

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:

MoPSC Staff

Type of Exhibit:

Direct Testimony

Case No.:

ER-2001-299

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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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Service Commission**

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DIRECT TESTIMONY

OF

CARY G. FEATHERSTONE

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2001-299

Q. Please state your name and business address.

A. Cary G. Featherstone, 3675 Noland Road, Independence, Missouri.

Q. By whom are you employed and in what capacity?

A. I am a Regulatory Auditor with the Missouri Public Service Commission
(Commission).

Q. Please describe your educational background.

A. I graduated from the University of Missouri at Kansas City in December 1978 with a Bachelor of Arts degree in Economics. My course work also included study in the field of Accounting.

Q. What has been the nature of your duties while in the employ of this Commission?

A. I have assisted, conducted and supervised audits and examinations of the books and records of public utility companies operating within the state of Missouri. I have participated in examinations of electric, industrial steam, natural gas, water, sewer and telecommunication companies. I have been involved in cases concerning proposed rate increases, earnings investigations and complaint cases as well as cases relating to mergers and acquisitions and certification cases.

Q. Have you previously filed testimony before this Commission?

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1 A. Yes, I have. Schedule 1 to this testimony is a summary of rate cases in which
2 I have submitted testimony. In addition, Schedule 1 identifies other cases in which I had
3 supervision responsibilities or otherwise assisted.

4 Q. With reference to Case No. ER-2001-299, have you made an examination and
5 study of the books and records of The Empire District Electric Company?

6 A. Yes, with the assistance other members of the Commission Staff (Staff).

7 Q. What is the purpose of your direct testimony?

8 A. I will provide testimony that supports Staff's positions on rate treatment of
9 income taxes and cost of removal/net salvage. I will also provide testimony on the new
10 generating facility currently under construction at Empire's State Line Power Plant—a 500-
11 megawatt combined cycle unit. Staff witnesses David W. Elliott and Mark L. Oligschlaeger
12 will also provide testimony on the combined cycle unit. Throughout Staff's direct testimony
13 filing the State Line Combined Cycle Unit will be referred to as the "Combined Cycle Unit"
14 or "SLCC."

15 Q. How is your testimony organized?

16 A. The following is the structure of my testimony by areas:

- 17 1. Income Taxes;
- 18
- 19 2. Cost of Removal and Salvage;
- 20
- 21 3. State Line Combined Cycle Unit;
- 22
- 23 4. Treatment of Test Power Costs for State Line Combined Cycle
- 24 Unit.
- 25

26 Q. What caused Staff's review in this case?

27

28 A. On November 3, 2000, The Empire District Electric Company (Empire or
29 Company) filed for a \$41.5 million (19.36%) increase in its Missouri electric retail rates.

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

6 Q. Does Empire currently provide utility services within the state of Missouri?

7 A. Yes. Empire provides retail and wholesale electric utility service to customers
8 in the southwest part of the state of Missouri. It also supplies electricity to retail customers in
9 northwest Arkansas, northeast Oklahoma and southeastern Kansas. Empire also provides
10 electricity on a wholesale basis through tariffs approved by the Federal Energy Regulatory
11 Commission (FERC). Empire provides water service to several communities in the state of
12 Missouri.

13 Empire is an independent investor-owned electric utility that is engaged in the
14 generation, purchase, transmission, distribution and sale of electricity to approximately
15 145,000 customers in four states. According to Empire's year 2000 Form 10-K (page 3),
16 Empire derived approximately 88% of its retail electric revenues from Missouri customers,
17 6% from Kansas customers, 3% from Oklahoma customers and 3% from Arkansas
18 customers. Empire's service territory encompasses 10,000 square miles in its four-state
19 region. At year-end 2000, Empire had 603 employees compared to 615 employees at year-
20 end 1999. In year 2000, electric revenues represented about 99.6% of gross operating
21 revenues; water represented the remaining 0.4%.

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

1 A. My principal areas of responsibility are the calculation of current and deferred
2 income taxes.

3 Q. Please identify which adjustments you are sponsoring.

4 A. I am sponsoring adjustments S-96.1 and S-97.1 which are listed on
5 Accounting Schedule 10, Adjustments to Income Statement.

