

May 1, 2018 Step Adjustment

Line No.	Description	Rate Effective Date	Investment Year 2017
	<u>Utility Plant:</u>		
1	Beginning Utility Plant		\$ 294,443,220
2	Plant Additions		32,158,460
3	Retirements		(2,387,563)
4	Ending Utility Plant		<u>324,214,118</u>
5	Beginning Accumulated Depreciation		106,174,178
6	Depreciation		11,128,490
7	Retirements		(2,387,563)
8	Cost of Removal and Salvage		(496,592)
9	Ending Accumulated Depreciation		<u>114,418,513</u>
10	Ending Net Utility Plant		<u>\$ 209,795,605</u>
	<u>Revenue Requirement:</u>		
11	Change in Net Plant		\$ 21,526,562
12	80% of Change in Net Plant		17,221,249
13	Pre-Tax Rate of Return		10.15%
14	Return and Taxes		<u>1,748,493</u>
15	Depreciation Expense on 80% of Plant Additions <sup>(1)</sup>		1,053,358
16	Property Taxes on 80% Change in Net Plant <sup>(2)</sup>		501,138
17	Revenue Requirement		<u>\$ 3,302,989</u>
18	<u>Rate Cap Limit:</u>		
19	Revenue Requirement		\$ 3,302,989
20	May 1, 2017, 2018 & 2019 Step Adjustment Revenue Requirement Cap		\$ 4,500,000
21	Less: May 1, 2017 Step Adjustment Revenue Requirement		900,194
22	Add: Tax Rate Reduction to May 1, 2017 Step Adjustment		44,991
23	Remaining May 1, 2018 & 2019 Step Adjustment Revenue Requirement Cap		<u>\$ 3,644,797</u>
24	Allowable Revenue Requirement (Min of Line 19 or 22)		<u>\$ 3,302,989</u>
25	Remaining May 1, 2019 Step Adjustment Revenue Requirement Cap		\$ 341,808

Notes:

(1) See Annualized Depreciation from page 4

(2) 2.91% rate (2017 Property Taxes of \$6,110,668 / 2017 Net Utility Plant of \$209,795,605)

2017 Gross Plant Detail

Description	Beginning Balance	Additions	Retirements	Ending Balance
301-00 Organization-E	380	-	-	380
303-00 Intangible Software-5 Yea-E	4,050,981	455,710	-	4,506,691
303-01 Intangible Software-3 Yea-E	87,196	-	-	87,196
303-02 Intangible Software-10 Yea-E	2,307,249	2,398,484	-	4,705,733
343-00 Prime Movers-E	56,575	-	-	56,575
353-00 Transmission Station Equi-E	-	-	-	-
360-01 ROW - Distribution-E	991,116	-	-	991,116
360-02 ROW - Distribution-E	1,674,812	-	-	1,674,812
361-00 Distribution Structures-E	167,773	2,005,843	-	2,173,616
362-00 Distribution Station Equi-E	36,463,670	9,429,736	(117,448)	45,775,957
364-00 Distribution Poles, Tower-E	57,227,150	4,643,618	(302,782)	61,567,986
365-00 Distribution Overhead Con-E	73,578,306	5,686,904	(511,652)	78,753,557
366-00 Distribution Underground -E	1,870,543	53,255	(2,274)	1,921,524
367-00 Distribution Underground -E	18,972,752	1,010,135	(101,085)	19,881,802
368-00 Distribution Line Transfo-E	25,112,809	1,411,172	(292,212)	26,231,769
368-01 Transformer Installations-E	19,443,103	1,115,120	(166,950)	20,391,273
369-00 Distribution Services-E	21,070,632	1,439,916	(69,261)	22,441,287
370-00 Distribution Meters-E	9,960,229	513,030	(334,282)	10,138,977
370-01 Meter Installation-E	4,519,509	521,731	(107,360)	4,933,880
371-00 Installations on Customer-E	2,054,660	178,376	(93,396)	2,139,641
373-00 Street Lights & Signal Sy-E	3,279,130	117,749	(75,996)	3,320,883
373-01 Street Lights & Signal Sy-E	-	-	-	-
389-00 General & Misc. Land-E	18,620	-	-	18,620
390-00 Structures-E	3,809,477	289,084	-	4,098,562
390-01 General & Misc. Structure-E	-	-	-	-
391-01 Office Furniture & Fixtur-E	271,671	7,111	-	278,782
391-03 Computer Equipment-E	-	-	-	-
392-00 Transportation Equipment-E	1,073,695	-	-	1,073,695
393-00 Stores Equipment-E	79,908	-	-	79,908
394-00 Tools, Shop and garage Eq-E	1,615,777	293,470	-	1,909,247
395-00 Laboratory Equipment-E	823,462	29,310	-	852,772
397-00 Communication Equipment-E	3,759,091	558,706	(212,864)	4,104,932
398-00 Miscellaneous Equipment-E	102,943	-	-	102,943
399-00 Other Intangible Plant-E	-	-	-	-
Grand Total	294,443,220	32,158,460	(2,387,563)	324,214,118

2017 Accumulated Depreciation Detail

Description	Beginning Balance	Provision	Retirements	Cost of Removal	Salvage	Ending Balance
301-00 Organization	-	-	-	-	-	-
303-00 Intangible Software-5 Year	3,578,054	287,861	-	-	-	3,865,915
303-01 Intangible Software-3 Year	87,196	-	-	-	-	87,196
303-02 Intangible Software-10 Year	952,715	250,712	-	-	-	1,203,428
343-00 Prime Movers	21,702	3,774	-	-	-	25,475
350-01 ROW - Transmission	-	-	-	-	-	-
350-02 ROW - Transmission	-	-	-	-	-	-
352-00 Transmission Structures	-	-	-	-	-	-
353-00 Transmission Station Equipme	-	-	-	-	-	-
354-00 Transmission Towers & Fixtur	-	-	-	-	-	-
355-00 Transmission Poles & Fixture	-	-	-	-	-	-
356-00 Transmission Overhead Conduc	-	-	-	-	-	-
360-01 ROW - Distribution	-	-	-	-	-	-
360-02 ROW - Distribution	-	-	-	-	-	-
361-00 Distribution Structures	136,320	10,078	-	-	-	146,398
362-00 Distribution Station Equipme	8,136,801	1,035,796	(117,448)	(5,888)	-	9,049,261
364-00 Distribution Poles, Towers &	22,247,770	2,159,482	(302,782)	(154,558)	3,388	23,953,300
365-00 Distribution Overhead Conduc	22,381,501	2,722,419	(511,652)	(239,210)	5,553	24,358,610
366-00 Distribution Underground Con	590,932	38,660	(2,274)	(101)	0	627,217
367-00 Distribution Underground Con	5,599,232	495,743	(101,085)	(33,020)	3,292	5,964,162
368-00 Distribution Line Transforme	9,708,678	760,045	(292,212)	(8,560)	1	10,167,952
368-01 Transformer Installations	4,858,773	567,334	(166,950)	(434)	-	5,258,722
368-02 Transformers Installations	-	-	-	-	-	-
369-00 Distribution Services	14,410,056	1,217,296	(69,261)	(48,480)	1,066	15,510,678
370-00 Distribution Meters	3,983,736	491,775	(334,282)	(243)	-	4,140,985
370-01 Meter Installation	681,280	224,775	(107,360)	-	-	798,695
370-02 Meter Installations	-	-	-	-	-	-
371-00 Installations on Customers P	448,681	158,390	(93,396)	(9,109)	7,788	512,355
373-00 Street Lights & Signal Syste	2,273,055	258,017	(75,996)	(14,914)	11,274	2,451,436
373-01 Street Lights & Signal Syste	-	-	-	-	-	-
389-00 General & Misc. Land	-	-	-	-	-	-
390-00 Structures	1,515,037	79,738	-	-	-	1,594,775
390-01 General & Misc. Structures	863	-	-	-	-	863
391-01 Office Furniture & Fixtures	(138,394)	15,873	-	-	-	(122,521)
391-03 Computer Equipment	4,346	-	-	-	-	4,346
392-00 Transportation Equipment	1,045,145	-	-	-	-	1,045,145
393-00 Stores Equipment	55,412	2,685	-	-	-	58,097
394-00 Tools, Shop and garage Equip	694,581	60,421	-	-	-	755,002
395-00 Laboratory Equipment	362,549	32,253	-	-	-	394,803
397-00 Communication Equipment	2,454,746	250,340	(212,864)	(14,438)	-	2,477,785
398-00 Miscellaneous Equipment	83,411	5,024	-	-	-	88,434
399-00 Other Tangible Property	-	-	-	-	-	-
Grand Total	106,174,178	11,128,490	(2,387,563)	(528,955)	32,363	114,418,513

Annualized Depreciation by FERC Account

Description	Additions	Depreciation Rate	Annual Depreciation
303-00 Intangible Software-5 Yea-E	455,710	20.00%	91,142
303-02 Intangible Software-10 Yea-E	2,398,484	10.00%	239,848
361-00 Distribution Structures-E	2,005,843	2.45%	49,143
362-00 Distribution Station Equi-E	9,429,736	2.60%	245,173
364-00 Distribution Poles, Tower-E	4,643,618	3.70%	171,814
365-00 Distribution Overhead Con-E	5,686,904	3.64%	207,003
366-00 Distribution Underground -E	53,255	2.04%	1,086
367-00 Distribution Underground -E	1,010,135	2.55%	25,758
368-00 Distribution Line Transfo-E	1,411,172	3.00%	42,335
368-01 Transformer Installations-E	1,115,120	2.89%	32,227
369-00 Distribution Services-E	1,439,916	5.67%	81,643
370-00 Distribution Meters-E	513,030	5.00%	25,652
370-01 Meter Installation-E	521,731	5.00%	26,087
371-00 Installations on Customer-E	178,376	7.56%	13,485
373-00 Street Lights & Signal Sy-E	117,749	7.79%	9,173
390-00 Structures-E	289,084	2.08%	6,013
391-01 Office Furniture & Fixtur-E	7,111	5.83%	415
394-00 Tools, Shop and garage Eq-E	293,470	3.64%	10,682
395-00 Laboratory Equipment-E	29,310	3.90%	1,143
397-00 Communication Equipment-E	558,706	6.60%	36,875
Grand Total	32,158,460	4.09%	1,316,698

Pre-Tax Rate of Return  
December 31, 2015 Pro Forma

Line No.	Description	Proformed Amount	Weight	Cost of Capital	Weighted Cost of Capital	Tax Factor <sup>(1)</sup>	Pre-Tax Cost
1	Common Stock Equity	\$ 77,284,950	50.97%	9.50%	4.84%	1.3744	6.65%
2	Preferred Stock Equity	189,800	0.13%	6.00%	0.01%		0.01%
3	Long Term Debt	74,000,000	48.80%	7.15%	3.49%		3.49%
4	Short Term Debt	161,783	0.11%	1.54%	0.00%		0.00%
5	Total	\$ 151,636,533	100.00%		8.34%		10.15%

Notes:

(1) New tax factor calculated using a Federal Tax Rate of 21% and State Tax Rate of 7.9% (effective tax rate of 27.241%)

# **ATTACHMENT A**

## **Order No. 475**



DEPARTMENT OF ENERGY  
Federal Energy Regulatory Commission  
18 CFR Parts 35 and 389  
Electric Utilities; Rate Changes Relating to Federal Corporate Income Tax Rates for  
Public Utilities

[Docket No. RM87-4-000; Order No. 475]

52 FR 24987

July 2, 1987

EFFECTIVE DATE: June 26, 1987.

FOR FURTHER INFORMATION CONTACT: Thomas J. Lane, Office of the General Counsel, Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, (202) 357-8530.

**TEXT:** Issued: June 26, 1987.

**ACTION:** Federal Energy Regulatory Commission, DOE.

**ACTION:** Final rule.

**SUMMARY:** In the Tax Reform Act of 1986 Congress reduced the maximum Federal corporate income tax rate from 46 percent to 34 percent, effective July 1, 1987. The Federal Energy Regulatory Commission is adopting an abbreviated rate filing procedure that public utilities may use to reduce their rates to reflect this decrease.

**SUPPLEMENTARY INFORMATION:**

#### I. Introduction

The Tax Reform Act of 1986 n1 signed on October 22, 1986, significantly lowered the Federal corporate income tax rate from 46 percent to 34 percent. The Federal Energy Regulatory Commission (Commission) is adopting a voluntary, abbreviated rate filing procedure that will allow electric public utilities to file for certain rate decreases under section 205 of the Federal Power Act (FPA), n2 to reflect this decrease in the Federal income tax rate. n3

n 1 *I.R.C. 1-7872* (1986).

n 2 *16 U.S.C. 824d* (1982).

n 3 Although the reduction in the Federal corporate income tax rate impacts on natural gas and oil pipelines, this rule is limited to electric public utilities. Natural gas pipeline companies' rates will automatically be adjusted since tax trackers have been included in the majority of the natural gas pipeline companies' rate settlements. Changes in oil pipeline rates will be made on a case-by-case basis.

