rate (Btus per kWh) for the years 1997 through 2011.	6	
20	Buckley	For each plant in the GPIF targets for 2012, please identify what EAF and heat rate projections were used when the Company filed its need determination petitions.		
21	Aldazabal	 The GPIF methodology was established in 1980 by Order No. 9558. Commission staff's records reflect that from 1980 to the present, the overall generation mix for Florida's investor-owned utilities has changed. Commission staff is reviewing data to determine if the change in generation mix warrants changes to GPIF program. a. Do you agree with Commission staff's assertion that the overall generation mix for Florida's investor-owned utilities has changed from 1980 to present? b. How has TECO's generation mix changed from 1980 to 2011. c. Are TECO's 2011 Equivalent Availability Factors and heat rate more efficient than in 1980? Explain. 	8	
22	Aldazabal	In 2011, the generating mix for Florida's investor- owned utilities was much different than it was in 1980, and natural gas as a generating fuel had a much higher profile than it had in 1980. Do you agree with this assertion? If not, explain.		
23	Buckley	Do you agree that natural gas combined cycle units have a higher availability than heavy oil generating units? Explain your response.		
24	Buckley	Do you agree that natural gas combined cycle units have a lower heat rate than heavy oil generating units. Explain your response.		
25	Aldazabal	Should the Commission eliminate the Generating Performance Incentive Factor? Please explain your response.		
26	Aldazabal	If your response to Interrogatory 25 is no, do you believe the Generating Performance Incentive Factor program should be modified. Please identify all changes TECO believes are appropriate for the		

		Commission to consider in the GPIF program	
27	Aldazabal / Buckley	prospectively. Should the EAF and heat rate measures used in setting GPIF targets be higher, the same, or lower than similar metrics the Company has used for petitions for need determinations? Please explain your answer.	14
28	Aldazabal / Buckley	Please identify what EAF and heat rate measures are in the Company's current "standard offer contracts" for co-generators.	
29	Aldazabal / Buckley	Should the EAF and heat rate measures used in setting GPIF targets be higher, the same, or lower than similar metrics the Company has used in "standard offer contracts" for co-generators? Please explain your answer.	16
30	Aldazabal / Buckley	Please explain how the Company's GPIF methodology would have to be changed in order to align EAF and heat rate measures used in setting GPIF targets with similar metrics the Company has used in petitions for need determinations or with "standard offer" contracts?	17
31	Aldazabal	Should the Company's GPIF methodology be modified to include North American Electric Reliability Corporation (NERC) average generating availability for the same class and size of power plant for the purpose of setting GPIF targets? If so, how? If not, why not?	18
32	Aldazabal	if the Company has not made any investments or incurred any expenses directed at achieving the Company's EAF and heat rate targets? Why or why not? Please explain your answer.	
33 Buckley		Does the Company, for its own purposes apart from the GPIF program, set heat rate, EAF, and/or similar performance targets? If so, and if Company's internal performance data is different from the plant- specific data in the GPIF program, please explain the differences.	20
34	Buckley	In consideration of the data provided in response to Interrogatory 19 above, would the EAF for each of the Company's GPIF units be any different if the GPIF program did not exist? Why or why not? Please explain your answer.	21
35	Buckley	In consideration of the data provided in response to Interrogatory 19 above, would the heat rate for each of the Company's GPIF units be any different if the	22

GPIF program did not exist	Why or why not?
Please explain your answe	
36 Buckley In consideration of the data Interrogatory 19 above, we savings based on the GPIF the GPIF program did not Please explain your answe	d the Company's fuel nits be any different if

Carlos Aldazabal Director, Regulatory Affairs

Brian Buckley Manager, Compliance and Performance

Tampa Electric Company 702 N. Franklin Street Tampa, Florida 33602 TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 14 PAGE 1 OF 1 FILED: MAY 2, 2012

For purposes of questions 14 through 18, all references to "budget" mean the Company's budget that existed at the time that the Company prepared and filed its GPIF Target and Ranges for January through December 2012 period. If no such budget existed or if no such details exist, please explain why.

- 14. Did the Company's budget include an assessment of the preventative maintenance activity impacts on GPIF points, rewards and/or penalties for the January through December 2012 period? If so, please list all documents, procedures, or instructions that memorialize the Company's practices and identify all analyses and reports the Company relied on in its response to this question. If the Company's records are not sufficiently detailed to provide the requested information, please explain why.
- A. The company's budget did not include a specific assessment of the impact of preventive maintenance activities on GPIF rewards and/or penalties for the 2012 period. The company uses a number of preventive maintenance programs and practices. The results of these maintenance programs and practices are intended to maximize unit availability and performance and reduce fuel and purchased power costs. The company's budget does not take into consideration impacts to GPIF rewards and/or penalties since the benefits of maintaining and improving unit reliability outweigh GPIF impacts.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 15 PAGE 1 OF 1 FILED: MAY 2, 2012