6 Q. Please identify the Accounting Schedules you are sponsoring.

7 A. I am sponsoring Accounting Schedule 11, Income Tax.

8 Q. Please explain Accounting Schedule 11.

9 A. Accounting Schedule 11, Income Tax, reflects the Staff's calculation of
10 current and deferred income taxes based on the adjusted net operating income before taxes
11 (NOIBT) taken from column "F," Accounting Schedule 9, Income Statement. I will discuss
12 the various details concerning the income tax calculation later in this testimony.

13 **INCOME TAXES**

14 Q. Please explain adjustment S-96.1.

15 A. Adjustments S-96.1 adjust current income taxes to a level consistent with the
16 Staff's adjusted NOIBT.

17 Q. Please explain each component of the Company's total income tax liability.

18 A. There are five components to the total income tax liability for a utility. These
19 are: 1) current income tax, 2) deferred investment tax credit (ITC), 3) amortization of
20 deferred ITC, 4) deferred income tax, and 5) the amortization of deferred income tax. These
21 components are summarized at the end of the income tax calculation on Accounting
22 Schedule 11, where they are listed on lines 30 through 34.

23 Q. Please describe the current income tax component.

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

10 Q. Please describe adjustment S-96.1.

11 A. Adjustment S-96.1 reflects the difference between the annualized current
12 income tax expense, described above, and the Company's test year level of current income
13 taxes. The annualized level of current income tax expense is shown on Accounting
14 Schedule 11, line 30.

15 Q. Please describe the deferred ITC component.

16 A. Since the Tax Reform Act of 1986 eliminated ITC, there have been not any
17 deferred income taxes relating to ITC, therefore, there has not been any recognition of
18 deferred ITC in the income tax calculation. Accordingly, it has been set at zero for this case.

19 Q. Please describe the amortization of deferred ITC component.

20 A. The amortization of deferred ITC component represents the recovery by the
21 ratepayer of a portion of previously deferred ITC. The amount is based on the level of
22 deferred ITC amortization reflected on the Company's books.

23 Q. Please describe the deferred income tax component.

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

8 Q. Please explain the tax concept of "normalization."

9 A. Under the Code, the Company can take deductions for tax purposes for certain
10 items at different times than when the items are expensed for book purposes. Items for
11 which this tax treatment applies are called "tax-timing" differences. Normalization treatment
12 eliminates these differences for ratemaking purposes so that income tax expense is based
13 solely on the book income impact of these timing differences. Excess tax depreciation is the
14 only tax timing difference that Staff has normalized in this case.

15 Q. Please explain the tax concept of "flow-through."

16 A. Flow-through is the tax treatment that equates the amounts provided by the
17 ratepayers for income tax expense with the amount paid to the taxing authorities by the
18 Company.

19 Q. Please describe the amortization of the deferred income tax component.

20 A. The amortization of the deferred income tax component represents the amount
21 of excess deferred income taxes to be flowed back to the ratepayers. The amortization of the
22 deferred income tax component in this case was determined from data provided by the
23 Company in its workpapers.

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1 Q. Please describe the adjustment S-97.1.

2 A. Adjustment S-97.1 represents the amount needed to adjust total test year
3 booked deferred income taxes to the level of deferred income taxes calculated on Accounting
4 Schedule 11, line 32.

5 Q. Are taxable income and the adjusted book income identical in this case?

6 A. No. Taxable income is less than the book income as adjusted because of tax
7 timing differences and interest expense.

8 Q. How are tax timing differences presented in the Staff's case?

9 A. Tax timing differences are represented on Accounting Schedule 11, Income
10 Tax, as additions and/or deduction from NOIBT.

11 Q. Please explain the additions used to arrive at net taxable income in this case.

12 A. Annualized book depreciation and book depreciation charged to clearing and
13 operations accounts are added back to net income before taxes because the deduction for tax
14 depreciation in determining income taxes is different than book depreciation. It is also
15 necessary to add back these items to avoid deducting depreciation amounts twice for tax
16 purposes.

