State of Florida

Public Service Commission

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-M-E-M-O-R-A-N-D-U-M-

DATE: May 24, 2017

TO: Office of Commission Clerk (Stauffer)

FROM: Division of Accounting and Finance (Barrett, Vogel)
Division of Economics (Draper, Guffey)
Office of the General Counsel (Brownless)

RE: Docket No. 170001-EI – Fuel and purchased power cost recovery clause with generating performance incentive factor.

AGENDA: 6/5/17 – Regular Agenda – Parties May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Brisé

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

Case Background

On April 13, 2017, Duke Energy Florida, LLC (DEF or the Company) filed a petition for mid-course correction to its 2017 fuel adjustment factors (DEF Petition). The DEF Petition seeks to increase the respective 2017 fuel and purchased power cost recovery factors (fuel factors) approved in Order No. PSC-16-0547-FOF-EI.[1] The Company stated the increase is primarily due to fluctuations in coal and natural gas prices, and has requested that the revised fuel factors become effective with the July 2017 billing cycle.

Mid-course corrections are part of the fuel and purchased power cost recovery clause (fuel clause) proceeding, and such corrections are used by the Commission between fuel clause hearings whenever costs deviate from revenues by a significant margin. Petitions for mid-course corrections to fuel factors are addressed by Rule 25-6.0424, Florida Administrative Code (F.A.C.). Under this rule, a utility must notify the Commission whenever it expects to experience

[1]Order No. PSC-16-0547-FOF-EI, issued December 5, 2016, in Docket No. 160001-EI, *In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor.*

an under-recovery or over-recovery greater than 10.0 percent. Pursuant to Rule 25-6.0424, F.A.C., the mid-course percentage is the estimated end-of-period total net true-up amount divided by the current period's total actual and estimated jurisdictional fuel revenue applicable to period amount. In the instant case, DEF estimates that the resulting mid-course calculation reflects an under-recovery of 13.6 percent.

Mid-course corrections are considered preliminary procedural decisions, and any over-recoveries or under-recoveries caused by or resulting from the new fuel factors adopted by the mid-course correction may be included in the following year's fuel factors.

The Commission's jurisdiction to consider fuel clause proceedings derives from the Commission's authority to set fair and reasonable rates, found in Sections 366.04, 366.05, and 366.06, Florida Statutes.

Discussion of Issues

Issue 1: Should the Commission approve DEF's Petition for a mid-course correction to its 2017 fuel cost recovery factors and the associated tariff sheets?

Recommendation: Yes. Staff recommends that the Commission approve DEF's Petition for mid-course correction to its 2017 fuel cost recovery factors and the associated tariff sheets. The revised fuel cost recovery factors and associated tariff sheets should become effective with the July 2017 billing cycle and continue until the generation base rate adjustment (GBRA) for the Citrus Unit 1 Combined Cycle facility (Citrus 1) is placed into rates. (Barrett, Vogel)

Staff Analysis: DEF's currently authorized 2017 fuel factors were set by the Commission following the November 2, 2016 fuel hearing, and codified in Order No. PSC-16-0547-FOF-EI.[2] These factors are based on the Company's projected fuel costs for 2017, plus prior period true-up amounts. According to DEF, there are two related components that prompted this filing: the impact of the final true-up amount from 2016, and changes in fuel price and sales forecasts for 2017, as detailed below.

Impact of Final True-Up Amount from 2016

In the instant petition, DEF updated its 2016 actual/estimated true-up amount to reflect twelve months of actual data (January through December 2016). Originally, the actual/estimated true-up amount for 2016 was an under-recovery of $26,217,663. DEF's true-up filing and its mid-course correction filing show the actual true-up amount for 2016 is an under-recovery of $85,111,174. The difference between the actual/estimated amount and the final actual amount for 2016 is an under-recovery of $58,893,512. The principal drivers of the under-recovery in 2016 were lower sales and higher across-the-board fuel costs than originally projected.