- **15.** What budget preparation reviews, if any, include assessments of GPIF rewards and/or penalties? Please list all documents that affirm assessment of GPIF rewards and penalties in the budget preparation process that existed at the time the Company prepared and filed its GPIF Target and Ranges for January through December 2012. If the Company's records are not sufficiently detailed to provide the requested information, please explain why.
- A. There are not any budget preparation reviews that include assessments of GPIF rewards and/or penalties. The GPIF calculation is an independent process designed to appropriately reward and/or penalize the utility for the operating performance of its base load generating units. As ordered by the Commission in Docket No. 800400-CI, Order No. 9558, issued on September 19, 1980 the purpose of the GPIF is to provide an incentive for the efficient operation of base load generating units. The GPIF process has worked in the past and continues to work as an assurance of due diligence and as an ongoing effort to manage fuel and purchased power costs. The company's budget does not take into consideration impacts to GPIF rewards and/or penalties since the benefits of maintaining or improving unit reliability outweigh GPIF impacts.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 16 PAGE 1 OF 1 FILED: MAY 2, 2012

- **16.** Please describe the changes, if any, to TECO's budgeting process that would be required if the GPIF program did not exist. Please list all documents, procedures or instructions that memorialize the Company's practices and identify all analyses and reports the Company relied on in its response to this question.
- A. If the GPIF program did not exist, there would not be any budget process changes.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 17 PAGE 1 OF 1 FILED: MAY 2, 2012

- 17. Please identify all expenses that would not have been incurred or budgeted if the GPIF program had not existed at the time that the Company prepared and filed its GPIF Target and Ranges for January through December 2012. If the Company's records are not sufficiently detailed to provide the requested information please explain why.
- A. There are technical and administrative expenses involved in creating the GPIF filing. The company does not track individual job responsibilities or activities to the level of detail required to provide the requested information. Team members that work on the GPIF filing have additional responsibilities that would still have to be performed.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 18 PAGE 1 OF 1 FILED: MAY 2, 2012

- 18. What planned and budgeted activity, if any, was undertaken during and prior to the January through December 2011 period that were planned and budgeted for the purpose of achieving the GPIF targets in 2011? Please list all documents that memorialize the Company's planned and budgeted activities, including budgeted amounts, which were specifically directed at achieving the GPIF target metrics. If the Company's records are not sufficiently detailed to provide the requested information please explain why.
- A. There were not any planned and budgeted activities that were undertaken solely for the purpose of achieving GPIF targets. The company endeavors to maintain and operate its generating units in a reliable and cost-effective manner.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 19 PAGE 1 OF 1 FILED: MAY 2, 2012

19. Please provide the annual average or composite GPIF Equivalent Availability Factor (EAF) and heat rate (Btus per kWh) for the years 1997 through 2011.

	EAF	Heat Rate
	(%)	(Btu/kWh)
Oct. 1996-		
Mar. 1997	79.1	10,082
Apr. 1997-		
Sep. 1997	75.9	10,197
Oct. 1997-		
Mar. 1998	80.0	10,199
Apr. 1998-		
Sep. 1998	77.7	10,283
Oct. 1998-		
Dec. 1998	68.8	10,249
1999	70.5	10,385
2000	69.5	10,054
2001	73.0	10,287
2002	64.2	10,598
2003	65.1	10,737
2004	70.6	10,411
2005	61.7	10,670
2006	69.5	10,847
2007	63.0	9,754
2008	69.8	9,394
2009	69.7	9,313
2010	69.4	9,515
2011	72.2	9,849

A. The total GPIF annual adjusted EAF and heat rate averages are shown in the table below.¹

¹ During 1997 and 1998, the GPIF units were evaluated semi-annually because the fuel cost recovery factors were set on a semi-annual basis.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 20 PAGE 1 OF 1 FILED: MAY 2, 2012

- 20. For each plant in the GPIF targets for 2012, please identify what EAF and heat rate projections were used when the Company filed its need determination petitions.
- A. Tampa Electric filed a petition for determination of need for Polk Unit 1 in 1991. The table below shows the EAF and heat rate projections used in that case. The requested information for Big Bend Units 1 through 4 is not available since the units were built so long ago, during the 1970s and early 1980s, and records are not available for that period. Bayside Units 1 and 2 were a repowering project that did not require a need determination petition; therefore, the requested information is not available for those units.

