Exhibit No.:

Issues: Construction Audit of State Line

> Combined Cycle Unit; State Line Combined Cycle Unit Test Power;

Income Taxes

Witness:

Cary G. Featherstone

Sponsoring Party: Type of Exhibit:

MoPSC Staff Direct Testimony

ER-2001-299

Case No.:

Date Testimony Prepared:

April 3, 2001

# MISSOURI PUBLIC SERVICE COMMISSION UTILITY SERVICES DIVISION

## **DIRECT TESTIMONY**

**OF** 

**CARY G. FEATHERSTONE** 

### THE EMPIRE DISTRICT ELECTRIC COMPANY

**CASE NO. ER-2001-299** 

Jefferson City, Missouri April 2001

\*\*Denotes Highly Confidential Information\*\*

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Exhibit No46
Date <u>5/29/01</u> Case No. <u>ER. 2011</u> -2999
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1		DIRECT TESTIMONY
2		OF
3		CARY G. FEATHERSTONE
4		THE EMPIRE DISTRICT ELECTRIC COMPANY
5		CASE NO. ER-2001-299
6 7	Q.	Please state your name and business address.
8	A.	Cary G. Featherstone, 3675 Noland Road, Independence, Missouri.
9	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	n).
12	Q.	Please describe your educational background.
13	<b>A.</b> `	I graduated from the University of Missouri at Kansas City in December 1978
14	with a Bach	elor of Arts degree in Economics. My course work also included study in the
15	field of Acco	ounting.
16	Q.	What has been the nature of your duties while in the employ of this
17	Commission	?
18	A.	I have assisted, conducted and supervised audits and examinations of the
19	books and re	ecords of public utility companies operating within the state of Missouri. I have
20	participated	in examinations of electric, industrial steam, natural gas, water, sewer and
21	telecommun	ication companies. I have been involved in cases concerning proposed rate
22	increases, ea	arnings investigations and complaint cases as well as cases relating to mergers
23	and acquisit	ions and certification cases.
24	Q.	Have you previously filed testimony before this Commission?

- A. Yes, I have. Schedule 1 to this testimony is a summary of rate cases in which I have submitted testimony. In addition, Schedule 1 identifies other cases in which I had supervision responsibilities or otherwise assisted.
- Q. With reference to Case No. ER-2001-299, have you made an examination and study of the books and records of The Empire District Electric Company?
  - A. Yes, with the assistance other members of the Commission Staff (Staff).
  - Q. What is the purpose of your direct testimony?
- A. I will provide testimony that supports Staff's positions on rate treatment of income taxes and cost of removal/net salvage. I will also provide testimony on the new generating facility currently under construction at Empire's State Line Power Plant—a 500-megawatt combined cycle unit. Staff witnesses David W. Elliott and Mark L. Oligschlaeger will also provide testimony on the combined cycle unit. Throughout Staff's direct testimony filing the State Line Combined Cycle Unit will be referred to as the "Combined Cycle Unit" or "SLCC."
  - Q. How is your testimony organized?
  - A. The following is the structure of my testimony by areas:
    - 1. Income Taxes;
    - 2. Cost of Removal and Salvage;
    - 3. State Line Combined Cycle Unit;
    - 4. Treatment of Test Power Costs for State Line Combined Cycle Unit.
  - Q. What caused Staff's review in this case?
- A. On November 3, 2000, The Empire District Electric Company (Empire or Company) filed for a \$41.5 million (19.36%) increase in its Missouri electric retail rates.

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Empire is currently constructing a new generating facility -- the Combined Cycle Unit - that is scheduled for completion by June 1, 2001. Consequently, the Company requested a trueup of the major components of the revenue requirement, including plant in service to recognize the Combined Cycle Unit in rates. Staff Accounting witness Phillip K. Williams describes the true-up process and test year recommendation in his direct testimony.

- Q. Does Empire currently provide utility services within the state of Missouri?
- A. Yes. Empire provides retail and wholesale electric utility service to customers in the southwest part of the state of Missouri. It also supplies electricity to retail customers in northwest Arkansas, northeast Oklahoma and southeastern Kansas. Empire also provides electricity on a wholesale basis through tariffs approved by the Federal Energy Regulatory Commission (FERC). Empire provides water service to several communities in the state of Missouri.

Empire is an independent investor-owned electric utility that is engaged in the generation, purchase, transmission, distribution and sale of electricity to approximately 145,000 customers in four states. According to Empire's year 2000 Form 10-K (page 3), Empire derived approximately 88% of its retail electric revenues from Missouri customers, 6% from Kansas customers, 3% from Oklahoma customers and 3% from Arkansas customers. Empire's service territory encompasses 10,000 square miles in its four-state region. At year-end 2000, Empire had 603 employees compared to 615 employees at yearend 1999. In year 2000, electric revenues represented about 99.6% of gross operating revenues; water represented the remaining 0.4%.

Q. Please identify your areas of responsibility in Case No. ER-2000-299.

- A. My principal areas of responsibility are the calculation of current and deferred income taxes.
  - Q. Please identify which adjustments you are sponsoring.
- A. I am sponsoring adjustments S-96.1 and S-97.1 which are listed on Accounting Schedule 10, Adjustments to Income Statement.
  - Q. Please identify the Accounting Schedules you are sponsoring.
  - A. I am sponsoring Accounting Schedule 11, Income Tax.
  - Q. Please explain Accounting Schedule 11.
- A. Accounting Schedule 11, Income Tax, reflects the Staff's calculation of current and deferred income taxes based on the adjusted net operating income before taxes (NOIBT) taken from column "F," Accounting Schedule 9, Income Statement. I will discuss the various details concerning the income tax calculation later in this testimony.

#### **INCOME TAXES**

- Q. Please explain adjustment S-96.1.
- A. Adjustments S-96.1 adjust current income taxes to a level consistent with the Staff's adjusted NOIBT.
  - Q. Please explain each component of the Company's total income tax liability.
- A. There are five components to the total income tax liability for a utility. These are: 1) current income tax, 2) deferred investment tax credit (ITC), 3) amortization of deferred ITC, 4) deferred income tax, and 5) the amortization of deferred income tax. These components are summarized at the end of the income tax calculation on Accounting Schedule 11, where they are listed on lines 30 through 34.
  - Q. Please describe the current income tax component.

A. Staff calculated the current income tax component shown on Accounting Schedule 11 by taking the NOIBT amount from Accounting Schedule 9, Income Statement, and adjusting it by the additions to and deductions from NOIBT that appear on Accounting Schedule 11. Staff then multiplied this result by the appropriate federal and state income tax rates to arrive at the final result. This calculation is based upon the fact that federal income taxes are fifty percent (50%) deductible for state income tax purposes and that state income taxes are fully deductible for federal income tax purposes. The calculation in this case is based on the use of a 35% federal income tax rate and a 6.25% state income tax rate. This results in an effective overall tax rate of 38.3886%.

- Q. Please describe adjustment S-96.1.
- A. Adjustment S-96.1 reflects the difference between the annualized current income tax expense, described above, and the Company's test year level of current income taxes. The annualized level of current income tax expense is shown on Accounting Schedule 11, line 30.
  - Q. Please describe the deferred ITC component.
- A. Since the Tax Reform Act of 1986 eliminated ITC, there have been not any deferred income taxes relating to ITC, therefore, there has not been any recognition of deferred ITC in the income tax calculation. Accordingly, it has been set at zero for this case.
  - Q. Please describe the amortization of deferred ITC component.
- A. The amortization of deferred ITC component represents the recovery by the ratepayer of a portion of previously deferred ITC. The amount is based on the level of deferred ITC amortization reflected on the Company's books.
  - Q. Please describe the deferred income tax component.