Impact of Fuel Price changes (Actual and Estimated amounts for 2017)

On September 1, 2016, DEF filed testimony and exhibits to project what its forecasted fuel needs would be for 2017. As noted in DEF's Petition, in May 2016, the Company prepared fuel price forecasts for the four fuel types the Company uses in its generating plants. In mid-March of 2017, DEF revised those forecasts. The original and revised fuel price forecasts were for light oil, two varieties of coal, and natural gas. Staff notes that light oil is used as a starter fuel, and the coal varieties and natural gas are used as principal fuels.

Light Oil

DEF states that its originally-projected average cost for light oil futures for each month of 2017 was $62.16 per barrel, or $10.73 per MMbtu.[3] These figures were based on the fuel cost forecast the Company prepared on May 13, 2016.

As noted in DEF's Petition, the Company updated its fuel cost forecast on March 16, 2017. In the revised forecast, the average cost for light oil futures for each month of 2017 is $62.92 per

[2]Order No. PSC-16-0547-FOF-EI, issued December 5, 2016, in Docket No. 160001-EI, *In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor*.
[3]MMbtu is an acronym for one million British thermal units, a term used in the energy industry as a unit of measure.

barrel, or $10.85 per MMbtu. On a comparative basis, the average price for light oil increased by $0.76 per barrel (1.22 percent), or $0.12 per MMbtu (1.19 percent).

Coal

In its projection filing for 2017, DEF projected that coal as a fuel source would supply about 28 percent of the Company's generating mix. At its Crystal River generating station, DEF operates four coal-burning units. Crystal River Units 1 and 2 (CR 1 and 2) use a different coal variety than Crystal River Units 4 and 5 (CR 4 and CR 5).[4] In its fuel cost forecasting, the coal prices are expressed for each variety. Based on its May 2016 forecast, DEF's projected average cost for coal at CR 1 and 2 for each month of 2017 was $91.70 per ton, or $3.90 per MMbtu. In the March 2017 forecast, the average cost for coal at CR 1 and 2 for each month of 2017 is $94.20 per ton, or $4.12 per MMbtu. On a comparative basis, the average price for this variety of coal increased by $2.50 per ton (2.73 percent), or $0.22 per MMbtu (5.64 percent).

Based on its May 2016 forecast, DEF's projected average cost for coal at CR 4 and 5 for each month of 2017 was $63.50 per ton, or $2.80 per MMbtu. In the March 2017 forecast, the average cost for coal at CR 4 and 5 for each month of 2017 is $70.21 per ton, or $3.04 per MMbtu. On a comparative basis, the average price for this variety of coal increased by $6.71 per ton (10.57 percent), or $0.24 per MMbtu (8.71 percent).

Natural Gas

In its projection filing for 2017, DEF projected that natural gas as a fuel source would supply about 72 percent of the Company's generating mix. DEF states that its original projected cost for natural gas used the New York Mercantile Exchange (NYMEX)[5] futures contract prices for each month of 2017, based on a forward curve as of May 13, 2016. DEF states that its originally-projected average cost for natural gas for delivery in each month of 2017 was $2.92 per MMbtu.

In its Petition, DEF noted that projected natural gas commodity prices have increased since its original projections were developed. For its mid-course calculations, DEF used NYMEX futures contract prices based on a forward curve as of March 16, 2017, reflecting a price of $3.10 per MMbtu (an increase of 6.16 percent). Staff notes that because natural gas is the primary generating fuel DEF relies upon, an increase in the projected cost of gas can significantly increase its fuel factors.

Impact of lower sales (Actual and Estimated amounts for 2017)

In its projection filing for 2017, DEF estimated its total fuel and net power transactions, excluding true-ups, would be $1,413,729,784. In the Company's revised projections for 2017, which include actual data through March 2017 and estimated data for the remainder of 2017, the total is now $1,468,975,926, a difference of $55,246,142.

[4]CR 1 and 2 were constructed in the 1960's and are designed to burn coal varieties with a low sulfur content. The CR 4 and 5 units were built in the 1980's and have different design characteristics than the older units, and use coal varieties with higher sulfur content.

