

State of Florida



Public Service Commission

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TALLAHASSEE, FLORIDA 32399-0850

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COMMISSION
CLERK

DATE: September 6, 2012

TO: Office of Commission Clerk (Cole)

FROM: Division of Accounting and Finance (Barrett, Lester, Mouring, Prestwood)
Division of Engineering (M. Watts, Graves, Ballinger)
Office of the General Counsel (Barrera, Bennett)
Office of Industry Development and Market Analysis (Brennan, Laux)

Handwritten initials and signatures: MCB, FL, M, REU, MFB, JCB, JTB, JSC, JPB, MRL, and a large signature.

RE: Docket No. 120153-EI – Petition to recover capital costs of Polk Fuel Cost Reduction Project through the Fuel Cost Recovery Clause, by Tampa Electric Company.

AGENDA: 09/18/12 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Graham

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\AFD\WP\120153.RCM.DOC

Case Background

On January 3, 2012, Tampa Electric Company (TECO or Company) filed a letter to inform the Commission and the parties to the Fuel Cost Recovery Clause (Fuel Clause) docket of its intent to implement a fuel conversion project at the Polk Power Station Unit One (Polk Unit One), with an in-service date of May 2013, and seek recovery of the capital expenditures for the project through the Fuel Clause. TECO asserted the Company would achieve net fuel savings if auxiliary boilers and certain furnaces at this facility, currently fired with fuel oil and propane, were converted to burn natural gas.

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On January 31, 2012, staff and interested persons met with TECO officials to learn more about the TECO project, and on March 15, 2012, TECO filed its Petition To Recover The Capital Costs Of Polk Fuel Cost Reduction Project Through the Fuel Cost Recovery Clause (Petition). In the Petition, the Company further described the project and its request for cost recovery.

TECO estimates the project costs to be \$14.7 million for the fuel conversion work, and asserts that the upgrade will result in net fuel savings to customers of approximately \$29.6 million through the requested five-year cost recovery period, and additional savings thereafter for the remaining life of the plant.

Staff's recommendation addresses the project's eligibility for cost recovery through the Fuel Clause. The Commission has jurisdiction over this subject matter pursuant to the provisions of Sections 366.04, 366.05, and 366.06, Florida Statutes (F.S.).

Discussion of Issues

Issue 1: Should the Commission approve TECO's Petition to recover the capital investment of its proposed fuel conversion project at Polk Unit One through the Fuel Clause?

Recommendation: TECO's Petition to recover the capital investment of its proposed fuel conversion project at Polk Unit One through the Fuel Clause should be granted in part, with conditions, and denied in part. Staff recommends that TECO's request for recovery through base rates of any unrecovered costs be denied.

Staff recommends that the Commission make this approval subject to the following conditions: TECO should be permitted to recover the projected conversion costs through the Fuel Clause beginning on the date the unit is placed into service, limiting the cost recovery to actual fuel savings. TECO should amortize the Polk Unit One conversion over the next five years. TECO should use the actual weighted average cost of capital in TECO's most current May earning surveillance reports. Finally, if actual fuel savings during the annual period are less than the amortization and return costs, TECO should limit cost recovery to actual fuel savings and defer recovery of the difference to future periods through the Fuel Clause. (Barrett, M. Watts, Graves, Breman)

Staff Analysis:

Eligibility for Fuel Clause Recovery of Capital Costs

The Fuel Clause is a regulatory tool designed to pass through to utility customers the costs associated with fuel purchases. The purpose is to prevent regulatory lag. Regulatory lag occurs when a utility incurs expenses but is not allowed to collect offsetting revenues until the regulatory body approves cost recovery.¹

In Order No. 14546, issued July 8, 1985, in Docket No. 850001-EI-B, the Commission recognized that cost recovery through the Fuel Clause should include some flexibility to permit recovery of fossil fuel-related costs normally recovered through base rates but which were not recognized or anticipated in the cost levels used to determine current base rates and which, if expended, would result in fuel savings to customers. Cost recovery should be considered on a case by case basis after Commission approval.

Subsequent to the issuance of Order No. 14546, the Commission reviewed numerous requests for recovery of capital costs through the fuel clause. Most recently, by Order No. PSC-11-0080-PAA-EI,² the Commission examined the criteria for recovery of capital costs through the Fuel Clause, and, consistent with prior Commission decisions, found:

¹ Order No. PSC-11-0080-PAA-EI, issued January 31, 2011, in Docket No. 100404-EI, In re: Petition by Florida Power & Light Company to recover Scherer Unit 4 Turbine Upgrade costs through environmental cost recovery clause or fuel cost recovery clause. Although the Commission denied fuel cost recovery for the turbine upgrade project, this order prospectively describes the criteria for fuel cost recovery eligibility.

