

Exhibit No.:
Issue: Interim Energy Charge; State
Line Combined Cycle Unit;
Income Taxes
Witness: Cary G. Featherstone
Sponsoring Party: MoPSC Staff
Type of Exhibit: True-Up Direct Testimony
Case No.: ER-2001-299
Date Testimony Prepared: August 7, 2001

MISSOURI PUBLIC SERVICE COMMISSION
UTILITY SERVICES DIVISION

TRUE-UP DIRECT TESTIMONY

OF

CARY G. FEATHERSTONE

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2001-299

Jefferson City, Missouri
August 2001

FILED
AUG 7 2001
Missouri Public
Service Commission

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1 provide testimony on the amount of the Interim Energy Charge (IEC) that is subject to
2 refund. I will also sponsor the updates to the income tax calculation.

3 **INTERIM ENERGY CHARGE**

4 Q. What is the result of the true-up through June 30, 2001?

5 A. The true-up ending June 30, 2001, identified an amount of revenue
6 requirement for Empire in the range between \$10.8 to \$14.1 depending on the level of
7 rate of return used. Staff witness Phillip K. Williams is sponsoring testimony in support
8 of the overall revenue requirement determination as a result of the true-up agreed to by
9 the parties in this case and authorized by the Commission in its Order dated January 4,
10 2001.

11 Q. Is there any additional amount of revenue requirement that has been
12 determined in this case?

13 A. Yes. In addition to the amount of revenue requirement resulting from the
14 true-up, Staff has calculated the Interim Energy Charge (IEC). The IEC resulted from a
15 Unanimous Stipulation And Agreement Regarding Fuel And Purchased Power Expense
16 And Class Cost Of Service And Rate Design (IEC Stipulation), filed with the
17 Commission on June 4, 2001. This Stipulation And Agreement provided for an amount
18 of revenue requirement to be determined in excess of base rates. This mechanism allows
19 higher fuel and purchased power prices to be used in determining interim rates in this
20 case. The interim rates will be subject to refund with an interest provision after a fuel and
21 purchased power true-up audit that will occur at the end of the interim rate period. The
22 amount of fuel and purchased power costs that are in interim rates and subject to the true-
23 up process is called the Interim Energy Charge. Specifically, the IEC envisions that a

1 base amount of fuel and purchased power cost is established in permanent rates, with an
2 additional amount of fuel and purchased power costs set in interim rates.

3 Q. What were the specific terms of the IEC Stipulation with regard to the
4 Interim Energy Charge?

5 A. In the IEC Stipulation filed with the Commission on June 4, 2001, the
6 parties agreed to a mechanism and a true-up procedure regarding the IEC. Paragraph 4 at
7 page 2 of the IEC Stipulation states as follows:

8 The parties agree that resolution of the fuel and purchased power
9 expense issues in this case has been achieved as among themselves
10 by the inclusion of a specific amount in the cost of service on a
11 permanent (i.e., not subject to refund) basis and by the inclusion of
12 another additional amount on an interim and subject to true-up and
13 refund basis. The specific amount to be included in the Missouri
14 jurisdictional cost of service on a permanent basis is \$91,599,932.
15 This figure is meant to encompass all retail Missouri jurisdictional
16 charges accumulated in the FERC account numbers 501, 547 and
17 555 and will be updated in the August 2001 true-up portion of this
18 case. The other portion, referred to herein as an "Interim Energy
19 Charge," is explained in more detail herein and generally is
20 designed to attempt to address the potential volatility in natural gas
21 and wholesale electricity prices. This Interim Energy Charge
22 ("IEC") will be reflected separately on all Empire Missouri rate
23 schedules on an equal-cents-per-kilowatt-hour basis. The revenue
24 from the IEC will be collected on an interim and subject to true-up
25 and refund basis under the terms of this Agreement.

26 Q. Has Staff recomputed the fuel basis that is intended to be in permanent
27 rates as part of the true-up?

28 A. Yes. The amount identified in paragraph 4 of the IEC Stipulation was
29 \$91,599,932 on a total Company basis. The true-up amount is \$96,113,949, total
30 Company. This amount represents the level of fuel and purchased power costs that
31 should be included in Empire's permanent rates and not subject to refund.

1 Q. Has Staff determined the level of the interim energy charge that should be
2 in interim rates and subject to refund?