[5]The New York Mercantile Exchange (NYMEX) is a commodities futures exchange widely used by the electric industry for pricing natural gas. Forward curve prices represent the price of gas for delivery in a particular month in the future. Futures contracts are actively traded and the prices can change hour-by-hour throughout a trading day.

In a data request response, the Company stated that in addition to the changes in forecasted prices for the fuel types used in its generating plants, mild weather impacted sales and revenues and contributed to the DEF mid-course correction.[6] As noted previously, the original projections for 2017 were filed on September 1, 2016. Based on Schedule E-1, line 21, from DEF's Projection filing for 2017, the Company's Jurisdictional Sales amount of $1,436,253,271 was based on sales of 39,424,485 megawatt hours. In the Company's revised projections for 2017, DEF has estimated Jurisdictional Sales of $1,339,629,347 based on sales of 37,585,611 megawatt hours. On a comparative basis, the revised forecast is lower in dollars and megawatt hours. The lower revenue and sales figures, coupled with elevated fuel costs for 2017, are the principal drivers of the incremental under-recovery of $123,151,067.

When the final true-up amount from 2016 (an under-recovery of $58,893,512) is added to the estimated true-up amount for 2017 (an under-recovery of $123,151,067), the total true-up balance is an under-recovery of $182,044,578.[7]

Calculation of Mid-Course Correction Percentage

Based on Rule 25-6.0424, F.A.C., the mid-course percentage is the estimated end-of-period total net true-up amount divided by the current period's total actual and estimated jurisdictional fuel revenue applicable to period amount. Schedule E1-B in DEF's Petition shows that the Company's most current actual and estimated jurisdictional fuel revenue applicable to 2017 is projected to be $1,339,629,347. Dividing the total under-recovery of $182,044,578 by the total applicable revenue for the period of $1,339,629,347 results in an under-recovery percentage of 13.59 percent.

Options For Implementing Mid-Course Correction

The Company has requested that the revised fuel factors become effective with the July 2017 billing cycle and remain in-place until the Citrus 1 GBRA is placed into rates. Although the Company presented its calculation of the impact of this adjustment based on a 12-month period, the actual duration of the mid-course adjustment may be more or less than a 12 month period, depending on the actual in-service date of Citrus 1. In a data request response, the Company stated that the "best case" scenario for when Citrus 1 would enter commercial service is June 2018, and the "worse case" scenario is September 2018.[8] The Company noted that if the mid-course factor remains in place for greater than or less than 12 months, any over or under-recovered amounts will be addressed in the 2018 fuel clause hearing.

Staff notes that DEF's request is unique, but not unprecedented. Mid-course corrections to fuel cost recovery factors are generally applied over the remaining months in a given year before such factors are re-set in the annual fuel clause hearing process.[9] In the instant case, DEF is

[6]DEF's Response to Staff's First Data Request No. 2.
[7]In the Response to Staff 's First Data Request No. 1A, the Company stated the total under-recovery true-up balance of $182,044,578 is based on actual data through March, and estimated amounts for the remainder of 2017.
[8]DEF's Response to Staff's First Data Request Nos. 7 and 8.
[9]In the Commission's most recent mid-course correction pleadings (2016), the impacts of mid-course corrections were recovered over the remaining months of the year. See Order No. PSC-16-0120-PCO-EI, issued March 21, 2016, in Docket No. 160001-EI, *In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor*.

requesting that the impact of this correction begin in July of this year, and extend into 2018. Staff believes the Commission has the discretion to approve recovery applied over the remaining months of this year, or in the manner requested by DEF.

According to DEF, implementing this mid-course correction over an extended period of time will result in its customers seeing a smaller monthly increase in bills than if the recovery period was shorter. DEF presented calculations based on a 12-month recovery period, but requests that the mid-course correction factors remain in-place until the Citrus 1 GBRA is placed into rates. As shown in Schedule E10 in DEF's Petition, the mid-course correction amount is $4.70 for a residential customer using 1,000 kWh of electricity.