A. The deferred income tax component represents the amount of income taxes that, due to provisions in the Internal Revenue Code (Code), the ratepayer is expected to provide in rates currently, but for which the payment to taxing authorities will be deferred to some future period. The deferred income tax amount is arrived at by multiplying those tax timing differences that the Staff has normalized by the overall effective tax rate of 38.3886%, previously discussed. A description of tax timing differences, including ones proposed to be normalized, will be given later in my testimony.

- Q. Please explain the tax concept of "normalization."
- A. Under the Code, the Company can take deductions for tax purposes for certain items at different times than when the items are expensed for book purposes. Items for which this tax treatment applies are called "tax-timing" differences. Normalization treatment eliminates these differences for ratemaking purposes so that income tax expense is based solely on the book income impact of these timing differences. Excess tax depreciation is the only tax timing difference that Staff has normalized in this case.
  - Q. Please explain the tax concept of "flow-through."
- A. Flow-through is the tax treatment that equates the amounts provided by the ratepayers for income tax expense with the amount paid to the taxing authorities by the Company.
  - Q. Please describe the amortization of the deferred income tax component.
- A. The amortization of the deferred income tax component represents the amount of excess deferred income taxes to be flowed back to the ratepayers. The amortization of the deferred income tax component in this case was determined from data provided by the Company in its workpapers.

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excess tax depreciation.

Q.

Please explain the deduction for interest expense and how it was calculated.

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A. Interest expense is calculated by multiplying the jurisdictional rate base by the Staff's calculated weighted cost of debt (4.74%), which is sponsored by Staff witness Roberta McKiddy of the Financial Analysis Department.

This methodology assures that the amount of interest expense used in the calculation of income tax expense, for ratemaking purposes, equals the interest expense the ratepayer is required to provide the Company in rates. Since the revenue requirement recommended by the Staff is based on a rate of return computation, the interest synchronization method allows an interest deduction consistent with the rate of return computation that is applied to rate base.

- Q. Are you aware of any other rate cases where this type of methodology was proposed?
- Yes. This methodology was first utilized by the Staff and adopted by the A. Commission in Kansas City Power and Light Company's 1980 electric rate case, Case No. ER-80-48, and has been used consistently by Staff and adopted by the Commission since that case.
- Q. Please identity the source of the amounts of the deductions for straight line tax depreciation and excess tax depreciation.
- A. The amounts for these items were determined by using historical information and developing a percentage relationship of depreciation taken on Empire's books for financial accounting reporting purposes and Empire's depreciation taken as a deduction in prior tax years. This is known as "basis" differences of the book straight-line depreciation. This percentage relationship was applied to annualized depreciation that was included in Staff's revenue requirement to determine the Missouri jurisdictional straight-line tax

depreciation amount used in the calculation of income tax expense. This amount appears on Schedule 11, Income Tax, on line 7 and is identified as "Tax Depreciation – Straight Line."

The excess tax depreciation amount was determined by subtracting the jurisdictional amount for tax depreciation from tax depreciation straight-line. The amount of excess tax depreciation relates to normalization restrictions that do not allow a current deduction to be taken for income tax relating to accelerated depreciation. Utility customers must wait for the deduction of accelerated depreciation over the life of the asset. Utility companies like Empire benefit from this restriction because the associated deferred taxes provide enhanced cash flow to their operations. The calculation of excess tax depreciation is necessary so the IRS code restriction is not violated. If the restriction was not adhered to, Empire would lose the deduction relating to accelerated depreciation and the customers would lose the benefit of the accumulated deferred taxes which are an offset to rate base. To ensure that the accelerated depreciation is not "lost" as a tax deduction, deferred taxes are provided (calculated) which increases the income tax expense amount customers have to pay in their utility rates. The deferred taxes are accumulated and "flowed" back to customers over the life of the assets generating those deferrals.

The excess tax depreciation amount appears on Schedule 11, Income Tax, line 8 and is identified as "Tax Depreciation – Excess." The amount of deferred taxes relating to the excess tax depreciation is included on line 32 of Schedule 11 and is identified as "Deferred Tax Depreciation."

Q. What causes the basis differences of straight-line depreciation – book basis and straight-line tax depreciation – tax basis?

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A. The book basis of depreciable plant (plant property assets) differs from the tax basis of depreciation plant because, prior to the Tax Reform Act of 1986, specific overhead costs during the construction of the plant assets were capitalized for financial reporting and ratemaking purposes (in other words, included in the book basis of depreciable plant). The overhead costs that were capitalized as part of the construction costs of the plant assets and ultimately included in plant-in-service were capitalized pensions, payroll taxes, property taxes, property insurance and interest on long and short tem debt. For tax purposes, these overhead costs were treated as current tax deductions in the year incurred, instead of being included in the tax basis of the property and, therefore, reflected as a straight-line tax depreciation deduction over a period of time generally equal to the time period used in calculating book depreciation. Therefore, the tax basis of the assets acquired prior to the 1986 Tax Reform Act was less than the book basis because of the capitalization of specific overhead costs for book purposes (both financial accounting and ratemaking) and the deduction of these overhead costs for tax purposes in the current tax year. The tax basis was less for these pre-1986 Tax Reform assets because the company had already taken the capitalized overhead costs as a deduction in prior years for tax purposes resulting in the need to reduce the book basis by these previously taken deductions. However, the 1986 Tax Reform Act eliminated the current deduction for these overhead costs, which resulted in capitalizing these costs for both book and tax purposes.

Essentially, for assets acquired after 1986 Tax Reform Act, the book basis and tax basis are the same. Book depreciation expense and straight-line tax depreciation expense are typically the same amount for assets acquired after 1986.

O. What caused the need to reflect the basis differences in this case?

A. Generally, the Commission allowed "flow-through" treatment of the tax timing differences created by the capitalized overhead costs prior to the 1986 Tax Reform Act. This treatment resulted in the current deduction of the capitalized overhead costs in the income tax expense calculation for ratemaking purposes consistent with the income tax calculation made for tax reporting purposes. Thus, the difference between the book basis for financial reporting and tax basis for tax reporting also existed in the ratemaking process for those companies where the capitalized overhead costs were "flowed-through." Because Empire still has assets on its books that were acquired prior to 1986, these basis differences continue to exist. Using a calculation such as the relationship of book to tax basis gives consideration that certain costs were previously taken as a deduction should not be taken again. To do so would result in the deduction of these costs a second time. Reducing the tax basis removes the previously deducted costs from the tax calculation thereby ensuring that the deductions are not made twice.

- Q. What is "flow-through" treatment of tax timing differences?
- A. Reflecting the tax deduction of tax timing differences consistent with the period used in calculating current income tax expense is commonly referred to as the "flow-through" method. Conversely, reflecting the tax deduction for tax timing differences consistent with the period used for recognizing the cost as an expense for financial reporting purposes is referred to as the "normalization" method.

Staff generally used the "flow-through" method of determining income tax expense for ratemaking purposes. This method was used to give the customers the same deduction as the company took on its tax return. Taking the capitalized overhead costs as a current deduction for ratemaking purposes that were taken as a current deduction in the company's

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calculation of its income taxes ensured that the current utility customers received the tax benefit for these deductions.

The "normalization" method (not typically used in determining utility rates in this state) provided for a "deferral" of the deduction of the timing differences in the ratemaking process. While the companies take the tax deductions of certain costs currently to determine the amount of taxes owed to the IRS, the normalization method does not reflect these current deductions in the ratemaking process. Under normalization, the deductions are deferred and taken over the life of the assets. Generally, income tax expense is higher for ratemaking purposes under normalization than flow-through because of these deferred deductions.

