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	Exhibit No/32
August 2001 Date <u>S</u>	123/01 Case No. ER. 2001 294
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TRUE-UP DIRECT TESTIMONY 1 2 OF **CARY G. FEATHERSTONE** 3 4 THE EMPIRE DISTRICT ELECTRIC COMPANY 5 CASE NO. ER-2001-299 6 7 Q. Please state your name and business address. Cary G. Featherstone, 3675 Noland Road, Independence, Missouri 64055. 8 Α. Q. By whom are you employed and in what capacity? 10 A. I am a Regulatory Auditor with the Missouri Public Service Commission 11 (Commission). 12 Q. Are you the same Cary G. Featherstone who has previously filed direct 13 and surrebuttal testimony in this proceeding? 14 A. Yes, I am. 15 What is the purpose of this true-up direct testimony? Q. 16 The purpose of this testimony is to provide the Commission with an A. 17 update regarding the status of The Empire District Electric Company's (Empire or 18 Company) State Line Combined Cycle Unit (Combined Cycle Unit or SLCC). This 19 testimony will identify Staff's recommendation regarding rate treatment of the remaining 20 cost overruns relating to the Combined Cycle Unit as identified in the Unanimous 21 Stipulation And Agreement As To State Line Combined Cycle Unit Capital Costs 22 (Stipulation And Agreement) filed with the Commission on May 25, 2001. I will also

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

INTERIM ENERGY CHARGE

- Q. What is the result of the true-up through June 30, 2001?
- A. The true-up ending June 30, 2001, identified an amount of revenue requirement for Empire in the range between \$10.8 to \$14.1 depending on the level of rate of return used. Staff witness Phillip K. Williams is sponsoring testimony in support of the overall revenue requirement determination as a result of the true-up agreed to by the parties in this case and authorized by the Commission in its Order dated January 4, 2001.
- Q. Is there any additional amount of revenue requirement that has been determined in this case?
- A. Yes. In addition to the amount of revenue requirement resulting from the true-up, Staff has calculated the Interim Energy Charge (IEC). The IEC resulted from a Unanimous Stipulation And Agreement Regarding Fuel And Purchased Power Expense And Class Cost Of Service And Rate Design (IEC Stipulation), filed with the Commission on June 4, 2001. This Stipulation And Agreement provided for an amount of revenue requirement to be determined in excess of base rates. This mechanism allows higher fuel and purchased power prices to be used in determining interim rates in this case. The interim rates will be subject to refund with an interest provision after a fuel and purchased power true-up audit that will occur at the end of the interim rate period. The amount of fuel and purchased power costs that are in interim rates and subject to the true-up process is called the Interim Energy Charge. Specifically, the IEC envisions that a

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

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

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

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

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rates as part of the true-up?

A. Yes. The amount identified in paragraph 4 of the IEC Stipulation was \$91,599,932 on a total Company basis. The true-up amount is \$96,113,949, total

Has Staff recomputed the fuel basis that is intended to be in permanent

Company. This amount represents the level of fuel and purchased power costs that should be included in Empire's permanent rates and not subject to refund.

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

STATE LINE COMBINED CYCLE UNIT

- Q. What is the status of the State Line Combined Cycle Unit?
- A. Empire completed the testing of the Combined Cycle Unit during the month of June. As such, all major construction activities at the unit are complete and Empire announced that the unit was operational as of June 25, 2001.
- Q. What is the significance of Empire declaring the Combined Cycle Unit as operational?
- During the construction phase of any power plant, all costs are Α. accumulated in a work order system to identify all the components that are required to build the unit. In addition to the capital expenditures for labor, material and equipment, an Allowance For Funds Used During Construction (AFUDC) amount is accrued by month and charged to the work order. Once the unit is identified as operational, the construction expenditures are transferred to plant in service accounts and AFUDC stops

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

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

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

generating facility was met.

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

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

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

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

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

- A. Yes. As noted in the above language, the parties reached an agreement to disallow \$8.3 million (Total Project) relating to the installation of the Heat Recovery Steam Generators (HRSGs). In addition, an amount for AFUDC was identified as needing to be added to the \$8.3 million figure in order to calculate the overall disallowance. Staff witnesses Amanda McMellen and V. William Harris will provide testimony quantifying the appropriate disallowances in Staff's revenue requirement determination for the Combined Cycle Unit, including AFUDC, for the true-up period ending June 30, 2001.
- Q. Were there other agreements reached as part of the Stipulation And Agreement?
- A. Yes. Paragraph 5 of the Stipulation And Agreement also identified a cost overrun amount of approximately \$19 million that the parties agreed to continue to examine during the true-up phase of this proceeding:

The current estimate to construct the SLCC project is approximately \$203.2 million (excluding AFUDC), which is approximately \$31 higher than the original estimate. The \$31 million is comprised of approximately \$12 million relating to the Fru-Con contractor performance issue, and an additional amount equal to approximately \$19 million. Empire agrees to work with the Staff of the Commission to provide further and more detailed explanation for this additional approximately \$19 million difference. Empire will make this more detailed explanation available to the Staff no later than July 31, 2001, for use in the true-up in this case. If Empire fails to sufficiently detail the \$19 million difference to the reasonable satisfaction of the Staff, Empire will accept an additional \$1.0 million disallowance, which equates to about a \$480,000 reduction in Missouri jurisdictional rate base, for costs. An amount for Allowance For Funds Used During Construction (AFUDC) will be added to this disallowance. If Empire and Staff disagree on the reasonableness of the explanations detailing the \$19 million difference, Empire may seek rate base treatment of an additional \$480,000, increased for related AFUDC, on a Missouri jurisdictional basis for SLCC (which would be \$1 million on a total plant and total company basis) in the August 2001 true-up hearing in this case.