² Id.

. . . [C]apital projects eligible for cost recovery through the Fuel Clause should produce fuel savings based on lowering the delivered price of fossil fuel, or otherwise result in burning lower priced fuel at the plant.

TECO referenced this order in support of its assertion that this project is eligible for cost recovery through the Fuel Clause. TECO states that conversion of Polk Unit One as described in its petition will produce significant fuel savings by burning lower priced fuel at Polk Unit One.

TECO's Petition

In its Petition, TECO states that Polk Unit One is an integrated gasification combined cycle (IGCC)³ plant that uses a petroleum coke (pet coke)/coal blend as its primary fuel source with distillate oil as a backup fuel. Although pet coke/coal accounts for approximately 98 percent of the energy generated at the station, the unit also uses distillate oil to fire an auxiliary boiler and propane to fire a gasifier preheat burner and synthetic gas (syngas) as part of the IGCC process. TECO states that this project came about because it studied the prices of distillate oil and propane compared to the price of natural gas, and noted the opportunity for fuel savings over the current fuels (distillate oil and propane).

In its Petition, TECO identified the four components of the proposed project. For reference, all four components are described below, although on June 5, 2012, the Company removed component three from its request for cost recovery. Removing this component reduces the estimated project cost by about \$100,000, for a total project cost of \$14.7 million. Elimination of component three does not impact the project's estimated fuel savings.

- Component one involves converting a preheat burner that is currently fired with propane gas to burn natural gas. The propane-fired preheater is used in the gasification process. TECO has estimated the cost for this component to be \$792K.
- Component two involves converting an auxiliary boiler that is currently fired with distillate oil to burn natural gas. The auxiliary boiler provides steam for the heat recovery steam generator and is necessary for operating the gasifier. The cost estimate for this component is \$476K.
- Component three involves piping natural gas to replace syngas at higher levels of output in the IGCC process.
- Component four involves adding piping to use natural gas as a replacement for distillate oil as a start up and back up fuel. This fuel is used for fueling the combustion turbine at Polk Unit One, and the cost estimate for this component is \$13.4 million.

TECO states that using natural gas over oil and propane will produce significant fuel cost savings that will directly benefit its retail customers. The Company states that the Commission has previously allowed utilities to recover the costs of converting combustion turbines to burn

³ IGCC is a technology that uses a gasifier to turn coal and other carbon-based fuel into a synthetic gas. When synthetic gas is burned, it has a lesser impact on the environment than coal. In attachments to its Petition, TECO included a diagram showing the operating components of Polk Unit One and where present fuels are burned, and a second diagram to highlight where the natural gas distribution facilities and control systems will be placed.

natural gas, provided the fuel savings during an annual period exceed the amortization and return costs.⁴

With a forecasted in-service date of May 2013, and a five-year amortization schedule, TECO projects annual savings for the years 2013 through 2018, and claims the net fuel savings will be even greater after the amortization and return costs are fully recovered. In its June 22, 2012, Response to Staff's Data Request, the Company stated that it will recognize the project costs at the time of the in-service date, which is anticipated to be May 2013. If approved, TECO states the costs associated with this item will be included in the Company's 2013 fuel factor.⁵ In its June 22, 2012, Response to Staff's Data Request Number 17(b), the Company clarified its request that any unrecovered amounts be recovered through base rates if fuel savings during any annual period fell short of the amortization and return costs.

Staff's Analysis of Cost Recovery & Fuel Savings Projections

Staff believes that TECO should be permitted to recover the conversion project costs through the fuel clause because it appears the project will produce fuel savings by burning a lower priced fossil fuel at Polk Unit One. TECO provided an estimate that shows the total capital cost of the conversion will be approximately \$14.7 million. Staff notes that when Return On Investment (ROI) costs are included, the figure is approximately \$18.9 million. TECO estimates that the proposed conversion to natural gas, in place of distillate oil and propane, will result in fuel savings that exceed the amortization and ROI costs in each of the five years, totaling approximately \$29.6 million over the five-year recovery period. The table below summarizes the results of TECO's economic analysis over the five-year recovery period.

Year ⁶	Annual Amortization (\$000)	Return On Investment (ROI) (\$000)	Total Cost of Project (\$000)	Present Value Fuel Savings (\$000)	Net Present Value Savings (\$000)
2013	1,957	1,065	3,022	3,254	232
2014	2,938	1,312	4,250	6,296	2,046
2015	2,938	970	3,908	5,926	2,018
2016	2,938	628	3,566	5,908	2,342
2017	2,938	285	3,223	5,641	2,418
2018	979	19	998	2,604	1,606
Total	14,688	4,279	18,967	29,629	10,662

⁴ Order No. PSC-95-1089-FOF-EI, issued September 5, 1995, in Docket No. 950001-EI, In re: Fuel Cost Recovery; and Order No. PSC-96-0353-FOF-EI, issued March 13, 1996, in Docket No. 960001-EI, In re: Fuel Cost Recovery; and Order No. PSC-97-1045-FOF-EI, issued September 5, 1997, in Docket No. 970001-EI, In re: Fuel Cost Recovery.