- Q. Please discuss the depreciation deductions to NOIBT.
- A. Tax depreciation, not book depreciation, is the appropriate deduction for tax purposes. Therefore, since book depreciation has already been added back to NOIBT, tax depreciation must be deducted from NOIBT to properly calculate taxable income. Tax depreciation is made up of two components— straight line tax depreciation and excess tax depreciation.
  - Q. Please explain these two components.
- A. Straight line tax depreciation is the equivalent of book depreciation, restated to reflect the tax basis of the related plant in service. Excess tax depreciation is the net difference between accelerated tax depreciation and straight line tax depreciation on property vintages where accelerated depreciation exceeds straight line, and between accelerated tax depreciation and straight line tax depreciation on property vintages where straight line depreciation exceeds accelerated depreciation. Vintage refers to the year plant was originally put into service.

Q.

Please explain the subtraction of deferred income tax from net plant.

A. The balance of deferred income taxes included on Accounting Schedule 2 is composed of the accumulated deferred income tax balances related to contributions in aid of construction (CIAC), pollution control facilities, software costs, depreciation and loss on required debt. The balances of deferred taxes reflect the Missouri jurisdictional balances as of December 31, 2000. Using the balances as of December 31, 2000, is consistent with the treatment of the other components of the Missouri adjusted jurisdictional rate base, including the net plant in service balance as of December 31, 2000.

Q. Referring to your previous testimony regarding the calculation of income taxes on Accounting Schedule 11, the only tax timing difference that was specifically normalized concerned depreciation. What justification exists for the inclusion in rate base of deferred income tax balances related to items that were not specifically normalized in the past?

A. As long as it is intended that a tax timing difference be normalized, one should be indifferent to its inclusion for total tax expense. This is because a tax timing difference can be normalized in one of two ways: 1) The item can be used to determine current taxable income and a deferred income tax expense explicitly calculated on that tax timing difference; or 2) the item can be excluded from the tax calculation. Either way, total income tax is unaffected. Normalization represents a shift between the level of the current and deferred components of total income tax expense.

It is the Staff's opinion that these deferred tax balances are legitimate inclusions for the determination of rate base, since the related tax timing differences have been effectively normalized through exclusion from the tax calculation in the past.

Q. How are the deferred tax balances being funded through the ratemaking

process?

A. The deferred tax balance associated with depreciation is the easiest to understand because the depreciation tax timing difference must be normalized and the deferred tax expense is explicitly set out and included in the cost of service through the ratemaking process.

The deferred income tax balance related to pollution control facilities is, in essence, the same as depreciation. Pollution control facilities are a component of plant in service. This component is classified as an asset that is subject to amortization rather than depreciation. Although the amortization of pollution control facilities is not protected from flow-through treatment, as is depreciation, it has been effectively normalized by its omission from the tax calculation in prior cases.

Likewise, losses on reacquired debt have been normalized by its omission from the tax calculation. However, there is additional support for its inclusion in the determination of rate base. Staff Witness McKiddy has included unamortized losses on reacquired debt in the determination of the cost of debt included in the capital structure. Because the inclusion of the losses on reacquired debt in the capital structure increases the debt cost component in the overall rate of return that the ratepayer will be required to pay through rates, the ratepayers should receive the benefit of the tax savings by using the deferred income tax balance related to the losses on reacquired debt as an offset to rate base.

The deferred tax balance for CIAC differs from the other deferred tax balances in that it increases rate base. When received by the Company, CIAC is used to reduce the booked

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cost of plant in service. For tax purposes, CIAC must be reported as income in the year received and included in the basis of the property for calculating tax depreciation.

# COST OF REMOVAL AND SALVAGE

- Q. What is cost of removal and salvage?
- A. Cost of removal is incurred when utility property is retired from service. Generally, removing property from service causes the utility to incur costs to physically dismantle, tear down or otherwise remove the property from service. Salvage is the residual value or scrap value that some property has when it is removed from utility service. After a piece of property is dismantled or removed from service, utilities can in some instances sell or receive some value for the displaced property. Utilities track the costs relating to removal costs and salvage value on an ongoing annual basis. Typically, removal costs exceed salvage value, resulting in a "net negative salvage" value. The net effect of cost of removal and salvage was included in Staff's determination of the overall revenue requirement.
- Q. How did Staff determine the proper level of cost of removal and salvage value to include in this case?
- A. Staff reviewed the cost of removal and salvage values by year for the period 1990 to 2000. Based on this information, Staff calculated the cost of removal and salvage values based upon a five-year average for the period 1996 through 2000. The result of the five-year average is that Empire incurred net negative salvage value over this period of time. This amount was included in Accounting Schedule 9, Income Statement, on a total company and jurisdictional basis.
- Q. Why did Staff use a five-year average to determine the level of cost of removal and salvage value to include in the revenue requirement?

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A. A five-year average was used because the costs of removal and salvage values fluctuated from year to year for each of the years examined. Using a five-year average for fluctuating costs, such as the net negative salvage amount, removes or smoothes out the differences from one year to the next. Averaging costs for fluctuations is commonly used in the ratemaking process and is consistent with how other costs have been treated in this case.

- Q. Have cost of removal and salvage value been treated this way in prior Empire rate cases?
- A. Not to my knowledge. Typically, cost of removal and salvage value have been reflected in the overall depreciation rate and thus, an amount for these items included in depreciation expense. However, recently Staff has proposed to remove from the depreciation rates the accrual of the removal costs and salvage value. Staff witness Paul W. Adam of the Engineering and Management Services Department is sponsoring Staff's position in this case to remove these items from the accrual of depreciation. His testimony will provide the basis and reasoning for making this change. Consistent with this proposal, Staff has included the cost of removal and salvage value in the cost of service determination as a current expense item rather than part of the depreciation accrual process.
- Is Staff still examining the amount of the cost of removal and salvage value it Q. is including in this case?
- Yes. Staff is reviewing with Empire the question of whether any labor costs may be in the cost of removal amounts in the years included in Staff's five-year average. Staff will continue to examine this matter and propose any adjustments in subsequent testimony that it believes are appropriate and necessary.

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peaking season of 2001.

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### STATE LINE COMBINED CYCLE UNIT

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Q. Is Empire currently constructing new generating capacity?

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A. Yes. Empire is constructing a 500-megawatt combined cycle unit at its State

Line Power Plant site to increase its generating capacity.

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Q. When does Empire expect its combined cycle unit to be operational?

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(Combined Cycle Unit or SLCC unit) will be completed and ready to provide utility service

Empire believes that the State Line Combined Cycle Generating Facility

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by June 1 of this year. If this unit is in-service by June 1, Empire will be able to accredit

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with the Southwest Power Pool its ownership share of 300 megawatts for the summer

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Q. What is Empire's ownership share of the Combined Cycle Unit?

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A. Empire will own 60% of this unit. Empire is the operating partner of the

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Combined Cycle Unit. On July 26, 1999, the Company entered into agreements (Ownership

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Agreement) for the construction, ownership and operation of the Combined Cycle Unit with

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Westar Generating, Inc. (Westar), a wholly owned subsidiary of Western Resources, Inc.

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(Western Resources). The Ownership Agreement provides that Empire will have a 60%

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ownership share, which entitles it to 300 megawatts of the total 500 megawatt combined

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cycle capacity. Westar will own the remaining 40% of capacity, or 200 megawatts of this

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generating facility.