In DEF's Petition, the Company stated that when Citrus 1 is placed into service, DEF's customers will see a base rate adjustment for the new plant being placed into service, and the concurrent expiration of the mid-course correction. DEF estimates that the Citrus 1 GBRA adjustment to base rate will be $4.25 per month for a residential customer using 1,000 kWh of electricity. The Company believes ending the mid-course correction adjustment at the same time the Citrus 1 GBRA adjustment is implemented will offset the overall bill impact for its customers, because both adjustments will be addressed in a single billing adjustment.

The total current bill for a residential customer using 1,000 kilowatt hours (kWh) of electricity is $117.24 per month with a fuel component of $33.77 per month. Assuming that its mid-course correction is approved as filed, the fuel portion will increase by $4.70 per month, to $38.47 per month. Staff notes that DEF's Petition also identifies its separately requested revision to the Asset Securitization Charge (ASC). The revision to the ASC was incorporated into the tariff sheets with the mid-course correction for administrative efficiency because both charges will go into effect with the first billing cycle in July. The ASC portion of a residential bill for 1,000 kWh of usage will increase by $1.14 per month. Upon approval, the bill for a residential customer using 1,000 kilowatt hours of electricity increases to $123.23 per month, a total increase of $5.99 per month (including gross receipts tax), effective with the July billing cycle. The proposed fuel cost recovery factors for this implementation are presented in Attachment A.

By implementing the mid-course adjustment over an extended period, DEF's customers will see the following three changes to fuel cost recovery factors over the next 1-year period:

1. Effective with the first billing cycle in July 2017, the incremental adjustment on a total bill will be $5.99 for a residential customer using 1,000 kilowatt hours of electricity.
2. Although the specific amount is not known at this time, a billing change will be implemented effective with the first billing cycle in January 2018, when all cost recovery factors will be re-set in the annual fuel clause hearing (scheduled for October 2017).
3. The third billing change will be effective with the in-service date of the Citrus 1 generating facility.

Bill Impact (6 Months versus 12 Months)

In the two most recent mid-course correction petitions, the Commission ordered fuel cost recovery factors be revised to apply the correction over the remaining months in that year.[10] For the instant case, implementation in this manner would mean increased fuel factors for July-December 2017. DEF's customers will still experience three changes to their total bills and to fuel cost recovery factors over about a 1-year period. The proposed fuel cost recovery factors for this implementation are presented in Attachment B.

As noted earlier, if the mid-course correction is recovered as requested by the Company, the incremental increase for fuel cost recovery is $4.70 for a residential customer using 1,000 kilowatt hours of electricity per month. If the mid course correction is fully recovered in 2017, the comparative amount for fuel cost recovery is $8.73 for a residential customer using 1,000 kilowatt hours of electricity per month. Table 1-1 below presents a comparison of the bill impact of recovering the mid-course correction over 6 months and 12 months.

[10]Order No. PSC-16-0120-PCO-EI, issued March 21, 2016, in Docket No. 160001-EI, *In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor*.

Table 1-1
Comparison of 1,000 kWh Residential Bill Impacts

Component	April 2017 (Current)	July 2017 – June 2018 (recovery over an extended period)	July – Dec. 2017 (recovery within 2017)
Base Charge	$60.47	$60.47	$60.47
Fuel Cost Recovery	$33.77	$38.47	$42.50
Capacity Cost Recovery	$11.38	$11.38	$11.38
Energy Conservation Cost Recovery	$3.17	$3.17	$3.17
Environmental Cost Recovery	$1.51	$1.51	$1.51
Nuclear - CR3 Uprate	$1.56	$1.56	$1.56
Nuclear - Levy	$0	$0	$0
Asset Securitization Charge[11]	$2.45	$3.59	$3.59
Subtotal	$114.31	$120.15	$124.18
Gross Receipts Tax	$2.93	$3.08	$3.18
Totals	**$117.24**	**$123.23**	**$127.36**