	EAF (%)	Heat Rate (Btu/kWh)
Polk 1	NA ¹	9,320

¹ Tampa Electric's filing for determination of need for Polk Unit 1 did not include an expected EAF. Base load technologies, including the integrated gasification combined cycle technology utilized at Polk Unit 1, were evaluated at capacity factors ranging from 50 and 100 percent.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 21 PAGE 1 OF 1 FILED: MAY 2, 2012

- 21. The GPIF methodology was established in 1980 by Order No. 9558. Commission staff's records reflect that from 1980 to the present, the overall generation mix for Florida's investor-owned utilities has changed. Commission staff is reviewing data to determine if the change in generation mix warrants changes to GPIF program.
 - a. Do you agree with Commission staff's assertion that the overall generation mix for Florida's investor-owned utilities has changed from 1980 to present?
 - b. How has TECO's generation mix changed from 1980 to 2011.
 - c. Are TECO's 2011 Equivalent Availability Factors and heat rate more efficient than in 1980? Explain.
- A. a. Yes.
 - b. In 2011, Tampa Electric's generation portfolio included a significant amount of natural gas fired generation that did not exist in 1980.
 - c. Yes. The improvement in heat rate over time is correlated to the installation of combined cycle units. The remaining units are similar in performance with a more gradual change.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 22 PAGE 1 OF 1 FILED: MAY 2, 2012

- 22. In 2011, the generating mix for Florida's investor-owned utilities was much different than it was in 1980, and natural gas as a generating fuel had a much higher profile than it had in 1980. Do you agree with this assertion? If not, explain.
- A. Yes, Tampa Electric's generation portfolio includes a significant amount of natural gas fired generation that did not exist in 1980.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 23 PAGE 1 OF 1 FILED: MAY 2, 2012

- 23. Do you agree that natural gas combined cycle units have a higher availability than heavy oil generating units? Explain your response.
- A. No. The type of fuel that a generating unit consumes does not directly relate to the unit's availability. Unit vintage and operations and maintenance activities relate more directly to unit availability than fuel type.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 24 PAGE 1 OF 1 FILED: MAY 2, 2012

- 24. Do you agree that natural gas combined cycle units have a lower heat rate than heavy oil generating units. Explain your response.
- A. Yes. A typical natural gas combined cycle unit has an average net operating heat rate of 7,000 7,500 Btu/kWh, while a typical oil unit has an average net operating heat rate of 9,500 11,000 Btu/kWh.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 25 PAGE 1 OF 1 FILED: MAY 2, 2012

- **25.** Should the Commission eliminate the Generating Performance Incentive Factor? Please explain your response.
- **A.** No. Tampa Electric believes that the GPIF continues to function appropriately to provide an incentive for the efficient operation of base load generating units.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 26 PAGE 1 OF 1 FILED: MAY 2, 2012

- 26. If your response to Interrogatory 25 is no, do you believe the Generating Performance Incentive Factor program should be modified. Please identify all changes TECO believes are appropriate for the Commission to consider in the GPIF program prospectively.
- A. No. Tampa Electric believes the current GPIF program is operating effectively.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 27 PAGE 1 OF 1 FILED: MAY 2, 2012

- 27. Should the EAF and heat rate measures used in setting GPIF targets be higher, the same, or lower than similar metrics the Company has used for petitions for need determinations? Please explain your answer.
- A. The EAF and heat rate measures could be higher, the same, or lower than all other analysis based on the rules defined in the Tampa Electric GPIF Implementation Manual approved by the Commission. There is no correlation between GPIF targets that are based on historical metrics and other analysis like need determinations that are based on forward-looking performance and future maintenance activities.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 28 PAGE 1 OF 1 FILED: MAY 2, 2012

- **28.** Please identify what EAF and heat rate measures are in the Company's current "standard offer contracts" for co-generators.
- A. Tampa Electric's current standard offer contract for co-generators is based on the "avoided unit," a General Electric 7FA combustion turbine ("CT") expected to be needed for a May 2019 in-service date. The projected EAF and heat rate for the CT are 95.4 percent and 11,983 Btu/kWh, respectively.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 29 PAGE 1 OF 1 FILED: MAY 2, 2012

- 29. Should the EAF and heat rate measures used in setting GPIF targets be higher, the same, or lower than similar metrics the Company has used in "standard offer contracts" for co-generators? Please explain your answer.
- A. The EAF and heat rate measures could be higher, the same, or lower than all other analysis based on the rules defined in the Tampa Electric GPIF Implementation Manual approved by the Commission. There is no correlation between GPIF targets that are based on historical metrics and other analysis on which standard offer contracts for co-generators are established, that is based on forward-looking performance and future maintenance activities.

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TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 30 PAGE 1 OF 1 FILED: MAY 2, 2012

- **30.** Please explain how the Company's GPIF methodology would have to be changed in order to align EAF and heat rate measures used in setting GPIF targets with similar metrics the Company has used in petitions for need determinations or with "standard offer" contracts?
- A. In order for the GPIF methodology to be similar with the metrics used in petitions for need determination or standard offer contracts, historical data would not be used. The company would not use one year of actual data and remove forced outage outliers to calculate EAF targets or three years of actual data to calculate heat rate targets. Instead, the company would need to use forward-looking information such as potential fuel procurement, expected capital improvement projects, and engineering judgment to determine availability and efficiency impacts to future operational targets.