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fuel sourced combustion turbine-generator unit), is being contributed by Empire to be part of

One of Empire's existing generating units, State Line Unit 2 (a 152-megawatt dual

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the Combined Cycle project; i.e., State Line Unit 2 will be converted into part of the

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Combined Cycle Unit.

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Plant?

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Q. Will Westar own 40% of the total megawatt capacity at State Line Power

A. No. Westar only acquired a 40% interest in the Combined Cycle Unit. The State Line Power Plant was originally two Westinghouse manufactured and installed combustion turbines identified by Empire as State Line Unit 1 and Unit 2. Unit 1 is a 101megawatt dual fuel sourced combustion turbine (primary fuel source is natural gas, with oil as a secondary fuel) that Empire placed in service in June 1995. Unit 2 was a 152-megawatt dual fuel sourced combustion turbine (primary fuel source is natural gas, with oil as a secondary fuel) that Empire placed in service in June 1997. Prior to the Ownership Agreement with Westar, Empire solely owned both these combustion turbine units.

The Combined Cycle Unit under construction at the State Line Power Plant is made up of the original Unit 2 and an identical newly built 150-megawatt combustion turbine. In addition, a 200-megawatt steam turbine generator will operate as part of the combined cycle unit, using heat generated by the two combustion turbine generator units that otherwise would be wasted. When these two 150-megawatt combustion turbines and the 200-megawatt steam turbine generator are operating in combined cycle, they should provide a total generating capacity of 500 megawatts. State Line Unit 1 remains a separate generating unit owned 100% by Empire.

Westar acquired 40% of the original Unit 2 at Empire's net book value. The Commission approved the transfer in Case Nos. EM-2000-145 and EM-2000-153. As part of the Ownership Agreement, Empire has rebuilt the original 1997 Unit 2 to a "like-new" standard. All of the costs associated with the newly constructed combustion turbine and the steam turbine generator are shared in proportion to Empire's and Westar's ownership Q.

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interests. Empire will be entitled to 60% of the generating capacity of this unit with Westar

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Will Westar own any part of State Line Unit 1?

being entitled to the remaining 40% of the generating capacity.

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referred to as "common facilities" used in the operation of both State Line Unit 1 and the

No. Empire will remain the sole owner of Unit 1. But there are facilities,

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Combined Cycle Unit, such as land and buildings, which will be allocated between Empire

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and Westar based upon the total generating capacity of approximately 600 megawatts at State

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Line Power Plant (Unit 1, 101 megawatts, plus Combined Cycle, 500 megawatts).

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Q. Is the combined cycle unit a peaking unit?

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A. No. When operating in combined cycle mode, this unit will be efficient

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enough to be considered an intermediate generating facility. While the two combustion

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turbine-generators can be operated in what is referred to as "simple cycle" or "independent

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mode," the optimal and most efficient mode of operation is when the two, 150-megawatt combustion turbine-generators are running in tandem and the heat recovery system is

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capturing the exhaust heat and converting it to steam. The steam is then used to power the

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200-megawatt steam turbine-generator. The heat recovery system for each combustion

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turbine-generator is known as the heat recovery steam generator (HRSG). There is a separate

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HRSG unit for each of the two combustion turbine-generators. To obtain the optimal

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operating performance, the combined cycle will utilize the capacity from the two 150-

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megawatt combustion turbines and the steam flow to power the 200 megawatt steam turbine,

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giving the Combined Cycle Unit a total operating capacity at full load of 500-megawatts.

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Q. What fuel sources will the Combined Cycle Unit use?

# Direct Testimony of Cary G. Featherstone

A. The Combined Cycle Unit will operate only on natural gas. While the original State Line Unit 2 could operate on either natural gas or oil, Empire chose to convert the original Unit 2 to natural gas-fired only when it decided to incorporate that unit into the combined cycle unit. The new 150-megawatt combustion turbine-generator is designed to operate only on natural gas.

Q. Has Empire acted in the role of general contractor during the construction of the State Line Combined Cycle Unit?

A. Yes. Empire, as the operating partner, can be thought of as the general contractor for the Combined Cycle Unit construction project. Empire retained Black and Veatch Corporation (Black & Veatch) to provide management and oversight to the construction of the Combined Cycle Unit, but in contrast to its role in prior construction projects at State Line, Empire chose to take on the hands-on, day-to-day oversight of the construction of this generating unit. Empire had the responsibility of obtaining the equipment and the installation contractors needed to get the new unit operational on schedule and within budget. This is in contrast to its role in prior plant construction at the State Line Power Plant where earlier units were delivered to Empire on a "turn-key" basis. A turn-key project is one that is purchased through a contract for the equipment and installation.

Empire stated the following with regard to its role on this project:

State Line CC [Combined Cycle] is being developed in a different fashion than State Line 1 or 2. It is being developed in what Black & Veatch refers to as an owners engineer role. In an owners engineer development, Black & Veatch provides engineering for the CC plant and assists with construction management. As part of the construction management role, Black & Veatch assists with procurement of equipment and labor for the project, and provides expert on site construction management services.

[Source: Data Request No. 221]

(	Q.	Did Black & Veatch provide only project management and oversight?
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A.	No.	The	contract signed by Black & Veatch, dated January 15,	1999, also
identified t	hat it w	ould	provide engineering services in addition to the project m	nanagemen
and oversig	ght func	tion.	The Black & Veatch contract was for an amount **	
	** [	Source	rce: Black & Veatch contract B-1].	

The fixe	ed contract amo	ount for engine	ering services port	ion of the Blac	k & Veatch
scope of work	was **	** and the	construction mana	gement scope	of work was
**	** The final	current estima	te of the Black &	Veatch scope	of work is
**	** broken	out for engin	eering **	** and	construction
management of	·**	**			

Q. Did Empire assume the role of general contractor in the construction of its other generating units?

A. No. Empire's most recent construction of generating facilities occurred in 1995 and 1997 with the completion of the State Line Units 1 and 2 combustion turbines. Both of these generating units were built as "turn-key" projects. Units 1 and 2 were purchased as "packaged" units from the combustion turbine manufacturer, Siemens-Westinghouse (Westinghouse). While Empire provided oversight, they were not responsible for the ultimate construction of State Line Units 1 and 2. By contrast, in its role as general contractor for the construction of the Combined Cycle Unit, Empire assumed overall responsibility for acquiring the necessary equipment and overseeing and ensuring that the contractors install the facilities on schedule and within budget. Empire described the Units 1 and 2 projects as follows:

State Line 1 was constructed on a Greenfield site in a partial turn-key fashion. Westinghouse provided a turn-key contract on the combustion turbine power island. Westinghouse employed contractors for engineering and construction. Empire undertook site procurement, fuel procurement, office space development, oil tank procurement and erection, fire water system, as well as numerous other "outside" the power island risks. Empire employed Black & Veatch to assist in the design of some of the systems outside of the power island. Ultimately, Empire was responsible for the unit meeting power pool load requirements.

State Line 2 was constructed in a similar fashion to State Line 1, except that the site was no longer a Greenfield site.

[Source: Data Request No. 221]

- Q. What was the total cost of the State Line Combined Cycle Unit?
- A. Since the unit is still under construction, the final cost is unknown at this time.