3 A. Yes. Staff has determined that the amount that should be in Empire's
4 interim rates and subject to refund is \$19,643,484 on a Missouri jurisdictional basis
5 (Schedule 1 is the calculation of the Interim Energy Charge amount). This amount is
6 identified as a line item on Accounting Schedule 1-1, Revenue Requirement, entitled
7 "Interim Energy Charge-Subject To Refund." This amount, when added to the overall
8 revenue requirement at the mid-point rate of return of \$12.4 million indicates that
9 Empire's rates should be increased for both permanent and interim rates in the total of
10 \$32.1 million at the mid-point of the Staff's recommended rate of return.

11 **STATE LINE COMBINED CYCLE UNIT**

12 Q. What is the status of the State Line Combined Cycle Unit?

13 A. Empire completed the testing of the Combined Cycle Unit during the
14 month of June. As such, all major construction activities at the unit are complete and
15 Empire announced that the unit was operational as of June 25, 2001.

16 Q. What is the significance of Empire declaring the Combined Cycle Unit as
17 operational?

18 A. During the construction phase of any power plant, all costs are
19 accumulated in a work order system to identify all the components that are required to
20 build the unit. In addition to the capital expenditures for labor, material and equipment,
21 an Allowance For Funds Used During Construction (AFUDC) amount is accrued by
22 month and charged to the work order. Once the unit is identified as operational, the
23 construction expenditures are transferred to plant in service accounts and AFUDC stops

1 accruing. Thus, as of June 25, the Combined Cycle Unit is now identified on Empire's
2 books and records as plant in service.

3 Q. Does Staff concur with Empire's decision to declare the Combined Cycle
4 Unit operational?

5 A. Staff witness David W. Elliott of the Energy Department is providing
6 testimony on the status of the Combined Cycle Unit based on the in-service criteria
7 agreed to in the *Unanimous Stipulation And Agreement Regarding In-Service Criteria*
8 filed with the Commission on May 14, 2001. In that Stipulation And Agreement, the
9 parties identified numerous individual criteria that Empire agreed to meet in order to
10 determine if the Combined Cycle Unit should be considered to be in-service by this
11 Commission. Staff witness Elliott is recommending that, based on these criteria, the
12 Combined Cycle Unit should be considered fully operational and used for service (i.e.,
13 in-service) as of the end of the true-up period of June 30, 2001. In his true-up direct
14 testimony, Mr. Elliott details the individual in-service criteria and the analysis that was
15 performed to determine whether each of the individual conditions required for this
16 generating facility was met.

17 Q. Please identify the terms of the Stipulation And Agreement regarding the
18 Combined Cycle costs.

19 A. The parties to this proceeding reached unanimous agreement with regard
20 to rate treatment of the Combined Cycle Unit's cost. At page 2, paragraph 4 of the
21 Stipulation And Agreement, the following conditions appear:

22 In its direct case, the Staff proposed a total project cost
23 disallowance of approximately \$12 million for costs incurred on
24 the SLCC's Heat Recovery Steam Generators, which costs were
25 related to the Fru-Con contract, including the settlement between

1 Fru-Con and Empire. Without admitting any imprudence on its
2 part, and solely for the purpose of disposing of this issue, Empire
3 agrees to accept an \$8.3 million total SLCC disallowance, which
4 equates to a \$3.984 million reduction in Missouri jurisdictional rate
5 base, for costs. An amount for Allowance For Funds Used During
6 Construction (AFUDC) will be added to this disallowance. This
7 lump sum amount is a negotiated settlement of Issue number 6 a.
8 in the List of Issues, filed May 14, 2001. Empire agrees not to
9 seek recovery of the \$3.984 million rate base settlement amount
10 and related AFUDC associated with the Fru-Con contract in any
11 subsequent rate proceeding in Missouri.
12

13 Q. Has Staff made a disallowance for the cost overrun amounts identified in
14 the Stipulation And Agreement?

15 A. Yes. As noted in the above language, the parties reached an agreement to
16 disallow \$8.3 million (Total Project) relating to the installation of the Heat Recovery
17 Steam Generators (HRSGs). In addition, an amount for AFUDC was identified as
18 needing to be added to the \$8.3 million figure in order to calculate the overall
19 disallowance. Staff witnesses Amanda McMellen and V. William Harris will provide
20 testimony quantifying the appropriate disallowances in Staff's revenue requirement
21 determination for the Combined Cycle Unit, including AFUDC, for the true-up period
22 ending June 30, 2001.