The reduction in rates will be based on a formula using data provided by the utility in its most recent rate filing. Under this procedure, the Commission will consider only the reduction in the Federal corporate tax rate in establishing the new rate. Any other issues which may be raised in the rate filing will be dismissed without prejudice.

For utilities which do not voluntarily reduce their rates either through this abbreviated procedure or through general rate changes filings, the Commission intends to undertake a general review of their rates, and where appropriate, to institute formal investigations under section 206 of the FPA n4 on the basis that rates reflecting the 46 percent tax rate or other previously authorized cost allowances may no longer be just and reasonable. n5

n 4 *16 U.S.C. 824e* (1982).

n 5 Recently, the Commission instituted 206 proceedings involving the formula rates of electric utilities. *See*, EL87-21-000 Yankee Atomic Electric Company, EL87-22-000 Vermont Yankee Nuclear Power Corporation, EL87-23-000 Connecticut Yankee Atomic Power Company, EL87-30-000 Connecticut Light & Power Company.

## II. Background

In response to the Tax Reform Act, the Commission, on March 12, 1987, published a Notice of Proposed Rule-making (NOPR) n6 which proposed an abbreviated filing procedure that would allow public utilities to voluntarily reduce their rates to account for this reduction in the Federal tax rate. n7 The NOPR proposed two methods of determining the rate reduction. The primary option would permit a utility to reflect the reduction in the tax rate through a formula reduction to its existing rates. The formula would rely on data supplied by the utility in its most recent rate filing. An alternative approach was also suggested under which rates would be reduced using a generically determined fixed percentage reduction to the demand charge component of a utility's existing rates.

n 6 Rate Changes Relating to Federal Corporate Income Tax Rate for Public Utilities, *52 FR 8616* (Mar. 19, 1987), FERC Stats. and Regs. para. 32,437.

n 7 Fifty-two commenters responded to the NOPR. The list of commenters is contained in Appendix A.

The NOPR proposed to preclude a utility from using the abbreviated filing procedure if it had a rate change application pending before the Commission on a date certain; if it had an accepted tariff providing for automatic adjustments to reflect changes in the Federal tax rate; or if it already had rates in effect which reflected the reduced Federal income tax rate.

The NOPR stated that if a utility wished to reflect in its rates other changes created by the Tax Reform Act or by other cost elements, instead of the abbreviated procedure, it should file a rate change application under section 205 of the FPA. The Commission also proposed that if a utility failed to file for rate reductions, the Commission might institute a proceeding requiring the utility to show cause why its unadjusted rates are just and reasonable under section 206 of the FPA. The NOPR also proposed that such an investigation might not be limited to issues relating to the Tax Reform Act, and might include all components of the utility's rates.

### A. Overview

The Commission is concerned that large overcollections on an industry-wide basis may occur unless rates are reduced promptly to reflect the new tax rate since the reduction in the tax rate affects all utilities. The Commission is adopting a generic approach to address this concern. Through a generic reduction in rates based on a formula, a utility would be able to adjust for changes in the corporate tax rate by using an expedited procedure that would provide consumers immediate rate relief.

The Commission realizes that a formula reduction in rates may not be appropriate for all utilities under all circumstances. Therefore, a utility that chooses not to use the abbreviated procedure established in this rule may agree to a settlement with its customers, file a general section 205 rate change application, or if a utility finds that no rate reduction is warranted, it may elect to do nothing.

The Commission encourages settlement agreements and will look favorably on any proposed settlements that take into account the impact of the reduction in the tax rate.



Under a full section 205 rate change application, a utility may raise any other factors which might counterbalance the tax rate reduction. Under a full rate change application customers may also raise any relevant issues.

If a utility concludes that no rate decrease is warranted, it may refrain from filing any rate reduction. If the Commission institutes a section 206 proceeding, a utility may raise relevant issues to show that its unadjusted rates are just and reasonable.

*B. Other Tax and Cost Considerations.*

In the NOPR, the Commission identified three provisions of the Tax Reform Act that might affect public utilities on an industry-wide scale. These were changes in the depreciation rates, loss of investment tax credits and the reduction in the Federal income tax rate. The Commission stated in the NOPR that changes in liberalized depreciation and the loss of investment tax credits would have little immediate effect on a utility's rates. n8 It therefore concluded that the only changes that a utility should adjust immediately would be those to reflect the reduction in the Federal corporate income tax rate.

n8 Changes in tax depreciation have little immediate impact on the calculation of income tax allowable because of the Commission's tax normalization policy. Under normalization the calculation of allowable income tax expense is based upon the amount of book depreciation taken, not tax depreciation. The amount of book depreciation is not affected by the Tax Reform Act. *See 18 CFR 35.25.* "Regulations Implementing Tax Normalization for Certain Items Reflecting Timing Differences in the Recognition of Expenses or Revenues for Rate-making and Income Tax Purposes," Order No. 144, *46 FR 26613* (May 14, 1981), FERC Stats. and Regs. [Regulations Preambles, 1977-1981] para. 30,254 (May 6, 1981). Similarly, loss of investment tax credits will also have a minimal effect on a utility's revenue requirements. Under current regulatory policy, the benefits of investment tax credits are shared between the ratepayer and the stockholders of the regulated entities. The ratepayer benefits by either receiving the time value of the unamortized investment tax credit or the annual amortization amount, but not both, depending upon the optional treatment elected by the utility. The rate reducing effects of previously generated investment tax credits will continue until fully amortized.

Many commenters faulted the Commission for concentrating solely on the reduction of the tax rate. n9 They argued that other provisions of the Tax Reform Act offset this decrease. n10

n9 *See, e.g.,* Utah Power and Light Company, Philadelphia Electric Company, Kentucky Utilities Company, Electric Utilities, Public Service Electric and Gas Company, Colorado Public Utilities Commission, Public Service Company of Colorado, Sierra Pacific Power Company.

n10 In addition to elimination of investment tax credits and changes in depreciation other provisions of the TRA cited by commenters that addressed this issue were:

- Recognition of unbilled revenues.
- Capitalization of certain construction overheads.
- Taxability of contributions in aid of construction.
- Alternative minimum tax provisions.
- Timing of deduction for sales tax, property tax, and employee benefits.
- Elimination of accrual accounting for accrued vacation pay and reserve for bad debts.

The Commission recognizes that many of the aspects of the Tax Reform Act cited by the commenters may have an impact on a utility's cash flow. The effect, however, will differ widely from utility to utility depending upon its particular circumstances, and therefore would be inappropriate for a generic formula, which could not account for all the changes made by the Act and their effects on each utility. The one aspect of the Tax Reform Act that will have a significant effect on the rates of electric utilities on an industry-wide basis is the corporate tax rate reduction.

The Commission has determined that, to reflect this one change, the income tax component of rates under the Commission's ratemaking model should be reduced by nearly 40 percent. n11 Through this procedure, the Commission is enabling a public utility to voluntarily reduce its rates without having to file a full rate change application.

n 11 The percentage change in the income tax component of a jurisdictional company's revenue requirement due to a reduction in the Federal corporate income tax rate can be measured by the incremental change in the "income tax factor." This factor, expressed as the Federal tax rate divided by one minus the Federal tax rate, is 0.85185 at the 46 percent rate and 0.51515 at the 34 percent rate. Thus, the 12 percentage point reduction in the Federal tax rate translates to nearly a 40 percent reduction in a jurisdictional company's income tax allowance.

Some commenters suggested that the Commission consider changes in state income taxes. n12 Others urged the Commission to take into account other increases in cost components which might affect a utility's rates. n13 The Commission disagrees. The purpose of this final rule is to provide utilities with a simple mechanism to voluntarily reduce rates to reflect the reduction in the Federal tax rate. Consideration of these other suggested factors would unnecessarily complicate the abbreviated filing and delay rate relief.

n 12 *See* Utah Power and Light Company, Idaho Power Company (state tax increases), Cities and Villages of Algoma, *et al.* (state tax decreases).

n 13 *See, e.g.,* Central Illinois Public Service Company, Utah Power and Light Company.

### C. Filing Options

The NOPR requested comments on two proposed abbreviated filing methods, and invited suggestions on any other alternatives. The first alternative proposed in the NOPR was a formula reduction in rates, based on data supplied by the utility in its most recent rate filing. Under the alternative option, rates would be reduced automatically, for all utilities, using a fixed percentage reduction to the demand charge.

Most commenters (even those opposed to the rulemaking) favored the formula approach over a fixed percentage reduction. n14 Most utilities favored retaining both approaches, which would enable the filing utility to select the methodology most suited to its particular situation. n15 Some utilities also suggested that the Commission provide many abbreviated filing options. n16

n 14 *See, e.g.,* Public Service Company of Oklahoma, Borough of Madison, New Jersey, Consumer Power Company, Saffer Utility Consultants, Inc.

n 15 *See, e.g.,* Carolina Power and Light Company, Electric Utilities, Arizona Public Service Company.

n 16 *See, e.g.,* American Electric Power Service Corporation, Edison Electric Institute, Southwestern Electric Power Company.

The Commission is adopting only the formula alternative. The Commission agrees with many of the commenters that a formula reduction has certain advantages over a fixed percentage reduction. n17 While both may be simple, the formula approach is utility-specific. As such, it can more readily accommodate a utility's specific circumstances and, therefore, more closely approximates the actual cost-to-service impact of the lower tax rate.

n 17 *See, e.g.,* Department of Water Resources of the State of California, Coast Electric Power Association, *et al.*

Commenters also cited problems with the fixed percentage option. n18 Since it is not utility-specific, but calls for an across-the-board reduction for all utilities, it may be imprecise. In fact, it may produce excessive reductions for some utilities and allow others to receive a windfall. The Commission believes that the fixed percentage approach would be unfair to both the utility and the ratepayers. Additionally, these commenters faulted the method by which the Commission determined the fixed reduction percentage. The percentage reduction proposed in the NOPR was based on a sampling of eight rate filings which resulted in a five to eight percent reduction in the nonvariable portion of a utility's revenue requirement. Commenters argued that the sampling was too small and was not representative of the industry. The Commission recognizes that there are approximately 175 utilities subject to the Commission's jurisdiction. The Com-

mission agrees that a determination of an appropriate fixed percentage reduction would require extensive sampling. Furthermore, the Commission believes that using any fixed percentage reduction would not yield as accurate a result as a formula reduction.

n 18 *See, e.g.,* Southwestern Electric Power Company, Public Systems.

In view of the disadvantages of the fixed percentage approach, the Commission must reject the argument that a utility should have the option of using either the formula method or the fixed percentage method.

Some commenters wanted the Commission to adopt numerous filing options. 1 n9 Others suggested that the Commission establish some type of simplified procedure that a utility could use to show that its unadjusted rates remained justified. 2 n0 The Commission believes that multiple filing options or additional procedures would be unduly cumbersome. Allowing utilities to make simplified showings that their rates are just and reasonable also poses evidentiary problems, since a utility would be free to selectively supply the Commission with data in support of its case. A more appropriate forum to make such a showing is a proceeding under either section 205 or 206 of the FPA.

n 1 9 *See, e.g.,* Public Service Company of Oklahoma, Edison Electric Institute.

n 2 0 *See, e.g.,* Pennsylvania Power & Light Company, Central Vermont Public Service Corporation, Public Service Company of New Mexico.

#### *D. The Formula*

The adopted formula is:

$$K = \frac{D - D(E/F)}{I}$$

Where

D=Composite income taxes allowable included in rates in effect on the date that the change in the Federal corporate income tax rate becomes effective.

E=Composite income tax factor using the new Federal corporate income tax rate and the effective state income tax rate from the rate application docket upon which existing rates are based. This is computed by the following formula:

composite marginal income tax rate  
- composite marginal income tax rate

F=Composite income tax factor using the old Federal corporate income tax rate. This is computed by the same formula used for determining E.

I=Test period billing units from the rate application docket upon which the rates that are in effect are based. Absent extraordinary circumstances a public utility shall use demand billing units. This information is usually available in Statement BG of the rate application and/or settlement or compliance documents.

K=Required rate reduction per billing demand unit.