  However, Empire has projected the final cost to be approximately \*\*\_\_\_\*\* million (Data Request No. 220). Empire's 60% ownership share of this amount is \*\*\_\_\_\*\*million.
  - Q. Is this the original cost estimate of the Combined Cycle Unit?
- A. No. Originally, the Combined Cycle Unit's estimated cost was identified as

  \*\*\_\_\_\*\*million (Data Request No. 220). Empire's 60% share of this original estimate was

  \*\*\_\_\_\*\*million. The original estimate was developed using the contract amounts from
  the major equipment suppliers and contractors to construct this unit.
  - Q. Why are the current final cost projection and the original estimate different?
- A. Empire experienced construction problems and schedule delays that resulted in cost overruns and schedule slippage. Installation of the two HRSGs caused the most significant cost overruns and schedule delays.
  - Q. What caused the schedule delays in the installation of the HRSGs?

- A. The original contractor who was to construct the HRSGs was unable to perform the terms of the contract to the owners' satisfaction and the owners made the decision to relieve that contractor of its obligation under the original contract. This contractor was only on site at the State Line facilities for a fraction of the original planned schedule from January to early April 2000. During that time, Empire encountered numerous problems with the scheduling, staffing and managing of the HRSG installation. Upon a recommendation made by Black & Veatch, Empire terminated the contract under the "default provision" of the contract for the HRSG installation. The original HRSG contract was signed on December 3, 1999.
  - Q. When did the original contractor start working on the HRSGs installation?
- A. This contractor commenced work in January 2000 and was relieved of its duties under the terms of the HRSG erection contract in early April 2000.
  - Q. When was the work on the HRSGs scheduled to be completed?
- A. Under the terms of the contract, the "Guaranteed Start and Completion of Work Dates" were January 3, 2000, with a final completion date for all work by January 19, 2001.
- Q. Following the dismissal of the original contractor, who did Empire contract with to install the HRSGs?
- A. Empire contracted with Nooter Construction Company (Nooter Construction)

  a subsidiary of Nooter/Eriksen, the equipment supplier of the HRSGs, to construct the

  HRSGs through a separate contract after the dismissal of the original contractor. Empire met

  with Nooter/Eriksen on April 12, 2000, and following that meeting submitted a \*\*

  \*\* to complete the erection of the HRSGs. On April

	Cary G. Featherstone
1	24, 2000, Empire agreed to a contract with Nooter/Eriksen to install the HRSGs. However,
2	Nooter/Eriksen did not sign the contract until October 5, 2000 and Empire did not sign it
3	until October 9, 2000.
4	Q. Were the terms of the Nooter/Eriksen contract to install the HRSGs the same
5	terms as those of the original HRSG contract?
6	A. No. Both because work was behind schedule and because Nooter/Eriksen
7	began work on Empire's termination of the original contract with the original contractor,
8	Empire did not rebid installation of the HRSGs. Nooter/Eriksen began work immediately
9	upon the termination of the original contract, on a "time and materials" basis; i.e., Empire
10	agreed to pay Nooter/Eriksen based on the man-hours and materials costs incurred by
11	Nooter/Eriksen to install the HRSGs. Empire's total cost to install the HRSGs was
12	approximately ****. This represented a cost overrun of approximately **
13	** from the original contract. (Data Request No. 220). Because the scheduling of
14	other work depended upon scheduling dates for installing the HRSGs, the delay in scheduling
15	dates for the HRSGs caused complications and scheduling delays in other aspects of the
16	Combined Cycle Unit construction project. Thus, the **** cost overrun is likely
17	not the total cost overrun for the Combined Cycle construction project resulting from the
18	installation of the HRSGs.
19	Q. Why did cost overruns occur in the installation of the HRSGs?
20	A. **
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	Direct Testimony of Cary G. Featherstone
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	Cary G. Featherstone
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17	Q. Would you please identify some of the specific problems with the original
18	contractor had installing the HRSGs?
19	A. The following is a list of some of the performance problems Empire and
20	Black & Veatch considered the original contractor had during the HRSGs phase of
21	construction and which Empire discussed with the original contractor at a meeting on
22	April 5, 2000, also attended by Black & Veatch. On March 31, 2000, Empire had submitted
23	to the original contractor a letter indicating that Empire considered the original contractor in

	Direct Testimony of Cary G. Featherstone
1	default of contract. On April 5, 2000, Empire noted the following items in its meeting with
2	the original contractor:
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[Source: Notes of William C. Howell of April 6, 2000, meeting of representatives of Empire, Black & Veatch and the original HRSG contractor. Highly Confidential Schedule 2.]

- Q. How much was the original contractor paid for work done under the HRSG installation contract?
- A. The exact amount paid to the original contractor is not currently known by Staff. There is an outstanding data request seeking this information. However, there was a dispute for several months between the Combined Cycle owners and the original contractor as to each party's respective rights and obligations under the original contract, including Empire's right to terminate the contract under the default provision of the contract. On January 18, 2001, Empire ultimately paid \*\*\_\_\_\_\_\_\*\* to the original contractor, in a settlement reached during arbitration by the parties (Data Request No. 258). The original

i	HRSG installation contract had a provision for arbitrating disputes. While the origina
2	contractor initiated the arbitration process after Empire terminated it, the parties reached a
3	settlement of their dispute. The parties entered into an agreement entitled "Mutua
4	Settlement Agreement" that resolved all disputes arising from the failure of the original
5	contractor to install the HRSGs as provided for under the contract. Apparently, the owners
6	believed it was in their best interests to pay the settlement amount rather than pursue other
7	options.
8	Q. Is the settlement amount included in the cost overrun figure for the installation
9	of the HRSGs you identified earlier?
10	A. Yes. The ** ** cost overrun of the HRSGs installation includes
11	the **** settlement with the original HRSG installation contractor.
12	Q. Does Staff believe that the cost overruns or the settlement amount paid to the
13	original installation contractor should be included in the final cost of the Combined Cycle
14	Unit for ratemaking purposes?
15	A. No. Staff believes these amounts were imprudently incurred and resulted
16	from contractor error, and that the expenditures associated with the construction schedule
17	delays and cost overruns, including settlement of the original HRSG installation contract,
18	should not be included in Empire's rate base investment and, thus, recovered from Empire's
19	customers.
20	Q. What process did Empire use to award the original HRSG installation
21	contract?
22	A. Empire, through Black & Veatch, sought bid proposals from contractors to
23	install the HRSGs. Empire received three bids. The bids ranged from ****

	Cary G. Featherstone
1	which was the low bid amount from the contractor originally awarded this construction
2	component of the Combined Cycle Unit construction project, to the high bid of **
3	**. Empire awarded the contract to install the two HRSGs to the low bidder for
4	****
5	Q. For ratemaking purposes, should the Commission consider any expense that
6	Empire incurred to install the HRSGs over the low bid price?
7	A. While a case could be made for holding Empire to this amount, certainly the
8	possibility exists that the contractor "under-bid" the project. Even if the original contract
9	price was too low, the other bids ranging from **** could be used to
10	identify the prudent cost of installing the HRSGs. If these amounts were used instead of the
11	original contract price, the cost overrun would be **** respectively,
12	compared with cost overrun of **** relating to the low bid amount. Using any of
13	these original three bid amounts received by the owners for the installation of the HRSGs
14	would still result in cost overruns that Staff believes Empire's customers should not be
15	required to pay in rates.
16	Q. Was the original contract amount to install the HRSGs the original estimate?
17	A. No. The original contract amount of **** to install the HRSGs
18	was approximately **** over the original estimate. The original estimate
19	developed by Black & Veatch to install the two HRSGs was approximately ****
20	(Data Request No. 220). Even before construction on the HRSGs began, the low contract bid
21	was over the original estimate that the engineers overseeing the project had made for the
22	installation of the HRSGs.
23	Q. Did the original contract allow for termination of the contractor?