⁵ See TECO's Responses to Staff's First Data Request, Request Number 36.

⁶ Because the projected in-service date occurs in the middle of 2013, the 5-year recovery period covers partial years for 2013 and 2018. The partial year recovery amounts in the first and last years of the recovery period will be accounted for in the following year's Fuel Clause true up.

According to TECO's economic analysis, the conversion of Polk Unit One will result in approximately \$10.7 million of net present value savings over the five-year recovery period. Staff sent two sets of data requests to TECO to better understand the Company's forecasting assumptions, fuel cost estimates, and economic analysis. As noted previously, the primary fuel at Polk Unit One is a coal/pet coke blend, and although this project has no impact on the primary fuel, the unit will have natural gas as a back-up fuel when the project is completed. In its response to data requests, TECO provided information on its fuel price forecasts for natural gas, distillate oil, and propane, all of which are fossil fuels. For forecasted natural gas prices, TECO used the same data it prepared for its 2012 projection filings in the Fuel Clause docket; TECO used NYMEX⁷ natural gas futures contract closing prices from mid-July 2011 as the basis for its 2012 natural gas price forecast. Based on TECO's Response to Data Request No. 48, TECO's method for calculating fuel savings was determined by multiplying the amount of the replaced fuel, on a MMBtu basis, by the \$/MMBtu cost difference (when compared to natural gas) of the respective fuel. Staff reviewed TECO's fuel price forecast data and the forecasting methodology. Staff analyzed this data and the assumptions that were incorporated into the proposed conversion project and believes TECO's methodology for calculating fuel savings, as well as, its fuel forecasts are reasonable.

Although TECO's forecasts and assumptions appear reasonable, staff notes that the price and performance variables could impact fuel savings and, ultimately, the amount of recoverable costs of the project during the five-year recovery period. If markets were to change substantially during the five-year recovery period, or plant performance fell short of expectations, the current fuel savings projections would be affected. Therefore, staff believes that certain conditions should be placed upon the recovery of costs. TECO should be permitted to recover the projected conversion costs through the Fuel Clause beginning on the date the unit is placed into service, limited to the actual fuel savings. TECO should depreciate the Polk Unit One conversion over the next five years using the straight line depreciation method. TECO should use the actual weighted average cost of capital in TECO's most current May earning surveillance reports to calculate the revenue requirement.

According to TECO's Response to Data Request No. 17(b), the Company clarified in its request that any unrecovered amounts be recovered through base rates if actual fuel savings during any annual period fell short of the amortization and carrying costs. Staff does not believe that unrecovered amounts should be recovered through base rates if fuel savings during any annual period fell short of the amortization and return costs. Staff believes that if actual fuel savings during the annual period are less than the amortization and return costs, TECO should limit cost recovery to actual fuel savings and defer recovery of the difference to future periods.

Conclusion

Staff believes TECO's Petition to recover the capital investment of its proposed fuel conversion project at Polk Unit One through the Fuel Clause should be granted in part, with conditions, and denied in part. Staff recommends that TECO's request for recovery through base rates of any unrecovered costs be denied.

⁷ The New York Mercantile Exchange (NYMEX) is a commodities futures exchange widely used by the electric industry for pricing natural gas.

Staff recommends that the Commission make this approval subject to the following conditions: TECO should be permitted to recover the projected conversion costs through the Fuel Clause beginning on the date the unit is placed into service, limiting the cost recovery to actual fuel savings. TECO should amortize the Polk Unit One conversion over the next five years. TECO should use the actual weighted average cost of capital in TECO's most current May earning surveillance reports. Finally, if actual fuel savings during the annual period are less than the amortization and return costs, TECO should limit cost recovery to actual fuel savings and defer recovery of the difference to future periods through the Fuel Clause.

Docket No. 120153-EI
Date: September 6, 2012

Issue 2: Should this docket be closed?

Recommendation: Yes. If no person whose interests are substantially affected files a timely protest of the Commission's Proposed Agency Action, this docket may be closed upon issuance of a Consummating Order. (Barerra, Bennett)

Staff Analysis: If no person whose interests are substantially affected files a timely protest of the Commission's Proposed Agency Action, this docket may be closed upon issuance of a Consummating Order.