This formula may be broken down into the following four-step process:

$$(1) \quad A \times \frac{B}{C} = D$$

$$(2) \quad D \times \frac{E}{F} = G$$

$$(3) \quad D - G = H$$

$$(4) \quad \frac{H}{I} = K$$

Where

A=Income taxes allowable (exclusive of deferred tax make-up provisions, *i.e.* "South Georgia" provisions, and investment tax credit amortizations) included in the revenue requirement of the public utility's rate application docket upon which the rates in effect on the date the Federal corporate income tax rate change becomes effective were finally accepted or approved. This information is generally included in Statement BK or BL of the filing as revised after any summary dispositions where revised rates were required to be filed.

B=Revenue level in effect on the date the change in Federal corporate income tax rate becomes effective using test period billing determinants. This information is generally available from Statement BG of the rate application and/or settlement or compliance filing documents.

C=Revenue requirement from the rate application docket which includes A. This is generally included in Statement BK or BL of the filing.

G=Income taxes allowable at the new Federal corporate income tax rate.

H=Difference between income taxes allowable at the new Federal corporate income tax rate, and at the old Federal corporate income tax rate. This is the revenue reduction required to reflect the reduction in the Federal corporate income tax rate.

The Commission will use the data provided by a public utility in the rate application supporting its current rates on file to determine the reduction in rates to reflect the change in the Federal corporate tax rate. Since a public utility's rates generally differ, depending on the type of service the utility provides (firm transmission service, full requirements ser-

vice, or partial requirements service) and for each customer group, the utility must make a separate rate reduction calculation for each type of service and each customer group.

In the first step of the formula, the income tax allowable component (A) from a public utility's last rate application is multiplied by the ratio of: (B) The test period revenues from the rates actually in effect on July 1, 1987 (using billing determinants from Statement BG of the public utility's rate application) to (C) the test period revenue requirement reported by the public utility in its last rate application (Statement BK or BL of the public utility's rate application). The result (D) represents the income tax allowable component which, for purposes of this rule, the Commission is presuming is included in a public utility's rate in effect on the date that the change in Federal corporate income tax rate became effective. This figure is based on the old Federal corporate income tax rate. The calculation recognizes that the public utility's current rate level may be designed to achieve test period revenues lower than the revenue requirement originally supported by the public utility in its rate application. The difference between generated rate levels and revenue requirement may be due to a variety of reasons including reductions in rate levels due to settlement agreements, voluntary reductions, Commission orders, and Commission opinions. For those rates that were determined by Commission opinion or equivalent order following a litigated proceeding, the income tax allowance from the company's finally accepted compliance filing, exclusive of deferred tax make-up provisions and investment tax credit amortizations, must be used as (D) in the formula instead of using "A X (B/C)" as (D). For settlement rates where the utility submitted a cost of service supporting the settlement rate level, the utility must use the income tax allowable figure contained in the settlement as (D) in the formula.

In the second step, the income tax allowable component (D) is multiplied by the ratio of: (E) The income tax factor at the new Federal corporate income tax rate to (F) the income tax factor at the old Federal corporate income tax rate. The result (G) represents the income tax allowable based on the new Federal corporate income tax rate.

In the third step of the formula, the income tax allowable component based on the new Federal corporate income tax rate (G) is subtracted from the income tax allowable component based on the old Federal corporate income tax rate (D). The result (H) represents the revenue reduction necessary to reflect the new corporate income tax rate.

Finally, in the fourth step of the formula, the revenue reduction figure (H) is divided by the demand billing units reported in the public utility's last rate application to determine the revenue reduction per unit of billing demand (K). Some adjustments in the implementation of this aspect of the formula may be allowed if, for example, the utility's rate is entirely energy-based, *i.e.*, on a per-kilowatt-hour basis, or if the utility's rate design incorporates unusual features.

In applying this formula, a utility may, by affidavit setting forth the reason, deviate from the use of demand billing units under extraordinary circumstances. Under this filing procedure intervenors may challenge this variation. The utility shall have the burden of proof in showing that a deviation from the use of demand billing units is based on extraordinary circumstances.

In order to expedite filings under this rule, a utility must provide the following in support of its rate reduction:

- (A) Computations showing the application of each step of the formula methodology;
- (B) Supporting workpapers including (1) all intermediate calculations necessary under the formula with narrative explanation where appropriate and (2) details on the derivation of all formula inputs together with copies of all statements and workpapers used as source documents;
- (C) Detailed explanations of all adjustments to data shown on supporting statements (*e.g.*, adjustments to exclude South Georgia provisions from Federal Income Tax Allowable);
- (D) Form of notice noting that the rates are to be effective as of July 1, 1987;
- (E) Revised rate sheets reflecting the proposed rate reduction for every rate schedule to which the reduction is proposed;
- (F) A list of any customers or services for which no reduction is proposed and the reasons for not reducing these rates.

A number of commenters raised issues regarding application of the formula. The Commission proposed to base the formula reduction on data derived from a utility's most recent rate filing. However, several commenters argued that the Commission should not rely on data in a utility's last rate filing since the data may have been filed several years ago and may no longer reflect a utility's true costs, and a formula based on the data would therefore not be valid. n21

n 21 *See, e.g., Idaho Power Company, Public Service Company of New Mexico, Utah Power and Light Company.*

While a utility's specific costs may have changed since its last rate application, the data contained in this application are the most comprehensive on file at the Commission. A utility that believes that the data supporting its current rates no longer reflect its true costs should file an application for a general rate change.

The Iowa Public Service Company suggested that the Commission use data from a utility's most recent FERC annual report. The Commission disagrees since rates currently being collected are based on a utility's last cost-of-service filing and not annual report figures. Furthermore, it may not be possible to derive accurate data such as a utility's income tax allowable figure from its annual report.

In the formula, a utility's deferred tax make-up provision is excluded from the income taxes allowable component. These make-up provisions are designed to recover any deficiencies or to eliminate any excesses in the deferred tax reserves of a utility. Several commenters questioned whether the provision should be excluded in computing the appropriate reduction. n22 The Commission will consider any corrections to a utility's make-up provision amortization in conjunction with the utility's next full rate change application. The Commission believes that potentially complex questions involving any such adjustments should be dealt with in individual FPA section 205 or 206 proceedings, where all parties may question the necessary adjustment. Until that time, a utility should continue to accrue the deferred tax amortization amount in accordance with its previously approved plan of recovery.

n 22 *See, e.g., Allegheny Electric Cooperative, Inc., Coast Electric Power Association, et al.*

Similarly, some commenters requested that the Commission establish a method of returning any overaccruals of a utility's unfunded future tax liability to the ratepayers. n23 The Commission is delaying consideration of any of these excess accruals until a utility's next rate application for the same reasons discussed above with regard to deferred tax make-up provisions. Utilities are required to establish a plan to return any excess accruals in rate applications. Until the next full rate change application a utility would not receive a windfall because any excess funds the utility collects for deferred income taxes are used as a rate base deduction until ultimately returned to the customers. n24

n 23 *See, e.g., Wholesale Distribution Customers, Arkansas Public Service Commission, Indiana Utility Consumer Counselor.*

n 24 *See Order No. 144, 46 FR 26613 (May 14, 1981), FERC Stats. & Reg. [Regulations Preambles 1977-1981] para. 61,254 (May 6, 1981); Order No. 144-A, 47 FR 8329 (Feb. 26, 1982) and 477 FR 8991 (Mar. 2, 1981), FERC Stats. & Regs. [Regulations Preambles (1982-1985)] para. 30,340 (Feb. 22, 1982).*

Under the formula, reductions were to be made on a per billing demand unit basis unless there were "extraordinary circumstances" not to do so. The NORP requested comments as to the appropriate circumstances under which exceptions to the use of demand billing units should be allowed. Although two commenters addressed this issue, neither provided the Commission with specific examples of what would constitute an extraordinary circumstance. n25 Therefore, the Commission will consider these situations on a case-by-case basis. Intervenor may challenge such a deviation. A utility shall have the burden of proof in showing that a variation from the use of demand billing units is based on extraordinary circumstances.

n 25 *See Pacific Gas & Electric Company, Iowa Public Service Company.*

#### *E. Rates Affected*

In the NOPR, the Commission proposed to exclude three types of utilities from the abbreviated filing procedure: A utility with rate filings pending before the Commission in which the tax component could be changed and in which the effective date of the rates at issue was no later than July 1, 1987; a utility that tendered rate applications to allow an effective date no later than July 1, 1987; or a utility whose rates already reflected the change in the Federal tax rate.

Some commenters suggested that formula reductions were unwarranted with respect to certain types of rates, specifically wheeling rates n26 and market-based rates. n27 Since the Commission is adopting only the formula rate re-

duction method, only rates which can be reduced by this method are included in this rule. These are requirements service rates (full or partial) and firm wheeling rates.

n 26 See Niagara Mohawk Power Corporation.

n 27 See Illinois Power Company.

Several commenters argued that a formula reduction was not appropriate for settlement rates, since the income tax allowable component in these rates may not be readily determinable. n8 The formula assumes, in settlement rates, a *pro-rata* reduction in all of a utility's costs. For example, if a utility proposed revenues of \$100 but settled for \$75, all of the cost components submitted in support of the rate request to achieve those revenues, including income taxes allowable, would be reduced by 25 percent. The American Electric Power Service Corporation suggested a revision in the formula which would attribute the difference between the rate as filed and the settlement rate solely to a reduction in the rate of return on equity. Since it may be impossible to accurately allocate the reduction among all the different costs in a settlement rate, the Commission believes the best generic approach is to assume a *pro-rata* reduction in all the costs rather than attributing the reduction to a single factor. A utility that believes that application of the formula would result in inequitable treatment is encouraged to file an application under FPA section 205.

n 28 See, e.g., Detroit Edison Company, Pennsylvania Power & Light Company, Edison Electric Institute.

Other commenters questioned whether the formula could be applied to settlement rates subject to moratorium provisions. For moratoriums that prohibit any rate change (increase or decrease), the Commission is adopting a procedure suggested by the Florida Power & Light Company. Adjustment to this type of rate can be made under the abbreviated procedure, but the Commission will defer the effective date of the reduction until after the moratorium term. However, if a moratorium prohibits only rate increases, the rate can be adjusted using the formula since filing for a rate decrease would not violate the moratorium.

Two commenters stated that a formula reduction in phase-in rates may not be appropriate. n9 Phase-in rates present unique problems since rates are not computed using a conventional cost-of-service. Consequently, the Commission will adjust these rates on a case-by-case basis.

n 29 See Union Electric Company, Missouri Public Service Commission.

#### *F. Effective Date of Decreased Rates*

The Commission proposed that, in order to use the abbreviated filing procedure, a utility would have to file by June 1 1987, so that the proposed rates would become effective July 1, 1987, when the 34 percent tax rate becomes effective.

In this final rule, the Commission is establishing a filing timetable that utilities must use. Rates under this abbreviated filing are to be effective July 1, 1987, regardless of when the rate application is filed. To implement this procedure, the Commission is waiving any notice requirements in order to make July 1 the effective date of the new rate. n0

n 30 See 18 CFR 35.11 (1987).

If a utility uses the abbreviated filing procedure, it must refund to its customers the difference between the rate unadjusted for the tax change and the new rate that reflects the tax adjustment. In order to encourage utilities to use this procedure, the Commission is not requiring that refunds be made with interest.

The Commission expects that many public utilities will file for rate reductions under this rule. In order to process these applications expeditiously, the Commission is establishing the following filing schedule which utilities must follow. The expiration of each of these filing periods will provide the Commission with an orderly and efficient basis to initiate its section 206 review of those utilities that do not file under this rule.

#### Schedule for Filings

First letter of utility name	Filing period
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### Schedule for Filings

First letter of utility name	Filing period
A-B	No later than September 15, 1987.
C-E	No later than September 30, 1987.
F-L	No later than October 15, 1987.
M-N	No later than October 31, 1987.
O-S	No later than November 15, 1987.
T-Z	No later than November 30, 1987.

Some commenters suggested that the Commission delay the effective date of the new rates until January 1, 1988. While this would be administratively simpler, the Commission is unwilling to do so since it would allow utilities to overcollect during the last six months of 1987. They further argued that the June 1 filing date proposed in the NOPR did not allow utilities sufficient time to collect the data necessary to file. The first filing period in the schedule established in the final rule gives utilities at least two months to collect this data. The Commission believes that this is sufficient time for a utility to prepare its filing.

<sup>3 1</sup> See, e.g., Florida Power & Light Company, Idaho Power Company.

#### G. Tax Rate for 1987

Since the Tax Reform Act reduced the tax rate to 34 percent effective July 1, 1987, the NOPR proposed that rate filings under the abbreviated procedure were to reflect this 34 percent tax rate.