17 The other item added back to NOIBT is specific Internal Revenue Service (IRS)
18 non-deductible meal expense.

19 Q. Please list the deductions used to arrive at net taxable income.

20 A. The deductions are 1) interest expense, 2) straight line tax depreciation, and 3)
21 excess tax depreciation.

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

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

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

10 Q. Are you aware of any other rate cases where this type of methodology was
11 proposed?

12 A. Yes. This methodology was first utilized by the Staff and adopted by the
13 Commission in Kansas City Power and Light Company's 1980 electric rate case, Case
14 No. ER-80-48, and has been used consistently by Staff and adopted by the Commission since
15 that case.

16 Q. Please identify the source of the amounts of the deductions for straight line tax
17 depreciation and excess tax depreciation.

18 A. The amounts for these items were determined by using historical information
19 and developing a percentage relationship of depreciation taken on Empire's books for
20 financial accounting reporting purposes and Empire's depreciation taken as a deduction in
21 prior tax years. This is known as "basis" differences of the book straight-line depreciation.
22 This percentage relationship was applied to annualized depreciation that was included in
23 Staff's revenue requirement to determine the Missouri jurisdictional straight-line tax

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

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

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

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

1 A. The book basis of depreciable plant (plant property assets) differs from the tax
2 basis of depreciation plant because, prior to the Tax Reform Act of 1986, specific overhead
3 costs during the construction of the plant assets were capitalized for financial reporting and
4 ratemaking purposes (in other words, included in the book basis of depreciable plant). The
5 overhead costs that were capitalized as part of the construction costs of the plant assets and
6 ultimately included in plant-in-service were capitalized pensions, payroll taxes, property
7 taxes, property insurance and interest on long and short term debt. For tax purposes, these
8 overhead costs were treated as current tax deductions in the year incurred, instead of being
9 included in the tax basis of the property and, therefore, reflected as a straight-line tax
10 depreciation deduction over a period of time generally equal to the time period used in
11 calculating book depreciation. Therefore, the tax basis of the assets acquired prior to the
12 1986 Tax Reform Act was less than the book basis because of the capitalization of specific
13 overhead costs for book purposes (both financial accounting and ratemaking) and the
14 deduction of these overhead costs for tax purposes in the current tax year. The tax basis was
15 less for these pre-1986 Tax Reform assets because the company had already taken the
16 capitalized overhead costs as a deduction in prior years for tax purposes resulting in the need
17 to reduce the book basis by these previously taken deductions. However, the 1986 Tax
18 Reform Act eliminated the current deduction for these overhead costs, which resulted in
19 capitalizing these costs for both book and tax purposes.

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

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

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

14 Q. What is "flow-through" treatment of tax timing differences?

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

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

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

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

10 Q. Please discuss the depreciation deductions to NOIBT.

11 A. Tax depreciation, not book depreciation, is the appropriate deduction for tax
12 purposes. Therefore, since book depreciation has already been added back to NOIBT, tax
13 depreciation must be deducted from NOIBT to properly calculate taxable income. Tax
14 depreciation is made up of two components— straight line tax depreciation and excess tax
15 depreciation.

16 Q. Please explain these two components.

17 A. Straight line tax depreciation is the equivalent of book depreciation, restated
18 to reflect the tax basis of the related plant in service. Excess tax depreciation is the net
19 difference between accelerated tax depreciation and straight line tax depreciation on property
20 vintages where accelerated depreciation exceeds straight line, and between accelerated tax
21 depreciation and straight line tax depreciation on property vintages where straight line
22 depreciation exceeds accelerated depreciation. Vintage refers to the year plant was originally
23 put into service.

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1 Q. Why is it important to separate tax depreciation into the two components of
2 straight line tax depreciation and excess tax depreciation?

3 A. It is important to separate tax depreciation into the two components since
4 straight line tax depreciation is given flow-through treatment in rates, and excess tax
5 depreciation must be normalized for ratemaking purposes.

6 Q. In reference to the items discussed above, please identify the items that Staff
7 is proposing to normalize in the income tax calculation.

8 A. Staff is only proposing to normalize excess tax depreciation. Since the Staff
9 has recognized excess tax depreciation as a deduction, it is necessary to provide
10 corresponding deferred income tax treatment for the deduction. By multiplying the excess
11 tax depreciation amount appearing on Accounting Schedule 11, line 8, by the effective tax
12 rate of 38.3886%, I have calculated the deferred income tax component that was described
13 earlier in my direct testimony. The amount of the deferred taxes used in the income tax
14 calculation is identified on line 32 of Schedule 11.