Source**:** Schedule E-10s from DEF pleadings (FPSC Document Nos. 04213-17 and 04533-17)

Whether the mid-course correction is implemented over the remaining months in 2017 or is extended into 2018 as requested by the Company, a carrying charge on the unrecovered balance will be incurred. In both instances, the 30-day commercial paper rate is used for the calculations. As reflected on Schedule E1-B, DEF included $1,147,272 in carrying costs for the proposed recovery period. For comparative purposes, if the mid-course correction is fully recovered in 2017, the carrying cost would be approximately $763,000.[12]

[11]On Schedule E-10, DEF states that the July-December 2017 period includes a revision to the Asset Securitization Charge, which is being filed separately with the Commission in Docket No. 150171-EI, for Staff's administrative approval.
[12]DEF's Response to Staff's Second Data Request No. 2B. The response notes that although the carrying costs for the longer implementation period are somewhat higher in comparison to the shorter period, the difference between the values equates to about $0.01 on a residential bill for 1,000 kWh of usage.

Conclusion

Staff believes implementing the mid-course correction as proposed by DEF is reasonable in this instance. DEF's proposed methodology provides for a lower bill to customers in the near term compared to recovering the costs over a shorter period.

Staff recommends that the Commission approve DEF's Petition for Mid-Course Correction to its 2017 fuel cost recovery factors and the associated tariff sheets. The revised fuel cost recovery factors and associated tariffs should become effective with the July 2017 billing cycle and continue until the Citrus 1 GBRA is placed into rates.

Issue 2: Should the Commission approve DEF's proposed fuel cost recovery factors?

Recommendation: Yes. The Commission should give staff administrative authority to approve tariffs and associated fuel factors that implement the Commission vote in Issue 1. The charges should go into effect with the first billing cycle of July 2017. (Draper, Guffey)

Staff Analysis: As discussed in Issue 1, DEF has requested Commission approval of its mid-course correction to its 2017 fuel cost recovery factors and associated tariff Sheet No. 6.105. DEF has requested that the tariffs become effective with the first billing cycle of July 2017.

This case is scheduled to be voted on at the June 5, 2017 Commission Conference, which is 23 days before the July 2017 billing cycle begins.[13] Typically, effective dates are set a minimum of 30 days after a Commission vote modifying charges as the result of a mid-course correction.[14] This time limit is imposed in order to avoid new rates applied to energy consumed before the effective date of the Commission's action, i.e., the date of the vote. However, the Commission has implemented new charges in less than 30 days when circumstances warrant.[15] In this instance, the interval between the Commission's vote on this matter (June 5, 2017) and the proposed implementation date is 23 days.

In DEF's Response to Staff's First Data Request, the Company has stated that customers will be notified of the rate changes via bill inserts, DEF website, press releases in Tampa, Orlando, Lakeland, Winter Haven, and Gainesville, and that customer care representatives will be available to respond to inquiries.[16] In addition, DEF will include a bill insert notifying customers of its rates as of July 2017 in July bills.

Conclusion

The Commission should give staff administrative authority to approve fuel cost recovery factors that implement the Commission vote in Issue 1 effective with the first billing cycle of July 2017.

[13]In a data request response, the Company stated the July 2017 billing cycle begins on June 28, 2017.

[14]Gulf Power Co. v. Cresse, 410 So.2d 492 (Fla. 1982); Order No. PSC-96-0907-FOF-EI, issued on July 15, 1996, in Docket No. Docket No. 960001-EI, *In re: Fuel and Purchased Power Cost Recovery Clause and Generating Performance Incentive Factor*; Order No. 96-0908-FOF-EI, issued July 15, 1996, in Docket No. 960001-EI, *In re: Fuel and Purchased Power Cost Recovery Clause and Generating Performance Incentive Factor*; Order No. PSC-97-0021-FOF-EI, issued on January 6, 1997, in Docket No. 970001-EI, *In re: Fuel and Purchased Power Cost Recovery Clause and Generating Performance Incentive Factor*.