Numerous commenters argued that if a utility were to use a split tax rate of 46 percent for the first half of 1987 and 34 percent for the remaining half, it would be violating standard accounting practices and Internal Revenue Service normalization requirements. They specifically cited *section 15 of the Internal Revenue Code* that required a blended tax rate of 40 percent for 1987. Therefore, they suggested that the Commission also use the 40 percent tax rate to determine the appropriate rate reductions.

<sup>3 2</sup> See, e.g., Deloitte, Haskins & Sells, Arthur Anderson & Company, Kentucky Utilities Company, Utah Power & Light Company, Commonwealth Edison, Southern California Edison Company.

<sup>3 3</sup> *I.R.C. 15(a)* (1986) provides in part:

In any rate of tax imposed by this chapter changes, and if the taxable year includes the effective date of the change (unless that date is the first day of the taxable year), then

(1) Tentative taxes shall be computed by applying the rate for the period before the effective date of the change, and the rate for the period and after such date, to the taxable income for the entire taxable year; and

(2) The tax for such taxable year shall be the sum of that proportion of each tentative tax which the number of days in each period bears to the number of days in the entire taxable year.

Although the commenters are correct that income tax returns filed for the calendar year 1987 will be required to reflect the use of a blended rate, it does not necessarily follow that the blended rate is appropriate for the Commission to use for rate-making purposes. By using the split rate approach in which tax rates are assumed to change on July 1, 1987, from 46 percent to 34 percent the Commission has avoided the need to make two rate adjustments to give recognition to the tax rate change, one to reflect the blended rate of approximately 40 percent rate for calendar year taxpayers on January 1, 1987, and a second on January 1, 1988, to reflect the 34 percent rate. The split rate approach also avoids having to use a blended rate that would differ from the 40 percent rate for a utility that may have a tax year other than a calendar year. The Commission is not convinced that any distortions that may be caused by seasonal revenue patterns of a particular utility should outweigh the benefits that will be derived from the generic use of a single tax rate change date. Additionally, the Commission fails to understand those comments where concern was expressed that the use of a split rate would violate the normalization requirements of the Internal Revenue Code. The normalization requirements are annual ones that relate to certain differences between depreciation expenses on property claimed for tax purposes and that used for ratemaking and regulatory accounting purposes. The required annual normalization for property that is in service at



the beginning of the year would, therefore, be provided through either one-half of the year at 46 percent and the other half at 34 percent of a full year at 40 percent since the total amount for the year under either approach would be the same. Straight line depreciation, which is used almost universally for ratemaking purposes, is simply not dependent upon seasonal patterns of revenues. 3 n4

n 3 4 The Commission confronted this blended rate issue in *West Texas Utilities*, 37 FERC para. 61,284 (1986). In that order the Commission directed the utility to use a split tax rate approach for 1987. On rehearing, 38 FERC para. 61,138 (1987), the Commission allowed the use of the blended rate because the company's filing provided for rates at the 40 percent tax rate for 1987 and open-ended rates reflecting the 34 percent tax rate beginning in 1988. This rule is addressing utilities that have already been collecting at the 46 percent tax rate for the first six months of 1987.

#### *H. Interventions*

In the NOPR the Commission proposed that if any issue not directly related to the application of the formula were raised by an intervenor in the abbreviated proceeding it would be severed and automatically accorded complaint status under FPA section 206. The Central Vermont Public Service Corporation suggested that, as an inducement for utilities to file, the Commission should dismiss these issues without prejudice and require the intervenor to file the section 206 complaint separately. The Commission is adopting this suggestion. Dismissal of ancillary issues will allow utilities to make the abbreviated filing without automatically triggering FPA section 206 complaints.

#### *I. Miscellaneous Issues*

11 Several utility commenters suggested that the proposed rule was unnecessary because the Commission's current regulations already provide for voluntary rate reductions or Commission-initiated section 206 investigations. 3 n5 They further suggested that the abbreviated filing procedure required too much documentation.

n 3 5 See *Electric Utilities, Cincinnati Gas & Electric Company*.

The Commission is promulgating this rule to encourage utilities to file for rate reductions. The formula established is easy to use and should provide accurate results. Furthermore, the scope of the Commission's review will be limited, and issues not relating to the formula will be dismissed without prejudice.

The Commission is adopting a suggestion of the Consumers Power Company to reduce the filing requirements. The Commission proposed to require utilities to file billing determinants for each of the 12 months immediately before and each of the 12 months immediately after the proposed effective date of the rate change. Billing determinants are a measure of the demand each customer group places on a utility. Instead, in this rule, the Commission is requiring utilities to file billing determinants only from the most recent 12 months available. The Commission has determined that future billing determinants are not needed to evaluate the applications tendered pursuant to this rule.

Several commenters urged the Commission to make the abbreviated filing procedure mandatory. 3 n6 The Commission has no statutory authority to require utilities to make rate reductions under FPA section 205. 3 n7 The Commission does intend, however, to initiate FPA section 206 proceedings against utilities that it believes are overcollecting as a result of the reduction of the tax rate.

n 3 6 See, e.g., *Coast Electric Power Association, et al., Allegheny Electric Cooperative, Inc., Borough of Madison, New Jersey*.

n 3 7 Rate filings under Section 205 of the Federal Power Act are at the discretion of the utility.

Several commenters suggested that the Commission waive filing fees under the abbreviated procedure. 3 n8 The Commission is adopting this suggestion and is waiving filing fees to encourage the use of this voluntary procedure.

n 3 8 See, e.g., *Cincinnati Gas & Electric Company, Florida Power & Light Company*.

Otter Tail Power Company suggested that the rule should exempt utilities with minimal FERC revenues from the filing requirements. Since the abbreviated filing procedure is voluntary, creating such an exemption is unnecessary.

Although commenters urged the Commission to initiate procedures to determine the effects of the tax rate change on oil pipelines as well as electric utilities, this suggestion is outside the scope of this rulemaking. 3 n9 For the present, the Commission will continue to deal with oil pipeline rates on a case-by-case basis.

n 3 9 *See* Air Transport Association of America, Robert Abrams, Attorney General of New York.

The Florida Power & Light Company suggested that the Commission establish a single formula to account for any future changes in the Federal income tax rate. The Commission declines to adopt the suggestion. If Congress changes the Federal corporate income tax rate in the future, the Commission will evaluate the change at that time.

The Central Illinois Public Service Company suggested that the Commission not take any action on the rates of a utility until the jurisdictional state commission has had an opportunity to adjust retail rates to reflect the Tax Reform Act. The Commission also declines to adopt this suggestion. The Commission has a statutory obligation to ensure that electric wholesale rates are just and reasonable. If it were to wait for states to act first, it would be abdicating that responsibility.

### III. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) 4 n0 generally requires a description and analysis of final rules that will have a significant economic impact on a substantial number of small entities. 4 n1 Specifically, if an agency promulgates a final rule under the Administrative Procedure Act (APA) 4 n2, a final RFA analysis must contain (1) a statement of the need for and objectives of the rule, (2) a summary of the issues raised by the public comments in response to any initial regulatory flexibility analysis, and the agency response to those comments, and (3) a description of significant alternatives to the rule consistent with the state objectives of the applicable statute that the agency considered and ultimately rejected. An agency is not required to make an RFA analysis, however, if it certifies that a rule will not have "a significant economic impact on a substantial number of small entities." 4 n3

n 4 0 5 *U.S.C. 601-612* (1982).

n 4 1 *Id. 604(a)*.

n 4 2 *Id. at 553*.

n 4 3 *Id. 605(b)*.

In the proposed rule the Commission certified that the rule would not have a significant impact on a substantial number of small entities. In addition, the rule is voluntary and will be beneficial to public utilities by providing an expedited filing mechanism which they might use to reflect the reduction in the Federal corporate income tax rate. Accordingly, the Commission certifies that this rule will not have a "significant economic impact on a substantial number of small entities."

### IV. Paperwork Reduction Act

The Paperwork Reduction Act, 44 *U.S.C. 3501-3520* (1982) and the Office of Management and Budget's (OMB) regulations, 5 CFR Part 1320 (1987), require that OMB approve certain information collection requirements imposed by agency rules. On June 8, 1987, the information collection provisions in this final rule were approved by OMB and assigned Control Number 1902-0096.

### V. Effective Date

The Administrative Procedure Act permits an agency to make a substantive rule effective prior to 30 days after its publication in the Federal Register if the rulemaking relieves a restriction or if the agency finds good cause to waive the notice period and publishes this finding as part of the rule. 4 n4

n 4 4 5 *U.S.C. 553(d)* (1982).

The required finding of good cause for waiver of the 30-day notice period with respect to this rule is based upon the fact that the filing procedure adopted in this rule is voluntary. By making the rule effective immediately, the Commission is allowing utilities which have already compiled the necessary data to make immediate filings. This will enable Commission staff to expedite rate reductions to customers. In addition, since the Commission is also relieving a restriction on its normal filing requirements for rate decrease filings, the Commission finds good cause to make the rule effective upon issuance.

#### List of Subjects

##### *18 CFR Part 35*

Electric power rates, Electric utilities, Reporting and recordkeeping requirements.

##### *5318 CFR Part 389*

Reporting and recordkeeping requirements.

In consideration of the foregoing, the Commission amends Parts 35 and 389, Title 18, Chapter I, Code of Federal Regulations as set forth below.

By the Commission.

Kenneth F. Plumb,  
Secretary.

#### PART 35 -- FILING OF RATE SCHEDULES

1. The authority citation for Part 35 is revised to read as follows:

Authority: Department of Energy Organization Act, *42 U.S.C. 7101-7352* (1982); E.O. No. 12009, 3 CFR 1978 Comp., p. 142; Independent Offices Appropriations Act, *31 U.S.C. 9701* (1982); Federal Power Act, *16 U.S.C. 791a-825r* (1982); Public Utility Regulatory Policies Act, *16 U.S.C. 2601-2645* (1982).

2. In § 35.13, paragraph (a)(2)(ii) is revised to read as follows:

§ 35.13 Filing of changes in rate schedules.

\* \* \* \* \*

(a) *General rule.* \* \* \*

(2) *Abbreviated filing requirements.* \* \* \*

(ii) *For rate schedule changes other than rate increases.* (A) Except as provided in paragraph (a)(2)(ii)(B) of this section, any utility that files a rate schedule change that does not provide for a rate increase or that provides for a rate increase that is based solely on change in delivery points, a change in delivery voltage, or a similar change in service, must submit with its filing only the information required in paragraphs (b) and (c) of this section.

(B) Any utility that files a rate schedule change that provides for a rate decrease under § 35.27 of this part must submit with its filing only the information required by § 35.27 of this part.

\* \* \* \* \*

3. Section 35.27 is added to read as follows:

§ 35.27 Changes of rates relating to changes in the Federal corporate income tax rate.

(a) *Purpose.* The abbreviated filing procedure and formula for this section are intended to permit a public utility to make an adjustment to its rates to reflect the decrease in the Federal corporate income tax rate pursuant to the Tax Re-

form Act of 1986. This abbreviated filing procedure and formula would be used by a public utility in lieu of a more comprehensive rate filing under § 35.13 of this part concerning changes in rate schedules.

(b) *Applicability.* (1) Except as provided in paragraph (b)(2), and (b)(3) of this section, a public utility may use the abbreviated filing procedure and formula in this section to adjust its rates to reflect the decrease in the Federal corporate income tax rate.

(2) If a public utility has a rate case currently pending before the Commission in which the change in the Federal corporate income tax rate can be reflected, the public utility may not use this section to adjust its rates.

(3) If a public utility has a rate accepted for filing by the Commission that provides for the automatic adjustment of its rates to reflect, without prior hearing, increases or decreases in the Federal corporate income tax rate, it may not use this section to adjust its rates.

(c) *Formula for rate adjustment to reflect changes in Federal corporate income tax rate.* (1) For purposes of establishing a rate reduction designed to reflect a percentage decrease in the Federal corporate income tax rate, a public utility must use the following formula:

$$K = \frac{D-D(E/F)}{I}$$

where:

D=Income taxes allowable included in rates in effect on the date that the change in Federal corporate income tax rate becomes effective.

E=Composite income tax factor using the new Federal corporate income tax rate and the effective state income tax rate from the rate application docket upon which existing rates are based. This is computed by the following formula:

$$\frac{\text{composite marginal income tax rate}}{1-\text{composite marginal income tax rate}}$$

F=Composite income tax factor using the old Federal corporate income tax rate. This is computed by the same formula used for determining E.

I=Test period billing units from rate application docket upon which the rates that are in effect are based. Absent extraordinary circumstances a public utility must use demand billing units. This information is usually available in Statement BG of the rate application and/or settlement or compliance documents.

K=Required rate reduction per billing demand unit.