15 Q. Which of the items is the Staff proposing to flow-through in its income tax
16 calculation?

17 A. The Staff is proposing to flow-through straight line tax depreciation.

18 Q. Are there any specific items that you are sponsoring on Accounting Schedule
19 2, Rate Base?

20 A. Yes, I am sponsoring the line item, deferred income taxes, that appears on
21 Accounting Schedule 2, Rate Base, as a subtraction from net plant.

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

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

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

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

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

1 Q. How are the deferred tax balances being funded through the ratemaking
2 process?

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

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

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

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

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

3 **COST OF REMOVAL AND SALVAGE**

4 Q. What is cost of removal and salvage?

5
6 A. Cost of removal is incurred when utility property is retired from service.
7 Generally, removing property from service causes the utility to incur costs to physically
8 dismantle, tear down or otherwise remove the property from service. Salvage is the residual
9 value or scrap value that some property has when it is removed from utility service. After a
10 piece of property is dismantled or removed from service, utilities can in some instances sell
11 or receive some value for the displaced property. Utilities track the costs relating to removal
12 costs and salvage value on an ongoing annual basis. Typically, removal costs exceed salvage
13 value, resulting in a "net negative salvage" value. The net effect of cost of removal and
14 salvage was included in Staff's determination of the overall revenue requirement.

15 Q. How did Staff determine the proper level of cost of removal and salvage value
16 to include in this case?

17 A. Staff reviewed the cost of removal and salvage values by year for the period
18 1990 to 2000. Based on this information, Staff calculated the cost of removal and salvage
19 values based upon a five-year average for the period 1996 through 2000. The result of the
20 five-year average is that Empire incurred net negative salvage value over this period of time.
21 This amount was included in Accounting Schedule 9, Income Statement, on a total company
22 and jurisdictional basis.

23 Q. Why did Staff use a five-year average to determine the level of cost of
24 removal and salvage value to include in the revenue requirement?

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

6 Q. Have cost of removal and salvage value been treated this way in prior Empire
7 rate cases?

8 A. Not to my knowledge. Typically, cost of removal and salvage value have
9 been reflected in the overall depreciation rate and thus, an amount for these items included in
10 depreciation expense. However, recently Staff has proposed to remove from the depreciation
11 rates the accrual of the removal costs and salvage value. Staff witness Paul W. Adam of the
12 Engineering and Management Services Department is sponsoring Staff's position in this case
13 to remove these items from the accrual of depreciation. His testimony will provide the basis
14 and reasoning for making this change. Consistent with this proposal, Staff has included the
15 cost of removal and salvage value in the cost of service determination as a current expense
16 item rather than part of the depreciation accrual process.

17 Q. Is Staff still examining the amount of the cost of removal and salvage value it
18 is including in this case?

19 A. Yes. Staff is reviewing with Empire the question of whether any labor costs
20 may be in the cost of removal amounts in the years included in Staff's five-year average.
21 Staff will continue to examine this matter and propose any adjustments in subsequent
22 testimony that it believes are appropriate and necessary.

STATE LINE COMBINED CYCLE UNIT

Q. Is Empire currently constructing new generating capacity?

A. Yes. Empire is constructing a 500-megawatt combined cycle unit at its State Line Power Plant site to increase its generating capacity.

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

A. Empire believes that the State Line Combined Cycle Generating Facility (Combined Cycle Unit or SLCC unit) will be completed and ready to provide utility service by June 1 of this year. If this unit is in-service by June 1, Empire will be able to accredit with the Southwest Power Pool its ownership share of 300 megawatts for the summer peaking season of 2001.

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

A. Empire will own 60% of this unit. Empire is the operating partner of the Combined Cycle Unit. On July 26, 1999, the Company entered into agreements (Ownership Agreement) for the construction, ownership and operation of the Combined Cycle Unit with Westar Generating, Inc. (Westar), a wholly owned subsidiary of Western Resources, Inc. (Western Resources). The Ownership Agreement provides that Empire will have a 60% ownership share, which entitles it to 300 megawatts of the total 500 megawatt combined cycle capacity. Westar will own the remaining 40% of capacity, or 200 megawatts of this generating facility.