23 Q. Were there other agreements reached as part of the Stipulation And
24 Agreement?

25 A. Yes. Paragraph 5 of the Stipulation And Agreement also identified a cost
26 overrun amount of approximately \$19 million that the parties agreed to continue to
27 examine during the true-up phase of this proceeding:

28 The current estimate to construct the SLCC project is
29 approximately \$203.2 million (excluding AFUDC), which is
30 approximately \$31 higher than the original estimate. The \$31
31 million is comprised of approximately \$12 million relating to the

1 Fru-Con contractor performance issue, and an additional amount
2 equal to approximately \$19 million. Empire agrees to work with
3 the Staff of the Commission to provide further and more detailed
4 explanation for this additional approximately \$19 million
5 difference. Empire will make this more detailed explanation
6 available to the Staff no later than July 31, 2001, for use in the
7 true-up in this case. If Empire fails to sufficiently detail the
8 \$19 million difference to the reasonable satisfaction of the Staff,
9 Empire will accept an additional \$1.0 million disallowance, which
10 equates to about a \$480,000 reduction in Missouri jurisdictional
11 rate base, for costs. An amount for Allowance For Funds Used
12 During Construction (AFUDC) will be added to this disallowance.
13 If Empire and Staff disagree on the reasonableness of the
14 explanations detailing the \$19 million difference, Empire may seek
15 rate base treatment of an additional \$480,000, increased for related
16 AFUDC, on a Missouri jurisdictional basis for SLCC (which
17 would be \$1 million on a total plant and total company basis) in
18 the August 2001 true-up hearing in this case.
19

20 Q. Has Empire shown that the remaining cost overruns were necessary to
21 complete the Combined Cycle Unit?

22 A. Yes. On June 7, 2001, Empire provided the Project Cost Report dated
23 May 31, 2001, prepared by Black & Veatch, the project engineers, that identified reasons
24 for the cost overruns through the change order process. Staff witness Elliott will provide
25 testimony identifying the broad categories of cost overruns in his true-up direct
26 testimony.

27 Q. How did Staff reach its conclusion that Empire has sufficiently justified
28 the remaining cost overruns?

29 A. Staff reviewed the Black & Veatch report and data request responses
30 received relating to questions unanswered by that report. The report was organized by
31 individual contract with the cost overrun amounts identified through a change order
32 process. Individual change orders were identified and Staff made further inquiry
33 regarding them, both formally and informally. Staff also reviewed additional contracts

1 beyond those reviewed previously during the direct filing period and interviewed the
2 construction site management for information regarding the remaining costs over the
3 original estimate.

4 Q. What standard did Staff use to determine if Empire has justified the
5 remaining costs over the original estimate?

6 A. Staff was looking to see if there were any other issues involving possible
7 Empire or contractor imprudence such as that which occurred in the installation of the
8 HRSGs. Staff has concluded that there were no other events that occurred during
9 construction of the Combined Cycle Unit that would warrant an adjustment to disallow
10 any additional overrun amounts.

11 Q. In summary, has Empire justified the additional costs over the original
12 estimate that do not relate to the HRSG overruns?

13 A. Yes. Staff recommends that no further adjustments to disallow costs
14 relating to the construction of the Combined Cycle Unit should be made. The basis for
15 this recommendation results from the review process identified above. Since Staff's
16 criteria for evaluating the non-HRSG costs over the original estimate of approximately
17 \$19 million as identified in paragraph 5 of the Stipulation And Agreement have been
18 satisfactorily explained, Staff believes no further disallowance is necessary. While there
19 were significant cost increases over the original estimate to complete the Combined
20 Cycle Unit, it is believed that those increased costs were a necessary part of constructing
21 this generating unit. While Staff took issue with the contractor performance issue
22 relating to the installation of the HRSGs, no other similar or like event was discovered by
23 Staff that would justify a disallowance over and above the total project cost of

1 \$8.3 million previously agreed to in the Stipulation And Agreement by the parties.

2 Q. What are some of the cost increases over the Combined Cycle's original
3 estimate that Staff recommends be included in Empire's plant in service amount as of
4 June 30, 2001?

5 A. Staff witness Elliott identifies in his true-up direct testimony the cost
6 increases over the original estimate (other than the HRSG installation costs) by summary
7 cost categories. These categories include cost increases relating to the labor rate issue
8 and the incentive bonus award system that was implemented by Empire to attract and
9 maintain qualified, skilled craft laborers to complete the Combined Cycle Unit. This
10 issue was identified in my direct testimony (Exhibit No. 45) at pages 37 and 38. In
11 addition to the labor and incentive bonus cost categories, both of which involved
12 significant overruns to the original project estimate, there are cost overruns associated
13 with additional project scope and design issues. An example that was used in my
14 previous testimony was the additional cost associated with the overhead maintenance
15 crane for the combustion turbines at the State Line facilities. This addition to the
16 Combined Cycle Unit was not in the original design and engineering of the unit. Empire
17 made the decision to add the overhead maintenance crane to the Combined Cycle Unit
18 project, which resulted in part of the cost increase over the original estimate. Staff
19 witness Elliott identifies other cost categories with a number of other examples that
20 caused the Combined Cycle Unit project to ultimately cost more than assumed in the
21 original estimate.