[15]Order No. PSC-01-0963-PCO-EI, issued April 18, 2001, in Docket No. 010001-EI, *In re: Fuel and Purchased Power Cost Recovery Clause and Generating Performance Incentive Factor*, (allowing recovery of increase in fuel factor in order to decrease the carrying costs and therefore the total amount ratepayers were ultimately required to repay.); Order No. PSC-00-2383-FOF-GU, issued December 12, 2000, in Docket No. 000003-GU, *In re: Purchased Gas Adjustment (PGA) true-up, (*allowing recovery of an increased gas fuel factor due to drastic increases in natural gas prices in winter of 2000-2001.*)*; Order No. PSC-15-0161-PCO-EI, issued April 30, 2015, in Docket No. 150001-EI, *In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor*, (approving FPL's petition for a mid-course correction, thereby reducing fuel factors with less than 30 days notice).

[16]DEF's Response to Staff's First Data Request Nos. 11 and 12.

Issue 3: Should this docket be closed?

Recommendation: No. The fuel docket is on-going and should remain open. (Brownless)

Staff Analysis: The fuel docket is on-going and should remain open.

DEF's Proposed Mid-Course Correction Fuel Cost Recovery Factors July 2017 – June 2018				
Cost Recovery Factors with an extended recovery period				
Rate Schedule	Delivery Voltage Level	Fuel Cost Recovery		
		Levelized (c/ kWh)	On-Peak (c/ kWh)	Off-Peak (c/ kWh)
RS-1, RST-1, RSL-1, RSL-2, RSS-1	Secondary		5.313	3.568
< 1,000		3.847		
> 1,000		4.847		
GS-1, GST-1	Secondary	4.144	5.313	3.568
	Primary	4.103	5.259	3.532
	Transmission	4.061	5.206	3.497
GS-2	Secondary	4.144		
GSD-1, GSDT-1, SS-1	Secondary	4.144	5.313	3.568
	Primary	4.103	5.259	3.532
	Transmission	4.061	5.206	3.497
CS-1, CST-1, CS-2, CST-2, CS-3, CST-3, SS-3	Secondary	4.144	5.313	3.568
	Primary	4.103	5.259	3.532
	Transmission	4.061	5.206	3.497
IS-1, IST-1, IS-2, IST-2, SS-2	Secondary	4.144	5.313	3.568
	Primary	4.103	5.259	3.532
	Transmission	4.061	5.206	3.497
LS-1	Secondary	3.894		

Source**:** DEF's Rate Schedule BA-1, from FPSC Document No. 04216-17

DEF's Proposed Mid-Course Correction Fuel Cost Recovery Factors July 2017 – December 2017				
Cost Recovery Factors with a July-December 2017 recovery period				
Rate Schedule	Delivery Voltage Level	Fuel Cost Recovery		
		Levelized (c/ kWh)	On-Peak (c/ kWh)	Off-Peak (c/ kWh)
RS-1, RST-1, RSL-1, RSL-2, RSS-1	Secondary		5.829	3.915
< 1,000		4.250		
> 1,000		5.250		
GS-1, GST-1	Secondary	4.547	5.829	3.915
	Primary	4.502	5.771	3.876
	Transmission	4.456	5.713	3.837
GS-2	Secondary	4.547		
GSD-1, GSDT-1, SS-1	Secondary	4.547	5.829	3.915
	Primary	4.502	5.771	3.876
	Transmission	4.456	5.713	3.837
CS-1, CST-1, CS-2, CST-2, CS-3, CST-3, SS-3	Secondary	4.547	5.829	3.915
	Primary	4.502	5.771	3.876
	Transmission	4.456	5.713	3.837
IS-1, IST-1, IS-2, IST-2, SS-2	Secondary	4.547	5.829	3.915
	Primary	4.502	5.771	3.876
	Transmission	4.456	5.713	3.837
LS-1	Secondary	4.273		

Source**:** DEF's Rate Schedule BA-1, from FPSC Document No. 04533-17