One of Empire's existing generating units, State Line Unit 2 (a 152-megawatt dual fuel sourced combustion turbine-generator unit), is being contributed by Empire to be part of the Combined Cycle project; i.e., State Line Unit 2 will be converted into part of the Combined Cycle Unit.

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

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

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

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

1 interests. Empire will be entitled to 60% of the generating capacity of this unit with Westar
2 being entitled to the remaining 40% of the generating capacity.

3 Q. Will Westar own any part of State Line Unit 1?

4 A. No. Empire will remain the sole owner of Unit 1. But there are facilities,
5 referred to as "common facilities" used in the operation of both State Line Unit 1 and the
6 Combined Cycle Unit, such as land and buildings, which will be allocated between Empire
7 and Westar based upon the total generating capacity of approximately 600 megawatts at State
8 Line Power Plant (Unit 1, 101 megawatts, plus Combined Cycle, 500 megawatts).

9 Q. Is the combined cycle unit a peaking unit?

10 A. No. When operating in combined cycle mode, this unit will be efficient
11 enough to be considered an intermediate generating facility. While the two combustion
12 turbine-generators can be operated in what is referred to as "simple cycle" or "independent
13 mode," the optimal and most efficient mode of operation is when the two, 150-megawatt
14 combustion turbine-generators are running in tandem and the heat recovery system is
15 capturing the exhaust heat and converting it to steam. The steam is then used to power the
16 200-megawatt steam turbine-generator. The heat recovery system for each combustion
17 turbine-generator is known as the heat recovery steam generator (HRSG). There is a separate
18 HRSG unit for each of the two combustion turbine-generators. To obtain the optimal
19 operating performance, the combined cycle will utilize the capacity from the two 150-
20 megawatt combustion turbines and the steam flow to power the 200 megawatt steam turbine,
21 giving the Combined Cycle Unit a total operating capacity at full load of 500-megawatts.

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

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

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

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

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

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

27 [Source: Data Request No. 221]
28

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1
2 Q. Did Black & Veatch provide only project management and oversight?

3 A. No. The contract signed by Black & Veatch, dated January 15, 1999, also
4 identified that it would provide engineering services in addition to the project management
5 and oversight function. The Black & Veatch contract was for an amount ** _____
6 _____ ** [Source: Black & Veatch contract B-1].

7 The fixed contract amount for engineering services portion of the Black & Veatch
8 scope of work was ** _____ ** and the construction management scope of work was
9 ** _____ ** The final current estimate of the Black & Veatch scope of work is
10 ** _____ ** broken out for engineering ** _____ ** and construction
11 management of ** _____ **

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

14 A. No. Empire's most recent construction of generating facilities occurred in
15 1995 and 1997 with the completion of the State Line Units 1 and 2 combustion turbines.
16 Both of these generating units were built as "turn-key" projects. Units 1 and 2 were
17 purchased as "packaged" units from the combustion turbine manufacturer, Siemens-
18 Westinghouse (Westinghouse). While Empire provided oversight, they were not responsible
19 for the ultimate construction of State Line Units 1 and 2. By contrast, in its role as general
20 contractor for the construction of the Combined Cycle Unit, Empire assumed overall
21 responsibility for acquiring the necessary equipment and overseeing and ensuring that the
22 contractors install the facilities on schedule and within budget. Empire described the Units 1
23 and 2 projects as follows:

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

11
12 State Line 2 was constructed in a similar fashion to State Line 1,
13 except that the site was no longer a Greenfield site.

14
15 [Source: Data Request No. 221]

16
17 Q. What was the total cost of the State Line Combined Cycle Unit?

18 A. Since the unit is still under construction, the final cost is unknown at this time.

19 However, Empire has projected the final cost to be approximately ** ____ ** million (Data
20 Request No. 220). Empire's 60% ownership share of this amount is ** ____ **million.

21 Q. Is this the original cost estimate of the Combined Cycle Unit?

22 A. No. Originally, the Combined Cycle Unit's estimated cost was identified as
23 ** ____ **million (Data Request No. 220). Empire's 60% share of this original estimate was
24 ** ____ **million. The original estimate was developed using the contract amounts from
25 the major equipment suppliers and contractors to construct this unit.