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Did Black & Veatch certify the original HRSG contractor to be in default of

On March 31, 2000, Black & Veatch provided Empire a letter recommending that the original contractor be placed in "Default of Contract" in accordance

#### Cary G. Featherstone 1 with the guidelines set out in GC.14. - Contract Termination - Contractor Default. Highly Confidential Schedule 3 is a copy of the certification letter from Black & Veatch to Empire. 2 On March 31, 2000, Empire notified the original contractor by letter that the original 3 4 contractor was in default of the HRSG contract. Highly Confidential Schedule 4 is a copy of 5 the Empire termination notice. Empire's letter stated the reasons for termination of the contract: 6 7 8 9 10 11 12 13 Did the original contractor respond to Empire's termination notice? 14 Q. 15 A. Yes. On April 5, 2000, the contractor provided a response to Empire (Highly 16 Confidential Schedule 5) indicating certain conditions that must exist for the contractor to 17 continue work on the HRSGs installation. After receipt of the April 5, 2000, letter, Empire 18 terminated the contract on April 6, 2000 (Highly Confidential Schedule 6). In response to 19 the April 6, 2000, termination letter from Empire, the original contractor sent a follow-up 20 letter to Empire on April 10, 2000, stating its position that \*\* 21 \*\* (Highly Confidential Schedule 7) 22 23 Why was the dispute between the owners and the original contractor Q. arbitrated? 24 25 A. The original contract provided for arbitration of disputes between the owners 26 and the contractor. It was the obligation of the parties to initiate arbitration to attempt to

Direct Testimony of

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resolve any of their disputes and claims.

[Source: original HRSG Erection Contract, page GC-32]

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In the above reference to the arbitration proceedings, the Combined Cycle owners would be Party B in this matter, while the original contractor for the installation of the two HRSGs would be Party A.

Q.

Unit?

A. Yes. During the course of the construction of the Combined Cycle Unit, the owners increased the hourly wage rate and benefits paid to craft workers. This was done to attract and keep the craft labor force working on the project. The craft workforce required to construct the Combined Cycle Unit included boilermakers, pipe fitters, welders, electricians and other highly skilled workers. The owners used a variety of incentives to keep the workforce intact and to have the necessary labor available. The cost of these incentives contributed significantly to the cost overruns of the Combined Cycle Unit.

Did other issues also cause cost overruns for the State Line Combined Cycle

Q. What incentives were used to attract craft labor?

A. The original estimate for the Combined Cycle Unit used labor rates derived from the local labor market of Joplin, Missouri. Early in the construction, the owners decided to increase the craft labor rate to the level for the local labor market in Springfield, Missouri. While this had a positive effect initially in attracting workers, it was determined that additional incentives were needed in order to keep the craft workforce on the project. These additional incentives included providing bonuses for attendance and quality of work performance.

Q. What is the estimate that the increases in craft labor rates caused to the final plant cost?

A. Empire estimates that the additional labor rates for craft workers resulted in a

\*\* cost overrun above the original estimate.

Q. Does Staff believe that the additional cost related to craft labor rates should be disallowed from the final cost of the State Line Combined Cycle Unit recovered in rates?

A. Yes, until such time as the Company is able to more specifically identify the amounts of this overrun and make a sufficient showing that the cost overrun was unavoidable. While no cost overrun is desirable, some may be inevitable. If that proves to be true in this case, Staff will consider including reasonably and prudently incurred costs relating to attracting and keeping skilled craft labor on the project. The original estimate was based upon an assumption that the owners could attract the necessary craft labor at a local Joplin, Missouri labor rate. Certainly, this would have been better from an economic perspective, but if it turned out that the estimate assumed an unrealistic and unattainable labor rate, then the final costs of the Combined Cycle Unit should include some or all of these costs overruns for ratemaking purposes.

Throughout the country for the last few years, the electric utility industry has been constructing additional capacity. This includes construction of combustion turbines similar to those that Empire has brought into service in the recent past, and generating units like the Combined Cycle Unit which it hopes to complete in June. The increase in construction activity by the utility industry has increased the demand for the limited supply of good quality craft workers with highly specialized construction skills. Empire has indicated that during the course of the construction of the Combined Cycle Unit at State Line, there was a shortage of these highly skilled craft workers. This may have contributed to the craft labor cost overrun.

- Q. How has Staff treated the costs associated with the State Line Combined Cycle Unit in its current revenue requirement?
- A. Staff continues to review material regarding the cost overruns for this power plant. The Combined Cycle Unit is not in service and is still under construction as of the

#### Direct Testimony of Cary G. Featherstone

April 3, 2001 filing date of Staff's direct testimony. This unit is scheduled to be completed and in service by June 1, 2001, and, accordingly, the costs associated with this plant are not final. Staff's direct case has been developed using a test year ending December 31, 2000, with certain known and measurable changes that have occurred prior to the April 3, 2001 filing date. None of the Combined Cycle Unit costs have been included in Staff's initial revenue requirement determination. However, Staff has attempted to estimate certain costs relating to the Combined Cycle Unit assuming that the plant will be completed as scheduled and that it meets Staff's in-service criteria. Staff has not included the cost overruns in its current estimates of the cost of the State Line Combined Cycle Unit, but has developed the estimated revenue requirement for the true-up based on the original cost estimate for this unit of \*\*\_\_\_\_\_\_\* of which Empire's total company share is 60%, or \*\*\_\_\_\_\_\_\*\*, excluding allowance for funds used during construction (AFDC).

- Q. Why has Staff excluded the cost overruns in the initial estimates of the State Line Combined Cycle Unit?
- A. Since these are preliminary quantifications, Staff believes it would be inappropriate to include these cost overruns in Empire's revenue requirement until such time that quantification is adequately determined and causation is adequately explained and determined to be beyond the reasonable control of Empire. The Company bears the responsibility and assumes the risk of justifying any cost overruns above the final original amounts upon which the contracts are based. Empire should be held to these original contracted amounts, but should be given sufficient time to quantify and justify the cost overruns. It is the Company's burden to identify, quantify and explain any cost overruns above the contracted amounts.

Q. Has Empire provided, at the time of Staff's direct filing, sufficient justification for including in its revenue requirement the cost overruns?

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A. No. Staff has submitted to Empire numerous data requests relating to the Combined Cycle Unit's cost overruns. While Staff has received responses to some of the data requests and has reviewed them, such as responses regarding the major equipment and contractor contracts, there still are many unresolved and unanswered questions that Staff must examine before it can make a complete and final determination as to an appropriate disposition of the cost overruns relating to this unit. As discussed earlier in my testimony, there were significant cost overruns relating to the installation of the HRSGs for the steam turbine-generator. While there are other cost overruns that occurred with other individual contracts, this was by far the most significant cost overrun. It related primarily to the inability of the original contractor to keep the schedule that would meet the specifications of the contract. Shortly after the initial on-site construction of the HRSGs, this contractor was removed and replaced at an increase in contract price of approximately \*\*\_\_\_\_\*. Staff continues to examine documents and will continue to discuss with the Company the appropriate treatment of this cost overrun but based on what has been presented to the Staff to date, these costs should not be allowed recovery by the Commission.

Q. Since Staff is unable to make a definitive determination at the time of its direct filing regarding the cost overruns, what process does Staff propose in order to further address this issue at a later time?

A. As noted earlier, none of the expenditures for the Combined Cycle Unit have been included in Staff's initial revenue requirement determination. Nevertheless, Staff will take a final position on this issue at the true-up phase, when it can identify and sort out the

Page 40

problems that occurred in the construction of the Combined Cycle Unit. While the in-service date is not scheduled until June, Staff believes it is important to identify these matters fully in the Staff's direct testimony, and not wait for a later phase of the case. Hopefully, the Staff will have sufficient time to address this issue within the schedule the Commission has established for this case if Empire now chooses to present its case in its rebuttal testimony or at the true-up phase of this case.