The company believes the current methodology provides the appropriate balance to reward improvement and penalize deterioration of performance.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 31 PAGE 1 OF 1 FILED: MAY 2, 2012

- **31.** Should the Company's GPIF methodology be modified to include North American Electric Reliability Corporation (NERC) average generating availability for the same class and size of power plant for the purpose of setting GPIF targets? If so, how? If not, why not?
- A. No. Average generating availability is dependent on factors like age, utilization in the portfolio, relative efficiency, fuel, design and other factors. Therefore, a change such as suggested would result in "comparing apples to oranges" in trying to use general or average unit information instead of unit-specific information.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 32 PAGE 1 OF 1 FILED: MAY 2, 2012

- 32. Should the Company's GPIF reward amount be zero if the Company has not made any investments or incurred any expenses directed at achieving the Company's EAF and heat rate targets? Why or why not? Please explain your answer.
- A. No. The reward and/or penalty should be based on the actual performance achieved for that year, regardless if maintenance, repair or improvement expenses were incurred in that year. The company's preventive maintenance programs are conducted over a period of several years. For example, major outages of the Big Bend units are performed every four years. Therefore, to eliminate the GPIF because an investment or expense was not incurred in that year would be counter-intuitive to the purpose of the GPIF, which is to incent investment in baseload generating units.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 33 PAGE 1 OF 1 FILED: MAY 2, 2012

- **33.** Does the Company, for its own purposes apart from the GPIF program, set heat rate, EAF, and/or similar performance targets? If so, and if Company's internal performance data is different from the plant-specific data in the GPIF program, please explain the differences.
- A. Yes, Tampa Electric sets heat rate, EAF and/or similar performance targets. The differences between Tampa Electric's internal performance targets and the GPIF program is that Tampa Electric's targets include in EAF the forced outage outliers that are removed for GPIF EAF targets. Additionally, Tampa Electric's internal performance targets include a forward-looking view of upcoming capital projects expected to improve EAF and heat rates, whereas the GPIF program targets are based on historical data.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 34 PAGE 1 OF 1 FILED: MAY 2, 2012

- **34.** In consideration of the data provided in response to Interrogatory 19 above, would the EAF for each of the Company's GPIF units be any different if the GPIF program did not exist? Why or why not? Please explain your answer.
- A. Yes. The EAF actual data is adjusted in the GPIF true-up calculations due to planned outage rescheduling. These changes can be a result of an identifiable and justifiable change in the work scope of a planned outage affecting total outage time.

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TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 35 PAGE 1 OF 1 FILED: MAY 2, 2012

- **35.** In consideration of the data provided in response to Interrogatory 19 above, would the heat rate for each of the Company's GPIF units be any different if the GPIF program did not exist? Why or why not? Please explain your answer.
- A. Yes. The heat rate actual data is adjusted based on the net operating factor at which the unit was dispatched. Adjustments to the average heat rate are necessary to reflect changes in the economic dispatch of units during the period due to conditions not anticipated in advance, such as the purchase or sale of economy energy. For example, if the company targeted a 10,800 Btu/kWh heat rate and 70 percent net operating factor for a coal unit but it was dispatched at a 90 percent net operating factor, then the heat rate target should be lowered to 10,300 Btu/kWh accordingly.

TAMPA ELECTRIC COMPANY DOCKET NO. 120001-EI STAFF'S THIRD SET OF INTERROGATORIES INTERROGATORY NO. 36 PAGE 1 OF 1 FILED: MAY 2, 2012

- **36.** In consideration of the data provided in response to Interrogatory 19 above, would the Company's fuel savings based on the GPIF units be any different if the GPIF program did not exist? Why or why not? Please explain your answer.
- A. No. The company uses a number of preventive maintenance programs and practices. The results of these maintenance programs and practices are intended to maximize unit availability and performance and reduce fuel and purchased power costs.

<u>AFFIDAVIT</u>

STATE OF FLORIDA

Before me the undersigned authority personally appeared Carlos Aldazabal who deposed and said that he is a Director, Regulatory Affairs, Tampa Electric Company, and that the individuals listed in Tampa Electric Company's response to Staff's Third Set of Interrogatories, (Nos. 14-36) prepared or assisted with the responses to these interrogatories to the best of his information and belief.

Dated at Tampa, Florida this $1^{2^{+}}$ day of May, 2012.

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Sworn to and subscribed before me this $1/2^{1/2}$ day of May, 2012.

Ticl,-

My Commission expires $\frac{d^2}{d^1/2d^{16}}$

Notary Public State of Florida l'ison C Vega

v) EE 165415