26 Q. Why are the current final cost projection and the original estimate different?

27 A. Empire experienced construction problems and schedule delays that resulted
28 in cost overruns and schedule slippage. Installation of the two HRSGs caused the most
29 significant cost overruns and schedule delays.

30 Q. What caused the schedule delays in the installation of the HRSGs?

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1 A. The original contractor who was to construct the HRSGs was unable to
2 perform the terms of the contract to the owners' satisfaction and the owners made the
3 decision to relieve that contractor of its obligation under the original contract. This
4 contractor was only on site at the State Line facilities for a fraction of the original planned
5 schedule from January to early April 2000. During that time, Empire encountered numerous
6 problems with the scheduling, staffing and managing of the HRSG installation. Upon a
7 recommendation made by Black & Veatch, Empire terminated the contract under the "default
8 provision" of the contract for the HRSG installation. The original HRSG contract was signed
9 on December 3, 1999.

10 Q. When did the original contractor start working on the HRSGs installation?

11 A. This contractor commenced work in January 2000 and was relieved of its
12 duties under the terms of the HRSG erection contract in early April 2000.

13 Q. When was the work on the HRSGs scheduled to be completed?

14 A. Under the terms of the contract, the "Guaranteed Start and Completion of
15 Work Dates" were January 3, 2000, with a final completion date for all work by January 19,
16 2001.

17 Q. Following the dismissal of the original contractor, who did Empire contract
18 with to install the HRSGs?

19 A. Empire contracted with Nooter Construction Company (Nooter Construction)
20 a subsidiary of Nooter/Eriksen, the equipment supplier of the HRSGs, to construct the
21 HRSGs through a separate contract after the dismissal of the original contractor. Empire met
22 with Nooter/Eriksen on April 12, 2000, and following that meeting submitted a ** ____

23 _____ ** to complete the erection of the HRSGs. On April

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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. ** _____
21 _____
22 _____

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Q. Would you please identify some of the specific problems with the original contractor had installing the HRSGs?

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A. The following is a list of some of the performance problems Empire and Black & Veatch considered the original contractor had during the HRSGs phase of construction and which Empire discussed with the original contractor at a meeting on April 5, 2000, also attended by Black & Veatch. On March 31, 2000, Empire had submitted to the original contractor a letter indicating that Empire considered the original contractor in

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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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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

1 HRSG installation contract had a provision for arbitrating disputes. While the original
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 "Mutual
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 ** _____ **,

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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?

1 A. Yes. The original contract for the installation of the HRSGs included a
2 section titled GC. 14 CONTRACT TERMINATION – CONTRACTOR DEFAULT. This
3 section of the contract identified the terms under which the contractor could be relieved from
4 the contract for “default” and identified the basis for termination. Section GC. 14 states:

5 **
6 _____
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9 _____
10 _____
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13 _____
14 _____
15 _____
16 _____
17 _____
18 _____
19 _____
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21 _____
22 _____
23 **
24 _____

25 [Source: original HRSG Erection Contract, page GC-11]
26

27 Q. Was there a dispute between the original contractor and the owners of the
28 Combined Cycle Unit over the termination of the contract?

29 A. Yes. While the original contract provided for default of the contract, there
30 was also a provision that provided for termination of the contract at the Company’s
31 convenience. Section GC.15 CONTRACT TERMINATION – COMPANY’S
32 CONVENIENCE of the original contract identified the conditions under which the contract
33 could be simply terminated. Section GC.15 states:

34 **
35 _____

**

[Source: original HRSG Erection Contract, page GC-12]

The dispute between the parties arose when the owners believed that the contractor was in default, while the contractor contended that the contract had been terminated for convenience under section GC.15. The convenience termination provision related to situations where the contract would be terminated through no fault of the contractor. An example of this would be if the owners decided to cancel the project and terminate the contract. Presumably, the contractor may have incurred certain costs or, in some cases, scheduled work under the terms of the contract that would have precluded it for providing services to another client, thus tying up the contractor's resources. Under such conditions, the contract envisioned certain payment amounts to the contractor based on the time period during which the contract was in effect.

Q. How are the default provisions different than the convenience termination provisions?

A. Under terms of the default provisions of the original contract, the owners could cite the contractor for lack of performance and could terminate the contract for cause. The contractor would not be awarded any payments for unfinished work under that provision.