(2) A separate rate calculation using this formula is required for each type of service a public utility provides and for each individual customer group thereunder.

(d) *Abbreviated filing requirements for rate schedule changes due to reductions in the Federal corporate income tax rate.* Any public utility that files a rate schedule change providing for a rate decrease that is based on a change in the

Federal corporate income tax rate must submit with its finding only the information required in paragraphs (d)(1) and (d)(2) of this section.

(1) *General information.* Any public utility filing under this section must file the following general information:

- (i) A list of documents submitted with the rate schedule change;
- (ii) The date on which the public utility proposes to make the rate schedule effective;
- (iii) The names and addresses of persons to whom a copy of the rate schedule change has been mailed;
- (iv) A brief description of the rate schedule change;
- (v) A statement of the reasons for the rate schedule change;
- (vi) A showing that all requisite agreement to the rate schedule change, or to the filing of the rate schedule change, including any agreement required by contract, has in fact been obtained;
- (vii) Computations showing the application of each step of the formula methodology;
- (viii) Supporting workpapers including all intermediate calculations necessary under the formula with narrative explanation where appropriate, and details on the derivation of all formula inputs together with copies of all statements and workpapers used as source documents;
- (ix) Detailed explanations of all adjustments to data shown on supporting statements (*e.g.*, adjustments to exclude South Georgia provisions from Federal income taxes allowable);
- (x) Form of notice stating that the rates are to be effective July 1, 1987;
- (xi) Revised rate sheets reflecting the proposed rate reduction for every rate schedule to which the reduction is proposed;
- (xii) A list of any customers or services for which no reduction is proposed and the reasons for not reducing these rates; and
- (xiii) A form of notice suitable for publication in the Federal Register in accordance with § 35.8 of this part.

(2) *Information relating to the effect of the rate schedule change.* Any public utility filing under paragraph (d)(1) of this section must also file the following information or materials:

(i) A table or statement comparing sales and services and revenues from sales and services under the rate schedule to be superseded or supplemented and under the rate schedule change, by applying the components of each such rate schedule to the billing determinants for each class of service, for each customer, and for each delivery point or set of delivery points that constitute a billing unit:

(A) For each of the twelve most recent available months prior to the effective date of the rate schedule change; and

(B)(1) If in the immediately preceding rate change filing the public utility filed Statements BG and BH under paragraph (h) of § 35.13 of this part for Period I, for each of the twelve months of Period I; and

(2) If in the immediately preceding rate change filing Period II is the test period, for each of the twelve months of Period II.

(ii) A comparison of the rate schedule change and the public utility's other rates for similar wholesale services.

(e) *Hearing issues.* (1) The only issues that may be raised by Commission staff or any intervenor under the procedures established in this section are:

- (i) Whether or not the public utility may file under this section,
- (ii) Whether or not the formula in § 35.27 has been properly applied, and
- (iii) Whether or not the correct information was used in that formula.

(2) Any other issue raised will be severed from the proceeding and dismissed without prejudice.

(f) *Effective date.* Rates proposed under the filing are to have a July 1, 1987 effective date. A public utility that chooses to use the abbreviated filing procedure and formula contained in this section must make its filing according to the following schedule:

Schedule for Filings

First letter of utility name	Filing period
A-B	No later than September 15, 1987.
C-E	No later than September 30, 1987.
F-L	No later than October 15, 1987.
M-N	No later than October 31, 1987.
O-S	No later than November 15, 1987.
T-Z	No later than November 30, 1987.

(g) *Refunds.* A utility filing under this procedure must refund to its customers the difference between the rates unadjusted for the tax change and the new rate that reflects the tax adjustment. These refunds will be made without interest.

(h) *Waiver of filing fees.* Any filing under this section may be filed without the filing fee required by § 35.0 of this part.

PART 389 -- OMB CONTROL NUMBERS FOR COMMISSION INFORMATION COLLECTION REQUIREMENTS

4. The authority citation for Part 389 continues to read as follows:

Authority: Paperwork Reduction Act of 1980 (*44 U.S.C. 3501-3520*) (1982).

§ 389.101 [Amended]

5. The table of OMB Control Numbers in § 389.101(b) is amended by inserting "35.27" in numerical order in the section column and "0096" in the corresponding position in the OMB Control Number column.

Appendix A

Note: This appendix will not appear in the *Code of Federal Regulations*.

1. Arthur Young
2. Public Service Company of Oklahoma
3. Cities and Villages of Algoma, *et al.*
4. American Electric Power Service Corporation
5. Air Transport Association of America
6. Borough of Madison, New Jersey
7. Cincinnati Gas & Electric Company

8. Public Service Company of New Mexico
9. Illinois Power Company
10. Philadelphia Electric Company
11. Consumers Power Company
12. Missouri Public Service Commission
13. Arkansas Public Service Commission
14. Utah Power & Light Company
15. Allegheny Electric Cooperative, Inc.
16. Mississippi Power Company
17. New England Power Company
18. Union Electric Company
19. American Public Power Association
20. Wholesale Distribution Customers
21. Public Systems
22. Niagara Mohawk Power Corporation
23. Iowa Power & Light Company
24. Department of Water Resources of the State of California
25. Kentucky Utilities Company
26. Pacific Gas & Electric Company
27. Central Illinois Public Service Company
28. Carolina Power & Light Company
29. Pennsylvania Power & Light Company

30. Saffer Utility Consultants, Inc.
31. Detroit Edison Company
32. Southwestern Electric Power Company
33. Florida Power & Light Company
34. Idaho Power Company
35. Robert Abrams, Attorney General of New York
36. Public Service Electric & Gas Company
37. Electric Utilities
38. Golden Spread Electric Cooperative, Inc., *et al.*
39. Central Vermont Public Service Corporation
40. Coast Electric Power Association, *et al.*
41. Colorado Public Utilities Commission
42. Deloitte, Haskins & Sells
43. Edison Electric Institute
44. Public Service Company of Colorado
45. Arthur Andersen & Company
46. Arizona Public Service Company
47. Iowa Public Service Company
48. Indiana Utility Consumer Counselor
49. Otter Tail Power Company
50. Commonwealth Edison Company
51. Sierra Pacific Power Company



52. Southern California Edison Company  
[FR Doc. 87-15090 Filed 7-1-87; 8:45 am]

BILLING CODE 6717-01-M

Line	Description	Cost of Capital			Amount	Notes
<b>1</b>	<b><u>Cost of Capital Per Docket DE 16-384 Settlement Agreement</u></b>					
		% of Capital	Cost of Capital	Rate of Return		
2	Common Stock Equity	50.97%	9.50%	4.84%		
3	Preferred Stock Equity	0.13%	6.00%	0.01%		
4	Long Term Debt	48.80%	7.15%	3.49%		
5	Short Term Debt	0.11%	1.54%	0.00%		
6	Total	100.00%		8.34%		
<b>7</b>	<b><u>Cost of Service</u></b>					
8	Proforma Income Taxes			\$ 5,125,436	Per Docket DE 16-384 Settlement Agreement Revenue Requirement	
<b>9</b>	<b><u>Revenue Reduction Per FERC Formula = D - D*(E/F)</u></b>					
10	D (Composite Income Taxes)			\$ 5,125,436	Line 8	
11	E (New Effective Tax Rate Factor)			0.3744	= 1 / (1 - new tax rate) - 1	
12	F (Old Effective Tax Rate Factor)			0.6559	= 1 / (1 - old tax rate) - 1	
13	<b>Revenue Reduction</b>			\$ 2,199,753	Line 10 - Line 10 * Line 11 ÷ Line 12	
<b>14</b>	<b><u>Revenue Reduction Due to 2017 Step Adjustment</u></b>					
15	As Settled Revenue Requirement for 2017 Step Adjustment			\$ 900,194	See Schedule DLC-4 Page 1	
16	Revenue Requirement for 2017 Step Adjustment Adjusted For Tax Change			855,203	See Schedule DLC-4 Page 2	
17	<b>Revenue Reduction</b>			\$ 44,991	Line 15 - Line 16	
<b>18</b>	<b>Grand Total Revenue Reduction Due to Lower Tax Rates</b>			\$ 2,244,744	Line 13 + Line 17	

May 1, 2017 Step Adjustment

Line No.	Rate Effective Date	5/1/2017
Line No.	Description	Investment Year 2016
<b><u>Utility Plant:</u></b>		
1	Beginning Utility Plant <sup>(1)</sup>	\$ 283,122,968
2	Plant Additions <sup>(2)</sup>	13,666,114
3	Retirements	(2,345,862)
4	Ending Utility Plant	<u>294,443,220</u>
5	Beginning Accumulated Depreciation	98,980,036
6	Depreciation	10,260,907
7	Retirements	(2,340,795)
8	Cost of Removal and Salvage	(725,971)
9	Ending Accumulated Depreciation	<u>106,174,178</u>
10	Ending Net Utility Plant	<u>\$ 188,269,043</u>
<b><u>Revenue Requirement:</u></b>		
11	Change in Net Plant	\$ 4,126,111
12	80% of Change in Net Plant	3,300,889
13	Pre-Tax Rate of Return	11.52%
14	Return and Taxes	<u>380,134</u>
15	Depreciation Expense on 80% of Plant Additions <sup>(3)</sup>	415,422
16	Property Taxes on 80% Change in Net Plant <sup>(4)</sup>	104,638
17	Revenue Requirement	<u>\$ 900,194</u>
<b><u>Revenue Cap:</u></b>		
19	May 1, 2017, 2018 & 2019 Step Adjustment Revenue Requirement Cap	\$ 4,500,000
20	Less: May 1, 2017 Step Adjustment Revenue Requirement	900,194
21	Remaining May 1, 2018 & 2019 Step Adjustment Revenue Requirement Cap	<u>\$ 3,599,806</u>

**Notes:**

(1) Beginning Utility Plant from page 2, plus Kingston substation of \$10,336,281

(2) Plant Additions from page 2, less Kingston substation of \$10,336,281

(3) See page 4

(4) 3.17% rate (2016 Property Taxes of \$5,971,944 / 2016 Net Utility Plant of \$188,269,043)

May 1, 2017 Step Adjustment (Adjusted for TCJA)

Line No.	Rate Effective Date	5/1/2017
Line No.	Description	Investment Year 2016
<b><u>Utility Plant:</u></b>		
1	Beginning Utility Plant <sup>(1)</sup>	\$ 283,122,968
2	Plant Additions <sup>(2)</sup>	13,666,114
3	Retirements	(2,345,862)
4	Ending Utility Plant	<u>294,443,220</u>
5	Beginning Accumulated Depreciation	98,980,036
6	Depreciation	10,260,907
7	Retirements	(2,340,795)
8	Cost of Removal and Salvage	(725,971)
9	Ending Accumulated Depreciation	<u>106,174,178</u>
10	Ending Net Utility Plant	<u>\$ 188,269,043</u>
<b><u>Revenue Requirement:</u></b>		
11	Change in Net Plant	\$ 4,126,111
12	80% of Change in Net Plant	3,300,889
13	Pre-Tax Rate of Return	10.15%
14	Return and Taxes	<u>335,143</u>
15	Depreciation Expense on 80% of Plant Additions <sup>(3)</sup>	415,422
16	Property Taxes on 80% Change in Net Plant <sup>(4)</sup>	104,638
17	Revenue Requirement	<u>\$ 855,203</u>
18	<b><u>Revenue Cap:</u></b>	
19	May 1, 2017, 2018 & 2019 Step Adjustment Revenue Requirement Cap	\$ 4,500,000
20	Less: May 1, 2017 Step Adjustment Revenue Requirement	855,203
21	Remaining May 1, 2018 & 2019 Step Adjustment Revenue Requirement Cap	<u>\$ 3,644,797</u>

**Notes:**

(1) Beginning Utility Plant from page 2, plus Kingston substation of \$10,336,281

(2) Plant Additions from page 2, less Kingston substation of \$10,336,281

(3) See page 4

(4) 3.17% rate (2016 Property Taxes of \$5,971,944 / 2016 Net Utility Plant of \$188,269,043)