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

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

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

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

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

- What standard did Staff use to determine if Empire has justified the Q. remaining costs over the original estimate?
- A. Staff was looking to see if there were any other issues involving possible Empire or contractor imprudence such as that which occurred in the installation of the HRSGs. Staff has concluded that there were no other events that occurred during construction of the Combined Cycle Unit that would warrant an adjustment to disallow any additional overrun amounts.
- Q. In summary, has Empire justified the additional costs over the original estimate that do not relate to the HRSG overruns?
- A. Yes. Staff recommends that no further adjustments to disallow costs relating to the construction of the Combined Cycle Unit should be made. The basis for this recommendation results from the review process identified above. Since Staff's criteria for evaluating the non-HRSG costs over the original estimate of approximately \$19 million as identified in paragraph 5 of the Stipulation And Agreement have been satisfactorily explained, Staff believes no further disallowance is necessary. While there were significant cost increases over the original estimate to complete the Combined Cycle Unit, it is believed that those increased costs were a necessary part of constructing this generating unit. While Staff took issue with the contractor performance issue relating to the installation of the HRSGs, no other similar or like event was discovered by Staff that would justify a disallowance over and above the total project cost of

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

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estimate that Staff recommends be included in Empire's plant in service amount as of

What are some of the cost increases over the Combined Cycle's original

4 June 30, 2001?

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Staff witness Elliott identifies in his true-up direct testimony the cost

increases over the original estimate (other than the HRSG installation costs) by summary

cost categories. These categories include cost increases relating to the labor rate issue

and the incentive bonus award system that was implemented by Empire to attract and

maintain qualified, skilled craft laborers to complete the Combined Cycle Unit. This

issue was identified in my direct testimony (Exhibit No. 45) at pages 37 and 38. In

addition to the labor and incentive bonus cost categories, both of which involved

significant overruns to the original project estimate, there are cost overruns associated

with additional project scope and design issues. An example that was used in my

previous testimony was the additional cost associated with the overhead maintenance

crane for the combustion turbines at the State Line facilities. This addition to the

Combined Cycle Unit was not in the original design and engineering of the unit. Empire

made the decision to add the overhead maintenance crane to the Combined Cycle Unit

project, which resulted in part of the cost increase over the original estimate. Staff

witness Elliott identifies other cost categories with a number of other examples that

caused the Combined Cycle Unit project to ultimately cost more than assumed in the

original estimate.

Q. Does the Combined Cycle Capital Cost Stipulation and Agreement

address the possibility of Empire incurring additional cost overruns beyond the amounts

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

INCOME TAXES

- Q. Has Staff updated income taxes for the true-up?
- A. Yes. The associated income tax components relating to the June 30 trueup have been recomputed and included in the true-up revenue requirement. accumulated deferred income taxes used as an offset to rate base have been updated through June 30, 2001. The amortization for deferred income tax and investment tax credit have also been updated to reflect the true-up. Tax depreciation and excess tax straight-line have been updated to reflect changes to the annualized depreciation expense consistent with the true-up period of June 30 for plant in-service.
 - Does this conclude your true-up direct testimony? Q.
 - Α. 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)) ss. COUNTY OF COLE)	
in the preparation of the foregoing True-Up form, consisting of // pages to be present the foregoing True-Up Direct Testimony were the matters set forth in such answers; and that of his knowledge and belief.	nted in the above case; that the answers in re given by him; that he has knowledge of

Subscribed and sworn to before me this 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

	Total Company	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.	Missouri Retail			
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	Interim Energy
	Retail kWh Sales	3,636,036,241	3,636,036,241	Charge Provision
	Price \$/kWh	\$0.0253	\$0.0307	\$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
Additional MO Variable Fuel & Purchased Pow	\$35,661

Calculation of Trued-up Fuel & Purchased Power Expense

Base	Forecast	
\$20.00	\$25.00	
4,805,697.45	4,805,697.45	
\$96,113,949	\$120,142,436	
\$16,193,520	\$16,193,520	
\$112,307,469	\$136,335,956	
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	\$20.00 4,805,697.45 \$96,113,949 \$16,193,520	\$20.00 \$25.00 4,805,697.45 4,805,697.45 \$96,113,949 \$120,142,436 \$16,193,520 \$16,193,520 \$112,307,469 \$136,335,956