Q. Did Black & Veatch certify the original HRSG contractor to be in default of the contract?

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

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1 with the guidelines set out in GC.14. – Contract Termination – Contractor Default. Highly
2 Confidential Schedule 3 is a copy of the certification letter from Black & Veatch to Empire.
3 On March 31, 2000, Empire notified the original contractor by letter that the original
4 contractor was in default of the HRSG contract. Highly Confidential Schedule 4 is a copy of
5 the Empire termination notice.

6 Empire's letter stated the reasons for termination of the contract:

7 **
8 _____
9 _____
10 _____
11 _____
12 _____
13 **

14 Q. Did the original contractor respond to Empire's termination notice?

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 _____

22 ** (Highly Confidential Schedule 7)

23 Q. Why was the dispute between the owners and the original contractor
24 arbitrated?

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
27 resolve any of their disputes and claims.

1 Q. Were the parties required to resolve the disputes through arbitration?

2 A. While they had to make an attempt to resolve the disputes, there was no
3 requirement that those disputes had to be resolved through the arbitration process. Any
4 unresolved disputes could have been litigated in the courts. The parties ultimately chose not
5 to follow this course of action.

6 Q. Did the original contract for the installation of the two HRSGs include a
7 provision for arbitration?

8 A. Yes. Arbitration between the parties to settle disputes was provided for under
9 the section in the contract GC.42 ARBITRATION. Section GC.42 states:

10 **
11 _____
12 _____
13 _____
14 _____
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19 _____
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27 _____
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29 **
30 _____

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

32
33 In the above reference to the arbitration proceedings, the Combined Cycle owners would be
34 Party B in this matter, while the original contractor for the installation of the two HRSGs
35 would be Party A.

1 Q. Did other issues also cause cost overruns for the State Line Combined Cycle
2 Unit?

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

10 Q. What incentives were used to attract craft labor?

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

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

20 A. Empire estimates that the additional labor rates for craft workers resulted in a
21 ** _____ ** cost overrun above the original estimate.

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

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

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

20 Q. How has Staff treated the costs associated with the State Line Combined
21 Cycle Unit in its current revenue requirement?

22 A. Staff continues to review material regarding the cost overruns for this power
23 plant. The Combined Cycle Unit is not in service and is still under construction as of the

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

13 Q. Why has Staff excluded the cost overruns in the initial estimates of the State
14 Line Combined Cycle Unit?

15 A. Since these are preliminary quantifications, Staff believes it would be
16 inappropriate to include these cost overruns in Empire's revenue requirement until such time
17 that quantification is adequately determined and causation is adequately explained and
18 determined to be beyond the reasonable control of Empire. The Company bears the
19 responsibility and assumes the risk of justifying any cost overruns above the final original
20 amounts upon which the contracts are based. Empire should be held to these original
21 contracted amounts, but should be given sufficient time to quantify and justify the cost
22 overruns. It is the Company's burden to identify, quantify and explain any cost overruns
23 above the contracted amounts.

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

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

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

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

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

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

11 The Commission, through its Order issued on January 4, 2001, authorized a true-up
12 audit of material and significant events including costs relating to the Combined Cycle Unit
13 through June 30, 2001, supported by invoices through July 31. The true-up testimony
14 reflecting updates to the initial revenue requirement filed in April will be presented to the
15 Commission on August 7, 2001. The true-up hearings are scheduled for August 22 and 23,
16 2001. At that time, certain issues concerning the Combined Cycle Unit may be presented to
17 the Commission. These issues will likely include whether the Combined Cycle Unit meets
18 the in-service criteria for the "fully operational and used for service" standard and, also, an
19 identification of the final costs relating to the power plant. Thus, the Commission will have
20 the opportunity to hear testimony on potential Combined Cycle Unit cost overrun issues
21 during the scheduled May-June hearings, as well as those scheduled for August on cost
22 overruns.

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

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

7 Q. Are some of the cost overruns presently unexplained?

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

18 Q. What is the amount of current unexplained differences?

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

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

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

10 Q. Do the above amounts include AFDC?

11 A. No. None of the amounts that appear in testimony or schedules attached to
12 the testimony include AFDC. AFDC is an amount of carrying costs (return on investment)
13 while the unit is under construction. Typically, the costs relating to AFDC are added to the
14 other costs (capitalized) of the plant investment and recovered over the life of the asset
15 through depreciation.