**2016 Gross Plant Detail**

Description	Beginning Balance	Additions	Retirements	Ending Balance
301-00 Organization-E	380	-	-	380
303-00 Intangible Software-5 Yea-E	3,958,942	92,040	-	4,050,981
303-01 Intangible Software-3 Yea-E	87,196	-	-	87,196
303-02 Intangible Software-10 Yea-E	2,307,249	-	-	2,307,249
343-00 Prime Movers-E	56,575	-	-	56,575
353-00 Transmission Station Equi-E	34,220	(34,220)	-	-
360-01 ROW - Distribution-E	991,116	-	-	991,116
360-02 ROW - Distribution-E	1,674,812	-	-	1,674,812
361-00 Distribution Structures-E	167,773	-	-	167,773
362-00 Distribution Station Equi-E	23,696,229	12,947,587	(180,145)	36,463,670
364-00 Distribution Poles, Tower-E	54,781,196	2,794,857	(348,903)	57,227,150
365-00 Distribution Overhead Con-E	71,213,961	3,065,702	(701,357)	73,578,306
366-00 Distribution Underground -E	1,841,623	35,257	(6,337)	1,870,543
367-00 Distribution Underground -E	18,242,829	818,757	(88,835)	18,972,752
368-00 Distribution Line Transfo-E	24,590,384	820,798	(298,373)	25,112,809
368-01 Transformer Installations-E	18,572,941	912,800	(42,638)	19,443,103
369-00 Distribution Services-E	20,341,811	982,496	(253,675)	21,070,632
370-00 Distribution Meters-E	9,636,392	385,812	(61,974)	9,960,229
370-01 Meter Installation-E	4,027,591	508,276	(16,358)	4,519,509
371-00 Installations on Customer-E	1,886,935	297,589	(129,864)	2,054,660
373-00 Street Lights & Signal Sy-E	3,237,653	178,950	(137,473)	3,279,130
373-01 Street Lights & Signal Sy-E	-	-	-	-
389-00 General & Misc. Land-E	18,620	-	-	18,620
390-00 Structures-E	3,787,332	26,053	(3,908)	3,809,477
390-01 General & Misc. Structure-E	-	-	-	-
391-01 Office Furniture & Fixtur-E	267,375	4,296	-	271,671
391-03 Computer Equipment-E	-	-	-	-
392-00 Transportation Equipment-E	1,078,761	-	(5,067)	1,073,695
393-00 Stores Equipment-E	79,908	-	-	79,908
394-00 Tools, Shop and garage Eq-E	1,539,171	79,463	(2,858)	1,615,777
395-00 Laboratory Equipment-E	792,711	30,751	-	823,462
397-00 Communication Equipment-E	3,772,058	55,130	(68,098)	3,759,091
398-00 Miscellaneous Equipment-E	102,943	-	-	102,943
399-00 Other Intangible Plant-E	-	-	-	-
Grand Total	272,786,687	24,002,395	(2,345,862)	294,443,220

**2016 Accumulated Depreciation Detail**

Description	Beginning Balance	Provision	Retirements	Cost of Removal	Salvage	Ending Balance
301-00 Organization	-	-	-	-	-	-
303-00 Intangible Software-5 Year	3,273,350	304,704	-	-	-	3,578,054
303-01 Intangible Software-3 Year	87,196	-	-	-	-	87,196
303-02 Intangible Software-10 Year	721,991	230,725	-	-	-	952,715
343-00 Prime Movers	17,747	3,955	-	-	-	21,702
350-01 ROW - Transmission	-	-	-	-	-	-
350-02 ROW - Transmission	-	-	-	-	-	-
352-00 Transmission Structures	-	-	-	-	-	-
353-00 Transmission Station Equipme	-	-	-	-	-	-
354-00 Transmission Towers & Fixtur	-	-	-	-	-	-
355-00 Transmission Poles & Fixture	-	-	-	-	-	-
356-00 Transmission Overhead Conduc	-	-	-	-	-	-
360-01 ROW - Distribution	-	-	-	-	-	-
360-02 ROW - Distribution	-	-	-	-	-	-
361-00 Distribution Structures	143,327	(7,007)	-	-	-	136,320
362-00 Distribution Station Equipme	7,364,421	988,538	(180,145)	(36,398)	385	8,136,801
364-00 Distribution Poles, Towers &	22,341,062	507,501	(348,903)	(256,752)	4,862	22,247,770
365-00 Distribution Overhead Conduc	22,691,293	694,550	(701,357)	(318,438)	15,453	22,381,501
366-00 Distribution Underground Con	587,417	10,316	(6,337)	(465)	0	590,932
367-00 Distribution Underground Con	6,939,941	(1,243,333)	(88,835)	(16,627)	8,084	5,599,232
368-00 Distribution Line Transforme	8,931,881	1,186,352	(298,373)	(111,182)	-	9,708,678
368-01 Transformer Installations	3,997,430	904,602	(42,638)	(621)	-	4,858,773
368-02 Transformers Installations	-	-	-	-	-	-
369-00 Distribution Services	13,235,456	1,441,734	(253,675)	(13,597)	138	14,410,056
370-00 Distribution Meters	2,066,303	1,979,406	(61,974)	-	-	3,983,736
370-01 Meter Installation	(2,077,150)	2,774,788	(16,358)	-	-	681,280
370-02 Meter Installations	-	-	-	-	-	-
371-00 Installations on Customers P	363,888	218,398	(129,864)	(14,109)	10,368	448,681
373-00 Street Lights & Signal Syste	1,881,836	520,889	(137,473)	(16,746)	24,549	2,273,055
373-01 Street Lights & Signal Syste	-	-	-	-	-	-
389-00 General & Misc. Land	-	-	-	-	-	-
390-00 Structures	1,803,802	(284,858)	(3,908)	-	-	1,515,037
390-01 General & Misc. Structures	863	-	-	-	-	863
391-01 Office Furniture & Fixtures	(525,150)	386,757	-	-	-	(138,394)
391-03 Computer Equipment	518	3,828	-	-	-	4,346
392-00 Transportation Equipment	1,048,135	(2,991)	-	-	-	1,045,145
393-00 Stores Equipment	58,463	(3,051)	-	-	-	55,412
394-00 Tools, Shop and garage Equip	672,614	24,824	(2,858)	-	-	694,581
395-00 Laboratory Equipment	297,321	65,228	-	-	-	362,549
397-00 Communication Equipment	2,978,647	(450,925)	(68,098)	(4,877)	-	2,454,746
398-00 Miscellaneous Equipment	77,433	5,978	-	-	-	83,411
399-00 Other Tangible Property	-	-	-	-	-	-
Grand Total	98,980,036	10,260,907	(2,340,795)	(789,812)	63,841	106,174,178

**2016 Depreciation by FERC Account**

Description	Additions	Less: Kingston	Net Additions	Depreciation Rate	Annual Depreciation
303-00 Intangible Software-5 Yea-E	92,040	-	92,040	20.00%	18,408
353-00 Transmission Station Equi-E	(34,220)	-	(34,220)	N/A	N/A
362-00 Distribution Station Equi-E	12,947,587	10,336,281	2,611,306	2.60%	67,894
364-00 Distribution Poles, Tower-E	2,794,857	-	2,794,857	3.70%	103,410
365-00 Distribution Overhead Con-E	3,065,702	-	3,065,702	3.64%	111,592
366-00 Distribution Underground -E	35,257	-	35,257	2.04%	719
367-00 Distribution Underground -E	818,757	-	818,757	2.55%	20,878
368-00 Distribution Line Transfo-E	820,798	-	820,798	3.00%	24,624
368-01 Transformer Installations-E	912,800	-	912,800	2.89%	26,380
369-00 Distribution Services-E	982,496	-	982,496	5.67%	55,708
370-00 Distribution Meters-E	385,812	-	385,812	5.00%	19,291
370-01 Meter Installation-E	508,276	-	508,276	5.00%	25,414
371-00 Installations on Customer-E	297,589	-	297,589	7.56%	22,498
373-00 Street Lights & Signal Sy-E	178,950	-	178,950	7.79%	13,940
390-00 Structures-E	26,053	-	26,053	2.08%	542
391-01 Office Furniture & Fixtur-E	4,296	-	4,296	5.83%	250
394-00 Tools, Shop and garage Eq-E	79,463	-	79,463	3.64%	2,892
395-00 Laboratory Equipment-E	30,751	-	30,751	3.90%	1,199
397-00 Communication Equipment-E	55,130	-	55,130	6.60%	3,639
Grand Total	24,002,395	10,336,281	13,666,114	3.80%	519,277

**Pre-Tax Rate of Return  
December 31, 2015 Pro Forma**

Line No.	Description	Proformed Amount	Weight	Cost of Capital	Weighted Cost of Capital	Tax Factor	Pre-Tax Cost
1	Common Stock Equity	\$ 77,284,950	50.97%	9.50%	4.84%	1.3744	6.65%
2	Preferred Stock Equity	189,800	0.13%	6.00%	0.01%		0.01%
3	Long Term Debt	74,000,000	48.80%	7.15%	3.49%		3.49%
4	Short Term Debt	<u>161,783</u>	<u>0.11%</u>	1.54%	<u>0.00%</u>		<u>0.00%</u>
5	<b>Total</b>	<b><u>\$ 151,636,533</u></b>	<b><u>100.00%</u></b>		<b><u>8.34%</u></b>		<b><u>10.15%</u></b>

**Notes:**

(1) New tax factor calculated using a Federal Tax Rate of 21% and State Tax Rate of 7.9% (effective tax rate of 27.241%)



Docket No. DE 18-\_\_\_\_  
Schedule DLC-5  
TJCA - Tax Reduction Regulatory Liability  
Page 1 of 1

<u>Line No.</u>	<u>Date</u>	<u>2015 Test Year Units</u>	<u>Regulatory Liability</u>
1	Jan-18	107,718,250	\$ (199,143)
2	Feb-18	106,475,729	\$ (196,846)
3	Mar-18	110,811,143	\$ (204,861)
4	Apr-18	91,139,375	\$ (168,493)
5	May-18	85,892,926	\$ (158,794)
6	Jun-18	102,495,562	\$ (189,487)
7	Jul-18	106,755,260	\$ (197,363)
8	Aug-18	118,052,728	\$ (218,249)
9	Sep-18	114,610,029	\$ (211,884)
10	Oct-18	89,853,566	\$ (166,116)
11	Nov-18	86,512,214	\$ (159,938)
12	Dec-18	93,886,299	\$ (173,571)
13		1,214,203,082	\$ <b>(2,244,744)</b>

UNITIL ENERGY SYSTEMS, INC.  
 Wind Storm (October 2017) Incremental Cost - Recovery  
 Calculation of Increment to the Storm Recovery Adjustment Factor  
 Effective May 1, 2018

Description	Amount
Incremental Annual Recovery (Page 2)	\$ 284,569
Sales (kWh) - 12 months ending December 31, 2017	1,188,641,108
Storm Recovery Adjustment Factor (Increment, \$/kWh)*	<u>\$ 0.00023</u>

\* To be added to the current Storm Recovery Adjustment Factor.

Current SRAF (effective February 2018)	\$ 0.00139
less: recovery of Hurricane Sandy (terminates effective 5/1/2018)	\$ (0.00043)
plus: recovery of Wind Storm (proposed for effect 5/1/2018)	\$ 0.00023
Total SRAF for effect May 1, 2018:	<u>\$ 0.00119</u>

UNITIL ENERGY SYSTEMS, INC.  
Wind Storm (October 2017) - Recovery Schedule

<u>Year</u> (A)	<u>Beginning Balance With Interest</u> (B)	<u>Annual Recovery</u> (C)	<u>Ending Balance</u> (D)	<u>Balance Subject to Interest</u> (E)	<u>Interest Rate</u> (F)	<u>Interest</u> (G)	<u>Cumulative Interest</u> (H)
(1) May 2018 - April 2019	\$ 1,257,109	\$ 284,569	\$ 972,540	\$ 1,114,825	5.20%	\$ 57,971	\$ 57,971
(2) May 2019 - April 2020	\$ 1,030,511	\$ 284,569	\$ 745,942	\$ 888,227	5.20%	\$ 46,188	\$ 104,159
(3) May 2020 - April 2021	\$ 792,130	\$ 284,569	\$ 507,561	\$ 649,846	5.20%	\$ 33,792	\$ 137,951
(4) May 2021 - April 2022	\$ 541,353	\$ 284,569	\$ 256,784	\$ 399,069	5.20%	\$ 20,752	\$ 158,702
(5) May 2022 - April 2023	\$ 277,536	\$ 284,569	\$ (7,033)	\$ 135,251	5.20%	\$ 7,033	\$ 165,735
Total Recovery		\$ 1,422,844				\$ 165,735	

Column

Notes

- (A) Time period
- (B) Prior period Column (D) + Prior period Column (G)
- (C) Annual Recovery
- (D) Column (B) - Column (C)
- (E) ( Column (B) + Column (D) ) ÷ 2
- (F) UES's Cost of Debt net of deferred taxes
- (G) Column (E) times Column (F)
- (H) Prior Year Column (H) + Current Year Column (G)