Empire should have addressed these matters in its direct testimony but chose not to do so. Undoubtedly, Empire will address these matters in its rebuttal testimony. As a consequence, the time permitted by the procedural schedule for surrebuttal testimony may not be adequate for the Staff to respond on these matters.

The Commission, through its Order issued on January 4, 2001, authorized a true-up audit of material and significant events including costs relating to the Combined Cycle Unit through June 30, 2001, supported by invoices through July 31. The true-up testimony reflecting updates to the initial revenue requirement filed in April will be presented to the Commission on August 7, 2001. The true-up hearings are scheduled for August 22 and 23, 2001. At that time, certain issues concerning the Combined Cycle Unit may be presented to the Commission. These issues will likely include whether the Combined Cycle Unit meets the in-service criteria for the "fully operational and used for service" standard and, also, an identification of the final costs relating to the power plant. Thus, the Commission will have the opportunity to hear testimony on potential Combined Cycle Unit cost overrun issues during the scheduled May-June hearings, as well as those scheduled for August on cost overruns.

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Q. How will the additional information that Staff will examine subsequent to the April 3 direct filing be included in this case?

A. Staff's rebuttal and surrebuttal testimonies will be used to provide information as it becomes known. Supplemental testimony also may be necessary. Finally, information considered relevant to the final cost of the Combined Cycle Unit will be included in the true-up audit testimony, for the August hearings.

Q. Are some of the cost overruns presently unexplained?

A. Yes. Staff used the original contract estimate of \*\* \_\_\_\_\_\_\*\*. This amount will be subject to true-up as additional information becomes known. As Empire explains the causes that led to the final cost to exceed the original contract estimate and the reasons for the cost overruns, Staff will consider the costs associated with each cause for inclusion in rate base. Staff believes that the original contract estimate is a prudent project cost; therefore it is the Company's obligation to satisfactorily support including in rate base costs that exceed the original contract estimate. Any difference between the original contract estimate and the final completion costs should not be included in rate base by the Commission until such time as the Company has provided an adequate explanation, with support that demonstrates the Company prudently incurred the costs.

Q. What is the amount of current unexplained differences?

A. Highly Confidential Schedule 8 identifies the original contract estimate and final construction estimate on a Total Project and Missouri Jurisdictional basis. This schedule identifies the cost overruns of the project. Some of these overruns are currently unexplained differences and those are identified on both a Total Project and Missouri Jurisdictional basis. The current amount of unexplained differences is \*\*\_\_\_\_\_\*\* on

a Missouri Jurisdictional basis. If appropriate explanations and support are provided for the cost overruns, Staff will reduce the quantification of the unexplained amounts and the Staff will make a determination as to the recovery in rates of these overrun amounts. The circumstances surrounding the cost overruns will be evaluated and a recommendation will be made regarding any disallowances over the amount of the disallowance for the HRSGs construction costs.

However, Staff believes that even the amount of cost overruns that are shown to be "explained" on Schedule 8 should not be reflected in rates until further justification and explanation for these variances is provided by Empire.

- Q. Do the above amounts include AFDC?
- A. No. None of the amounts that appear in testimony or schedules attached to the testimony include AFDC. AFDC is an amount of carrying costs (return on investment) while the unit is under construction. Typically, the costs relating to AFDC are added to the other costs (capitalized) of the plant investment and recovered over the life of the asset through depreciation.
- Q. Will AFDC need to be considered on any disallowed costs of the Combined Cycle Unit?
- A. Yes. Any amount of the Combined Cycle Unit's costs that Staff recommends not to be included for recovery in rates, will have to have AFDC added to the total disallowed amount.
- Q. How do the other Staff witnesses testimony regarding the Combined Cycle Unit relate to this testimony?

A. Staff witness Oligschlaeger provides testimony on the treatment of cost

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overruns in previous cases and the Commission's recognition of cost overruns.

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construction industry and those that were used on the Combined Cycle Unit project. He also

Staff witness Elliott provides a discussion on the types of contracts used in the

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identifies the process used to request change in scope and design and, ultimately, the costs of

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the fixed contracts.

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Q. Is there information that is still outstanding relating to the Combined Cycle

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Unit's cost overruns?

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A. Yes. At the time of this filing there were numerous data requests outstanding.

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There are other questions that need to be requested of Empire as follow-up to responses to

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several data requests already received. Consequently, additional information will be

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reviewed by Staff and provided to the Commission as necessary.

# TEST POWER FOR THE STATE LINE COMBINED CYCLE UNIT

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Q. What is test power?

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A. Test Power is the amount of electricity that a unit generates during its

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"testing" phase of construction. Every power plant construction project like the Combined

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Cycle Unit requires that certain tests be performed before the unit is completed and deemed

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to be in-service. Power plants are comprised of extremely complex and sophisticated pieces

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of machinery that require a great deal of oversight to ensure that the units are operating

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properly and in accordance with contract specifications when brought on line. Testing of the

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Q. How is the test power accounted for on the Company's books?

unit is essential so the owners know the unit will work properly and as contracted for.

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A. Test power is identified through daily transactions that support the incremental difference between what the Company's fuel costs would be absent the new generating unit and the fuel costs associated with the operation of the new unit. Typically, fuel costs associated with the testing of the new unit will be capitalized, or added to the cost of plant investment. The test power amounts are recovered over the useful life of the generating plant through depreciation expense.

- Q. Will Empire incur additional test power costs relating to the tests that Staff believes are necessary for the determination of whether the unit is fully operational and used for service?
- Yes. Staff expects that Empire will incur additional costs relating to tests that A. are required as part of meeting the Staff's in-service criteria. To the extent that these additional costs are reasonable and prudently incurred, the Staff will recommend that Empire include the test power costs in the plant-in-service accounts for the Combined Cycle Unit and recover the investment over the useful life of the asset.

Staff expects Empire to maintain the necessary records on a daily basis to allow a review of the incremental costs relating to the test power amounts. Staff will examine this information and make a determination as to the reasonableness of the test power costs and the quantification of these costs to be included as part of the Combined Cycle Unit.

- Q. Will Staff include test power in its determination of Combined Cycle Unit costs?
- Yes. Staff will review the level of test power Empire identifies and supports A. respecting a reasonable and prudent amount for this item. This amount is expected to be capitalized and included as part of plant in service for the Combine Cycle Unit.