22 Q. Does the Combined Cycle Capital Cost Stipulation and Agreement
23 address the possibility of Empire incurring additional cost overruns beyond the amounts

True-Up Direct Testimony of
Cary G. Featherstone

1 discussed above?

2 A. Yes. In paragraph 7, the Stipulation And Agreement called for Empire to
3 explain any additional cost overruns incurred if the total project cost of the Combined
4 Cycle Unit exceeded \$203.2 million. Staff witness Mark A. Oligschlaeger addresses this
5 matter in his true-up direct testimony.

6 **INCOME TAXES**

7 Q. Has Staff updated income taxes for the true-up?

8 A. Yes. The associated income tax components relating to the June 30 true-
9 up have been recomputed and included in the true-up revenue requirement. The
10 accumulated deferred income taxes used as an offset to rate base have been updated
11 through June 30, 2001. The amortization for deferred income tax and investment tax
12 credit have also been updated to reflect the true-up. Tax depreciation and excess tax
13 straight-line have been updated to reflect changes to the annualized depreciation expense
14 consistent with the true-up period of June 30 for plant in-service.

15 Q. Does this conclude your true-up direct testimony?

16 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION


OF THE STATE OF MISSOURI

In the Matter of the Application of the Empire)
District Electric Company for a General Rate)
Increase)
Case No. ER-2001-299

AFFIDAVIT OF CARY G. FEATHERSTONE

STATE OF MISSOURI)
)
COUNTY OF COLE)
)
 ss.

Cary G. Featherstone, being of lawful age, on his oath states: that he has participated in the preparation of the foregoing True-Up Direct Testimony in question and answer form, consisting of 10 pages to be presented in the above case; that the answers in the foregoing True-Up Direct Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.


Cary G. Featherstone

Subscribed and sworn to before me this 6th day of August 2001.



TONI M. CHARLTON
NOTARY PUBLIC STATE OF MISSOURI
COUNTY OF COLE
My Commission Expires December 28, 2004



Calculation of Trued-up Fuel & Purchased Power Expense

<u>Total Company</u>	Base	Forecast	Increment
Price \$/MWH	\$20.00	\$25.00	\$5.00
MWH	4,803,523.00	4,803,523.00	
Fuel & Purchased Power	\$96,070,460	\$120,088,075	
Capacity Charge on Purchase	\$16,193,520	\$16,193,520	
Fuel & Purchased Power Expense	\$112,263,980	\$136,281,595	
MWH	4,803,523.00	4,803,523.00	
Price \$/MWH	\$23.37	\$28.37	\$5.00
 alloc. Fac. <u>Missouri Retail</u>			
0.8200 Fuel & Purchased Power	\$78,777,777	\$98,472,222	
0.813 Capacity Charge on Purchase	\$13,165,332	\$13,165,332	
Fuel & Purchased Power Expense	\$91,943,109	\$111,637,553	
Retail kWh Sales	3,636,036,241	3,636,036,241	
Price \$/kWh	\$0.0253	\$0.0307	
			Interim Energy Charge Provision \$0.0054

MO kWh Sales updated to June 30	3,637,682,198
Additional kWh Sales	1,645,957
Variable Fuel & Purchased Power	\$0.0217
Additional Fuel & Purchased Power Expense	\$35,661

Loss Factor (kWh -> MWH)	0.001321087767453
MWH	4,805,697.45
Additional MWH's	2,174.45
Variable Fuel & Purchased Power	20.00
Additional Variable Fuel & Purchased Power	\$43,489
0.8200 Additional MO Variable Fuel & Purchased Pow	\$35,661

Calculation of Trued-up Fuel & Purchased Power Expense

<u>Total Company</u>	Base	Forecast
Price \$/MWH	\$20.00	\$25.00
MWH Updated to June 30	4,805,697.45	4,805,697.45
Fuel & Purchased Power	\$96,113,949	\$120,142,436
Capacity Charge on Purchase	\$16,193,520	\$16,193,520
Fuel & Purchased Power Expense	\$112,307,469	\$136,335,956
 Interim Energy Charge (MO sales X \$0.0054)		
	3,637,682,198	\$0.0054 \$19,643,484