UNITIL ENERGY SYSTEMS, INC.  
 Wind Storm (October 2017) Incremental Costs

	<u>Month</u> (A)	<u>Beginning Balance</u> (B)	<u>Wind Storm Charges</u> (C)	<u>Ending Balance</u> (D)	<u>Balance Subject to Interest</u> (E)	<u>Interest Rate</u> (F)	<u>Interest</u> (G)	<u>Balance</u> (H)
(1)	Dec-17	\$0	\$1,233,742	\$1,233,742	\$616,871	4.27%	\$2,237	\$1,235,979
(2)	Jan - Apr 2018	\$1,235,979	\$0	\$1,235,979	\$1,235,979	5.20%	\$21,130	\$1,257,109
			\$1,233,742				\$23,367	\$1,257,109

**Major Storm Cost Reserve Amortization**

Date	Beginning Balance	Additional Storm Activity	Customer Rev/ Amortization @ \$800K	Add Customer Rev/ Amortization @ \$352,820	Deferred Tax Regulatory Liability	Ending Balance	Carrying Charges @ 0.052	Transfer to SRAF	Ending Balance
Jan-18	\$ 4,539,995	\$ 149,361	\$ (66,667)		\$ (199,143)	\$ 4,423,547	\$ 19,793		\$ 4,443,340
Feb-18	4,443,340	-	(66,667)		(196,846)	4,179,828	17,199		4,197,027
Mar-18	4,197,027	-	-		(204,861)	3,992,166	18,084		4,010,249
Apr-18	4,010,249	-	-		(168,493)	3,841,756	16,780	(1,257,109)	2,601,427
May-18	2,601,427	-	-	(29,402)	-	2,572,025	11,424		2,583,449
Jun-18	2,583,449	-	-	(29,402)	-	2,554,048	10,979		2,565,027
Jul-18	2,565,027	-	-	(29,402)	-	2,535,625	11,263		2,546,888
Aug-18	2,546,888	-	-	(29,402)	-	2,517,487	11,183		2,528,670
Sep-18	2,528,670	-	-	(29,402)	-	2,499,268	10,745		2,510,013
Oct-18	2,510,013	-	-	(29,402)	-	2,480,611	11,020		2,491,632
Nov-18	2,491,632	-	-	(29,402)	-	2,462,230	10,586		2,472,816
Dec-18	2,472,816	-	-	(29,402)	-	2,443,415	10,856		2,454,271
Jan-19	2,454,271	-	-	(29,402)	-	2,424,869	10,774		2,435,643
Feb-19	2,435,643	-	-	(29,402)	-	2,406,242	9,657		2,415,899
Mar-19	2,415,899	-	-	(29,402)	-	2,386,497	10,605		2,397,102
Apr-19	2,397,102	-	-	(29,402)	-	2,367,700	10,182		2,377,883
May-19	2,377,883	-	-	(29,402)	-	2,348,481	10,437		2,358,918
Jun-19	2,358,918	-	-	(29,402)	-	2,329,516	10,019		2,339,535
Jul-19	2,339,535	-	-	(29,402)	-	2,310,133	10,267		2,320,401
Aug-19	2,320,401	-	-	(29,402)	-	2,290,999	10,183		2,301,182
Sep-19	2,301,182	-	-	(29,402)	-	2,271,781	9,772		2,281,553
Oct-19	2,281,553	-	-	(29,402)	-	2,252,151	10,011		2,262,163
Nov-19	2,262,163	-	-	(29,402)	-	2,232,761	9,606		2,242,367
Dec-19	2,242,367	-	-	(29,402)	-	2,212,965	9,838		2,222,803
Jan-20	2,222,803	-	-	(29,402)	-	2,193,402	9,725		2,203,127
Feb-20	2,203,127	-	-	(29,402)	-	2,173,725	9,017		2,182,742
Mar-20	2,182,742	-	-	(29,402)	-	2,153,340	9,549		2,162,889
Apr-20	2,162,889	-	-	(29,402)	-	2,133,488	9,156		2,142,644
May-20	2,142,644	-	-	(29,402)	-	2,113,242	9,372		2,122,614
Jun-20	2,122,614	-	-	(29,402)	-	2,093,213	8,985		2,102,197
Jul-20	2,102,197	-	-	(29,402)	-	2,072,796	9,194		2,081,990
Aug-20	2,081,990	-	-	(29,402)	-	2,052,588	9,105		2,061,693
Sep-20	2,061,693	-	-	(29,402)	-	2,032,292	8,725		2,041,016
Oct-20	2,041,016	-	-	(29,402)	-	2,011,615	8,925		2,020,539
Nov-20	2,020,539	-	-	(29,402)	-	1,991,138	8,549		1,999,687
Dec-20	1,999,687	-	-	(29,402)	-	1,970,286	8,743		1,979,028
Jan-21	1,979,028	-	-	(29,402)	-	1,949,626	8,675		1,958,302
Feb-21	1,958,302	-	-	(29,402)	-	1,928,900	7,753		1,936,653
Mar-21	1,936,653	-	-	(29,402)	-	1,907,252	8,488		1,915,740
Apr-21	1,915,740	-	-	(29,402)	-	1,886,338	8,125		1,894,463
May-21	1,894,463	-	-	(29,402)	-	1,865,061	8,302		1,873,363
Jun-21	1,873,363	-	-	(29,402)	-	1,843,962	7,944		1,851,905
Jul-21	1,851,905	-	-	(29,402)	-	1,822,504	8,114		1,830,618
Aug-21	1,830,618	-	-	(29,402)	-	1,801,216	8,020		1,809,236
Sep-21	1,809,236	-	-	(29,402)	-	1,779,834	7,670		1,787,504
Oct-21	1,787,504	-	-	(29,402)	-	1,758,102	7,829		1,765,932
Nov-21	1,765,932	-	-	(29,402)	-	1,736,530	7,485		1,744,015
Dec-21	1,744,015	-	-	(29,402)	-	1,714,613	7,637		1,722,251
Jan-22	1,722,251	-	-	(29,402)	-	1,692,849	7,541		1,700,390
Feb-22	1,700,390	-	-	(29,402)	-	1,670,989	6,724		1,677,713
Mar-22	1,677,713	-	-	(29,402)	-	1,648,311	7,345		1,655,656
Apr-22	1,655,656	-	-	(29,402)	-	1,626,254	7,013		1,633,268
May-22	1,633,268	-	-	(29,402)	-	1,603,866	7,148		1,611,014
Jun-22	1,611,014	-	-	(29,402)	-	1,581,613	6,823		1,588,435
Jul-22	1,588,435	-	-	(29,402)	-	1,559,033	6,950		1,565,984
Aug-22	1,565,984	-	-	(29,402)	-	1,536,582	6,851		1,543,433
Sep-22	1,543,433	-	-	(29,402)	-	1,514,032	6,534		1,520,565
Oct-22	1,520,565	-	-	(29,402)	-	1,491,164	6,651		1,497,814
Nov-22	1,497,814	-	-	(29,402)	-	1,468,413	6,339		1,474,751



**Unitil Energy Systems, Inc.**  
**PUC 308.11 - F-1 Rate of Return**  
12 Months Ending December 31, 2017

**Schedule 1: Calculation of Per Books Rate of Return**

<u>Cost of Service</u>	<u>Rolling 12 Months</u>	<u>Rate Base</u>	<u>Period End</u>
Electric Service Revenue	\$ 141,089,478	Utility Plant in Service	\$ 324,214,118
Other Operating Revenue	1,264,226	Less: Reserve for Depreciation & Amortization	114,418,513
<b>Total Operating Revenue</b>	<b><u>142,353,704</u></b>	<b>Net Utility Plant</b>	<b><u>209,795,605</u></b>
<i>Operating Expenses:</i>		<i>Plus:</i>	
Purchased Power	47,455,276	M&S Inventories	1,557,600
Transmission	30,292,992	Cash Working Capital	2,908,994
Distribution	9,125,967	Prepayments	4,543,701
Cust. Accounting & Service	6,486,237		
Admin. & General	9,992,153	<i>Less:</i>	
Depreciation	10,589,917	Deferred Income Taxes	35,144,165
Amortization	3,883,955	Regulatory Liabilities	16,270,286
Taxes-Other Than Income	6,306,184	Customer Advances	566,074
State & Federal Income Taxes - Adjusted	4,820,791	Customer Deposits	801,216
Int on Customer Deposits	59,340		
<b>Total Operating Expenses</b>	<b><u>129,012,814</u></b>	<b>Total Rate Base</b>	<b><u>\$ 166,024,158</u></b>
<b>Net Operating Income</b>	<b>\$ 13,340,891</b>	Utility Operating Income - Current Cost of Capital	\$ 13,879,620
		Utility Operating Income - Adjusted	\$ 12,651,993
Less: Flow-Through Oper. Inc. (Exc. Lost Base Rev.)	688,898	<b>Operating Income Deficiency (Surplus)</b>	<b><u>\$ 1,227,627</u></b>
<b>Net Operating Income - Adjusted</b>	<b><u>\$ 12,651,993</u></b>	Income Tax Gross-Up	\$ 798,561
		<b>Revenue Deficiency (Surplus)</b>	<b><u>\$ 2,026,188</u></b>
		<b>Return on Rate Base - Actual</b>	<b>7.62%</b>
		<b>Return on Rate Base - Current Cost of Capital</b>	<b>8.36%</b>
		<b>ROE - Actual</b>	<b>8.09%</b>
		<b>ROE - Authorized DE 16-384</b>	<b>9.50%</b>

**Schedule 2: Current Cost of Capital**

	<u>Amount</u>	<u>Percent</u>	<u>Cost Rate</u>	<u>Weighted</u>
	<u>Outstanding</u>	<u>Total</u>		<u>Cost Rate</u>
Common Equity	\$ 80,739,631	52.62%	9.50%	<b>5.00%</b>
Preferred Stock Equity	\$ 189,300	0.12%	6.00%	<b>0.01%</b>
Long Term Debt	\$ 72,500,000	47.25%	7.10%	<b>3.35%</b>
Short Term Debt (a)	\$ -	0.00%	2.31%	<b>0.00%</b>
<b>Total</b>	<b><u>\$ 153,428,931</u></b>	<b><u>100.00%</u></b>		<b><u>8.36%</u></b>

(a) Excluding Accrued Revenue, Power Supply Working Capital and CWIP

**UNITIL ENERGY SYSTEMS, INC.**  
**SALES BY CUSTOMER CLASS**

SCHEDULE 3

**DEFINITIONS:**

**Small (or Commercial) Customers** = Regular General Service Schedule G2 customers, whether industrial or commercial , with average use consistently below two-hundred (200) kilovolt-amperes of demand and generally less than one-hundred (100,000) kilowatt-hours per month  
**Large (or Industrial) Customers** = Large General Service Schedule G1 customers, whether industrial or commercial , with average use consistently equal to or in excess of two-hundred (200) kilovolt-amperes of demand and generally greater than or equal to one-hundred (100,000) kilowatt-hours per month

Year to Date - December 31, 2017

Line No.	Title of Account (a)	OPERATING REVENUES		MEGAWATT HOURS SOLD		AVERAGE NUMBER OF CUSTOMERS PER MONTH	
		Year to Date Annual (b)	Amount for Previous Year (c)	Year to Date Annual (d)	Amount for Previous Year (e)	Current Year (f)	Previous Year (g)
		1	Sales of Electricity				
2	(440) Residential Sales	\$76,250,052	\$70,537,609	484,341	483,687	66,168	65,781
3	(442) Commercial and Industrial Sales						
4	Small (or Commercial)	39,423,464	35,284,845	326,499	306,594	10,386	10,034
5	Large (or Industrial)	19,079,903	15,381,093	319,634	282,684	143	130
6	(444) Public Street and Highway Lighting	2,380,242	2,236,472	8,073	8,117	1,641	1,692
7	(445) Other Sales to Public Authorities	3,108,305	6,341,361	50,094	106,943	384	765
8	(446) Sales to Railroads and Railways	0	0	0	0	0	0
9	(448) Interdepartmental Sales	0	0	0	0	0	0
10	TOTAL Sales to Ultimate Consumers	140,241,966	129,781,380	1,188,641	1,188,025	78,722	78,402
11	(447) Sales for Resale	847,512	492,891	21,885	15,379		
12	TOTAL Sales of Electricity	\$141,089,478	\$130,274,271	1,210,526	1,203,404	78,722	78,402
13	Sales of Electricity						