Direct Testimony of Cary G. Featherstone

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- 1 Q. Does this conclude your direct testimony?
  - 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. F	EATHERSTONE			
STATE OF MISSOURI ) ss. COUNTY OF COLE )				
•				
Cary G. Featherstone, being of lawful age, on his oath states: that he has participated in the preparation of the foregoing Direct Testimony in question and answer form, consisting of pages to be presented in the above case; that the answers in the foregoing 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 day of April 2001.				
	ne Al Mart			

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

## Cary G. Featherstone

## SUMMARY OF RATE CASE INVOLVEMENT

<u>Year</u>	Case No.	<u>Utility</u>	Type of Testimony	Disposition
1980	Case No. ER-80-53	St. Joseph Light & Power Company (electric)	Direct	Stipulated
1980	Case No. OR-80-54	St. Joseph Light & Power Company (transit)	Direct	Stipulated
1980	Case No. HR-80-55	St. Joseph Light & Power Company (industrial steam)	Direct	Stipulated
1980	Case No. GR-80-173	The Gas Service Company (natural gas)	Direct	Stipulated
1980	Case No. GR-80-249	Rich Hill-Hume Gas Company (natural gas)	No Testimony filed	Stipulated
1980	Case No. TR-80-235	United Telephone Company of Missouri (telephone)	Direct Rebuttal	Contested
1981	Case No. ER-81-42	Kansas City Power & Light Company (electric)	Direct Rebuttal	Contested
1981	Case No. TR-81-208	Southwestern Bell Telephone Company (telephone)	Direct Rebuttal Surrebuttal	Contested
1981	Case No. TR-81-302	United Telephone Company of Missouri (telephone)	Direct	Stipulated
1981	Case No. TO-82-3	Investigation of Equal Life Group and Remaining Life Depreciation Rates (telephone depreciation case)	Direct	Contested
1982	Case Nos. ER-82-66 and HR-82-67	Kansas City Power & Light Company (electric & district steam heating)	Direct Rebuttal Surrebuttal	Contested
1982	Case No. TR-82-199	Southwestern Bell Telephone Company (telephone)	Direct	Contested
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<u>Year</u>	Case No.	<u>Utility</u>	Type of <u>Testimony</u>	Disposition
1983	Case No. EO-83-9	Investigation and Audit of Forecasted Fuel Expense of Kansas City Power & Light Company (electric forecasted fuel true-up)	Direct	Contested
1983	Case No. ER-83-49	Kansas City Power & Light Company (electric)	Direct Rebuttal Surrebuttal	Contested
1983	Case No. TR-83-253	Southwestern Bell Telephone Company (telephone)	Direct	Contested
1984	Case No. EO-84-4	Investigation and Audit of Forecasted Fuel Expense of Kansas City Power & Light Company (electric forecasted fuel true-up)	Direct	Contested
1985	Case Nos. ER-85-128 and EO-85-185	Kansas City Power & Light Company (electric)	Direct	Contested
1987	Case No. HO-86-139	Kansas City Power & Light Company (district steam heating-	Direct Rebuttal Surrebuttal	Contested
1988	Case No. TC-89-14	discontinuance of public utility) Southwestern Bell Telephone Company (telephone complaint case)	Direct Surrebuttal	Contested
1989	Case No. TR-89-182	GTE North, Incorporated (telephone)	Direct - Rebuttal Surrebuttal	Contested
1990	Case No. GR-90-50	Kansas Power & Light - Gas Service Division (natural gas)	Direct	Stipulated
1990	Case No. ER-90-101	UtiliCorp United Inc., Missouri Public Service Division (electric)	Direct Surrebuttal	Contested

<u>Year</u>	Case No.	<u>Utility</u>	Type of Testimony	Disposition
1990	Case No. GR-90-198	UtiliCorp United, Inc., Missouri Public Service Division (natural gas)	Direct	Stipulated
1990	Case No. GR-90-152	Associated Natural Gas Company (natural gas)	Rebuttal	Stipulated
1991	Case No. EM-91-213	Kansas Power & Light - Gas Service Division (natural gas acquisition/merger case)	Rebuttal	Contested
1991	Case Nos. EO-91-358 and EO-91-360	UtiliCorp United Inc., Missouri Public Service Division (electric accounting authority orders)	Rebuttal	Contested
1991	Case No. GO-91-359	UtiliCorp United Inc., Missouri Public Service Division (natural gas)	Memorandum Recommendation	Stipulated
1993	Case Nos. TC-93-224 and TO-93-192	Southwestern Bell Telephone Company (telephone complaint case)	Direct Rebuttal Surrebuttal	Contested
1993	Case No. TR-93-181	United Telephone Company of Missouri (telephone)	Direct Surrebuttal	Contested
1993	Case No. GM-94-40	Western Resources, Inc. and Southern Union Company (natural gas sale of Missouri property)	Rebuttal	Stipulated
1994	Case No. GM-94-252	UtiliCorp United Inc., acquisition of Missouri Gas Company and Missouri Pipeline Company (natural gasacquisition case)	Rebuttal 	Contested
1994	Case No. GA-94-325	UtiliCorp United Inc., expansion of natural gas to City of Rolla, MO (natural gas certificate case)	Rebuttal	Contested
1995	Case No. GR-95-160	United Cities Gas Company (natural gas)	Direct	Contested
1995	Case No. ER-95-279	Empire District Electric Company	Direct	Stipulated Schedule 1-3

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<u>Year</u>	Case No.	<u>Utility</u>	Type of Testimony	<b>Disposition</b>
		(electric)		
1996	Case No. GA-96-130	UtiliCorp United, Inc./Missouri Pipeline Company (natural gas certificate case)	Rebuttal	Contested
1996	Case No. EM-96-149	Union Electric Company merger with CIPSCO Incorporated (electric and natural gas-acquisition/merger case)	Rebuttal	Stipulated -
1996	Case No. GR-96-285	Missouri Gas Energy Division of Southern Union Company (natural gas)	Direct Rebuttal Surrebuttal	Contested
1996	Case No. ER-97-82	Empire District Electric Company (electric interim rate case)	Rebuttal	Contested
1997	Case No. EO-97-144	UtiliCorp United Inc./Missouri Public Service Company (electric)	Verified Statement	Commission Denied Motion
1997	Case No. GA-97-132	UtiliCorp United Inc./Missouri Public Service Company (natural gas—certificate case)	Rebuttal	Contested
1997	Case No. GA-97-133	Missouri Gas Company (natural gas—certificate case)	Rebuttal	Contested
1997	Case Nos. EC-97-362 and EO-97-144	UtiliCorp United Inc./Missouri Public Service (electric)	Direct	Contested
1997	Case Nos. ER-97-394 and EC-98-126	UtiliCorp United Inc./Missouri Public Service (electric)	Direct Rebuttal Surrebuttal	Contested
1997	Case No. EM-97-395	UtiliCorp United Inc./Missouri Public Service (electric-application to spin-off generating assets to EWG subsidiary)	Rebuttal	Withdrawn

Year	Case No.	<u>Utility</u>	Type of <u>Testimony</u>	Disposition
1998	Case No. GR-98-140	Missouri Gas Energy Division of Southern Union Company (natural gas)	Testimony in Support of Stipulation And Agreement	Contested
1999	Case No. EM-97-515	Kansas City Power & Light Company merger with Western Resources, Inc. (electric acquisition/ merger case)	Rebuttal	Stipulated (Merger eventually terminated)
2000	Case No. EM-2000-292	UtiliCorp United Inc. merger with St. Joseph Light & Power Company (electric, natural gas and industrial steam acquisition/ merger case)	Rebuttal	Contested
2000	Case No. EM-2000-369	UtiliCorp United Inc. merger with Empire District Electric Company (electric acquisition/ merger case)	Rebuttal	Contested

## AUDITS WHICH WERE SUPERVISED AND ASSISTED:

Year	Case No.	<b>Utility</b>
1986	Case No. TR-86-14 (telephone)	ALLTEL Missouri, Inc.
1986	Case No. TR-86-55 (telephone	Continental Telephone Company of Missouri
1986	Case No. TR-86-63 (telephone)	Webster County Telephone Company
1986	Case No. GR-86-76 (natural gas)	KPL-Gas Service Company
1986	Case No. TR-86-117 (telephone)	United Telephone Company of Missouri
1988	Case No. GR-88-115 (natural gas)	St. Joseph Light & Power Company
1988	Case No. GR-88-116 (industrial steam)	St. Joseph Light & Power Company

# SCHEDULES 2 THROUGH 8 ARE DEEMED TO BE

# HIGHLY CONFIDENTIAL

# IN THEIR ENTIRETY