16 Q. Will AFDC need to be considered on any disallowed costs of the Combined
17 Cycle Unit?

18 A. Yes. Any amount of the Combined Cycle Unit's costs that Staff recommends
19 not to be included for recovery in rates, will have to have AFDC added to the total
20 disallowed amount.

21 Q. How do the other Staff witnesses testimony regarding the Combined Cycle
22 Unit relate to this testimony?

1 A. Staff witness Oligschlaeger provides testimony on the treatment of cost
2 overruns in previous cases and the Commission's recognition of cost overruns.

3 Staff witness Elliott provides a discussion on the types of contracts used in the
4 construction industry and those that were used on the Combined Cycle Unit project. He also
5 identifies the process used to request change in scope and design and, ultimately, the costs of
6 the fixed contracts.

7 Q. Is there information that is still outstanding relating to the Combined Cycle
8 Unit's cost overruns?

9 A. Yes. At the time of this filing there were numerous data requests outstanding.
10 There are other questions that need to be requested of Empire as follow-up to responses to
11 several data requests already received. Consequently, additional information will be
12 reviewed by Staff and provided to the Commission as necessary.

13 **TEST POWER FOR THE STATE LINE COMBINED CYCLE**
14 **UNIT**

15 Q. What is test power?

16 A. Test Power is the amount of electricity that a unit generates during its
17 "testing" phase of construction. Every power plant construction project like the Combined
18 Cycle Unit requires that certain tests be performed before the unit is completed and deemed
19 to be in-service. Power plants are comprised of extremely complex and sophisticated pieces
20 of machinery that require a great deal of oversight to ensure that the units are operating
21 properly and in accordance with contract specifications when brought on line. Testing of the
22 unit is essential so the owners know the unit will work properly and as contracted for.

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

Direct Testimony of
Cary G. Featherstone

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

7 Q. Will Empire incur additional test power costs relating to the tests that Staff
8 believes are necessary for the determination of whether the unit is fully operational and used
9 for service?

10 A. Yes. Staff expects that Empire will incur additional costs relating to tests that
11 are required as part of meeting the Staff's in-service criteria. To the extent that these
12 additional costs are reasonable and prudently incurred, the Staff will recommend that Empire
13 include the test power costs in the plant-in-service accounts for the Combined Cycle Unit and
14 recover the investment over the useful life of the asset.

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

19 Q. Will Staff include test power in its determination of Combined Cycle Unit
20 costs?

21 A. Yes. Staff will review the level of test power Empire identifies and supports
22 respecting a reasonable and prudent amount for this item. This amount is expected to be
23 capitalized and included as part of plant in service for the Combine Cycle Unit.

Direct Testimony of
Cary G. Featherstone

1 Q. Does this conclude your direct testimony?

2 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

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

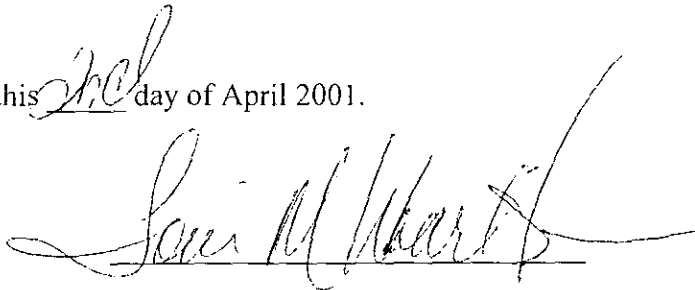
AFFIDAVIT OF CARY G. FEATHERSTONE

STATE OF MISSOURI)
) 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 46 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 2nd day of April 2001.





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>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony</u>	<u>Disposition</u>
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

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony</u>	<u>Disposition</u>
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-- discontinuance of public utility)	Direct Rebuttal Surrebuttal	Contested
1988	Case No. TC-89-14	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>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony</u>	<u>Disposition</u>
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 gas--acquisition 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

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony</u>	<u>Disposition</u>
		(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

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>	<u>Type of Testimony</u>	<u>Disposition</u>
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:

<u>Year</u>	<u>Case No.</u>	<u>Utility</u>
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