Quarter to Date - December 31, 2017

Line No.	Title of Account (a)	OPERATING REVENUES		MEGAWATT HOURS SOLD		AVERAGE NUMBER OF CUSTOMERS PER MONTH	
		Year to Date Quarter (b)	Amount for Previous Year (c)	Year to Date Quarterly (d)	Amount for Previous Year (e)	Current Quarter (f)	Previous Year (g)
		1	Sales of Electricity				
2	(440) Residential Sales	\$20,442,598	\$15,604,085	113,344	107,090	65,512	65,882
3	(442) Commercial and Industrial Sales						
4	Small (or Commercial)	11,065,984	8,066,702	82,643	67,696	10,676	10,010
5	Large (or Industrial)	5,887,222	3,786,838	87,040	63,866	156	129
6	(444) Public Street and Highway Lighting	665,445	557,178	2,028	1,889	1,595	1,684
7	(445) Other Sales to Public Authorities	75,530	1,573,204	10	24,730	5	762
8	(446) Sales to Railroads and Railways	0	0	0	0	0	0
9	(448) Interdepartmental Sales	0	0	0	0	0	0
10	TOTAL Sales to Ultimate Consumers	38,136,779	29,588,007	285,065	265,271	77,944	78,467
11	(447) Sales for Resale	268,405	123,864	4,478	2,661	0	0
12	TOTAL Sales of Electricity	\$38,405,184	\$29,711,871	289,543	267,932	77,944	78,467
13	Sales of Electricity						



**Unitil Energy Systems, Inc.**  
**Rate Design Calculation**  
**Individual Rate Design Calculations**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	Test Year 2015 Billing Units	Step 1 Adjustment Rates	Step 2 Adjustment Rates	Step 2 Adjustment Revenue May 1, 2018	Percent Change	MSCR Adjusted Rates	MSCR Adjusted Revenue May 1, 2018	Percent Change	Tax Adjusted Rates	Tax Adjusted Revenue May 1, 2018	Percent Change
<b>Residential - D</b>											
Test Year Consumers	785,306	\$15.24	\$16.12	\$12,661,259	5.79%	\$16.12	\$12,661,259	0.00%	\$16.12	\$12,661,259	0.00%
All kWh	497,875,828	\$0.03566	\$0.03773	\$18,783,423	5.79%	\$0.03810	\$18,967,936	0.98%	\$0.03574	\$17,794,009	-6.19%
Total Design Revenue				\$31,444,681	5.79%		\$31,629,195	0.59%		\$30,455,267	-3.71%
<b>Small General Service - G2 kWh</b>											
Test Year Consumers	5,238	\$17.27	\$18.27	\$95,717	5.79%	\$18.27	\$95,717	0.00%	\$18.27	\$95,717	0.00%
Annual kWh	607,397	\$0.01440	\$0.01523	\$9,251	5.79%	\$0.01624	\$9,867	6.66%	\$0.00979	\$5,948	-39.72%
Total Design Revenue				\$104,968	5.79%		\$105,584	0.59%		\$101,666	-3.71%
<b>Small General Service - G2 QR WH /SH</b>											
Test Year Consumers	3,454	\$9.14	\$9.67	\$33,411	5.79%	\$9.67	\$33,411	0.00%	\$9.67	\$33,411	0.00%
Annual kWh	5,742,223	\$0.03149	\$0.03331	\$191,271	5.79%	\$0.03354	\$192,589	0.69%	\$0.03208	\$184,201	-4.36%
Total Design Revenue				\$224,682	5.79%		\$226,000	0.59%		\$217,612	-3.71%
<b>Small General Service - G2 Demand</b>											
Test Year Consumers	123,180	\$27.43	\$29.02	\$3,574,789	5.79%	\$29.02	\$3,574,789	0.00%	\$29.02	\$3,574,789	0.00%
Demand kW	1,348,556	\$10.35	\$10.95	\$14,770,315	5.79%	\$11.03	\$14,877,814	0.73%	\$10.53	\$14,193,873	-4.60%
Annual kWh	347,811,789	\$0.00000	\$0.00000	\$0	0.00%	\$0.00000	\$0	0.00%	\$0.00000	\$0	0.00%
Total Design Revenue				\$18,345,104	5.79%		\$18,452,603	0.59%		\$17,768,662	-3.71%
<b>G2 Demand - kW Transformer Ownership Discount</b>											
Test Year kW	50,269	(\$0.50)	(\$0.50)	-\$25,134		(\$0.50)	-\$25,134		(\$0.50)	-\$25,134	
Total Design Revenue				-\$25,134	0.00%		-\$25,134	0.00%		-\$25,134	0.00%
<b>Subtotal G2 Demand inc. Transformer Ownership Discount</b>											
Total Design Revenue				\$18,319,969	5.80%		\$18,427,469	0.59%		\$17,743,527	-3.71%
<b>Large General Service - G1</b>											
Test Year Consumers Secondary	1,497	\$152.40	\$161.23	\$241,357	5.79%	\$161.23	\$241,357	0.00%	\$161.23	\$241,357	
Test Year Consumers Primary	381	\$81.28	\$85.99	\$32,761	5.79%	\$85.99	\$32,761	0.00%	\$85.99	\$32,761	
Demand kVA	1,022,850	\$7.42	\$7.85	\$8,025,672	5.79%	\$7.89	\$8,073,155	0.59%	\$7.60	\$7,771,053	
Annual kWh	353,924,392	\$0.00000	\$0.00000	\$0	0.00%	\$0.00000	\$0	0.00%	\$0.00000	\$0	
Total Design Revenue				\$8,299,790	5.79%		\$8,347,273	0.57%		\$8,045,172	-3.62%
<b>G1 - kVA Transformer Ownership Discount</b>											
Test Year kVA	415,470	(\$0.50)	(\$0.50)	-\$207,735		(\$0.50)	-\$207,735		(\$0.50)	-\$207,735	
Total Design Revenue				-\$207,735	0.00%		-\$207,735	0.00%		-\$207,735	0.00%
<b>Subtotal G1 inc. Transformer Ownership Discount</b>											
Total Design Revenue				\$8,092,055	5.95%		\$8,139,538	0.59%		\$7,837,437	-3.71%



**Unitil Energy Systems, Inc.**  
**Rate Design Calculation**  
**Individual Rate Design Calculations**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	Test Year	Step 1	Step 2	Step 2		MSCR	MSCR		Tax	Tax	
	2015 Billing	Adjustment	Adjustment	Adjustment	Percent	Adjusted	Adjusted	Percent	Adjusted	Adjusted	Percent
	Units	Rates	Rates	Revenue	Change	Rates	Revenue	Change	Rates	Revenue	Change
				May 1, 2018			May 1, 2018			May 1, 2018	
Step Adjustment \$ (does not include recoupment)				\$3,302,989							
Step Adjustment Percentage Change (not including transformer discounts)				5.79%							
Step Adjustment Percentage Change Total				5.81%							
Recoupment \$		\$1,411,065		-\$1,411,065							
Recoupment \$/kWh		\$0.00116		-\$0.00116							
MSCR Amortization Adjustment \$							\$352,820				
MSCR Amortization Adjustment Percentage Change (not including customer charges and transformer discounts)							0.81%				
MSCR Amortization Adjustment Percent Change Total							0.59%				
Tax Adjustment \$										-\$2,244,744	
Tax Adjustment Percentage Change (not including customer charges and transformer discounts)										-5.09%	
Tax Adjustment Percentage Change Total										-3.71%	
Cumulative \$ Adjustments on May 1, 2018				\$1,891,924			\$2,244,744			\$0	

**Unitil Energy Systems, Inc.**  
**Typical Bill Impacts - December 1, 2017 vs. May 1, 2018**  
**Impacts do NOT include the Electricity Consumption Tax**  
**Impact on D Rate Customers**

<u>Average kWh</u>	<u>Total Bill Using Rates 12/1/2017</u>	<u>Total Bill Using Rates 5/1/2018</u>	<u>Total Difference</u>	<u>% Total Difference</u>
125	\$36.35	\$37.08	\$0.72	2.0%
150	\$40.58	\$41.27	\$0.69	1.7%
200	\$49.02	\$49.65	\$0.63	1.3%
250	\$57.47	\$58.03	\$0.56	1.0%
300	\$65.91	\$66.41	\$0.50	0.8%
350	\$74.36	\$74.79	\$0.43	0.6%
400	\$82.80	\$83.17	\$0.37	0.4%
450	\$91.25	\$91.56	\$0.31	0.3%
500	\$99.70	\$99.94	\$0.24	0.2%
525	\$103.92	\$104.13	\$0.21	0.2%
550	\$108.14	\$108.32	\$0.18	0.2%
575	\$112.36	\$112.51	\$0.15	0.1%
600	\$116.59	\$116.70	\$0.11	0.1%
625	\$120.81	\$120.89	\$0.08	0.1%
650	\$125.03	\$125.08	\$0.05	0.0%
675	\$129.25	\$129.27	\$0.02	0.0%
700	\$133.48	\$133.46	(\$0.01)	(0.0%)
725	\$137.70	\$137.65	(\$0.05)	(0.0%)
750	\$141.92	\$141.85	(\$0.08)	(0.1%)
775	\$146.15	\$146.04	(\$0.11)	(0.1%)
825	\$154.59	\$154.42	(\$0.17)	(0.1%)
925	\$171.48	\$171.18	(\$0.30)	(0.2%)
1,000	\$184.15	\$183.75	(\$0.40)	(0.2%)
1,250	\$226.38	\$225.66	(\$0.72)	(0.3%)
1,500	\$268.61	\$267.57	(\$1.04)	(0.4%)
2,000	\$353.06	\$351.38	(\$1.68)	(0.5%)
3,500	\$606.43	\$602.83	(\$3.60)	(0.6%)
5,000	\$859.79	\$854.27	(\$5.52)	(0.6%)

	<u>Rates - Effective December 1, 2017</u>	<u>Rates - Proposed May 1, 2018</u>	<u>Difference</u>
Customer Charge	<b>\$15.24</b>	<b>\$16.12</b>	<b>\$0.88</b>
Distribution Charge:	<u>kWh</u> \$0.03682	<u>kWh</u> \$0.03574	<u>kWh</u> (\$0.00108)
External Delivery Charge	\$0.02637	\$0.02637	\$0.00000
Stranded Cost Charge	(\$0.00057)	(\$0.00057)	\$0.00000
Storm Recovery Adjustment Factor	\$0.00139	\$0.00119	(\$0.00020)
System Benefits Charge	\$0.00456	\$0.00456	\$0.00000
Default Service Charge	<u>\$0.10034</u>	<u>\$0.10034</u>	<u>\$0.00000</u>
<b>TOTAL</b>	<b>\$0.16891</b>	<b>\$0.16763</b>	<b>(\$0.00128)</b>

**Unitil Energy Systems, Inc.**  
**Typical Bill Impacts - December 1, 2017 vs. May 1, 2018**  
**Impacts do NOT include the Electricity Consumption Tax**  
**Impact on G2 Rate Customers**

<u>Load Factor</u>	<u>Average Monthly kW</u>	<u>Average Monthly kWh</u>	<u>Total Bill Using Rates 12/1/2017</u>	<u>Total Bill Using Rates 5/1/2018</u>	<u>Total Difference</u>	<u>% Total Difference</u>
20%	5	730	\$171.47	\$172.95	\$1.47	0.9%
20%	10	1,460	\$315.51	\$316.87	\$1.36	0.4%
20%	15	2,190	\$459.55	\$460.80	\$1.24	0.3%
20%	25	3,650	\$747.64	\$748.64	\$1.01	0.1%
20%	50	7,300	\$1,467.84	\$1,468.27	\$0.42	0.0%
20%	75	10,950	\$2,188.05	\$2,187.89	(\$0.16)	(0.0%)
20%	100	14,600	\$2,908.26	\$2,907.52	(\$0.74)	(0.0%)
20%	150	21,900	\$4,348.67	\$4,346.76	(\$1.91)	(0.0%)
36%	5	1,314	\$245.74	\$246.42	\$0.68	0.3%
36%	10	2,628	\$464.06	\$463.83	(\$0.23)	(0.0%)
36%	15	3,942	\$682.37	\$681.23	(\$1.14)	(0.2%)
36%	25	6,570	\$1,119.00	\$1,116.04	(\$2.96)	(0.3%)
36%	50	13,140	\$2,210.58	\$2,203.06	(\$7.52)	(0.3%)
36%	75	19,710	\$3,302.15	\$3,290.08	(\$12.07)	(0.4%)
36%	100	26,280	\$4,393.72	\$4,377.09	(\$16.63)	(0.4%)
36%	150	39,420	\$6,576.87	\$6,551.13	(\$25.73)	(0.4%)
50%	5	1,825	\$310.73	\$310.72	(\$0.01)	(0.0%)
50%	10	3,650	\$594.04	\$592.42	(\$1.62)	(0.3%)
50%	15	5,475	\$877.34	\$874.11	(\$3.23)	(0.4%)
50%	25	9,125	\$1,443.95	\$1,437.51	(\$6.44)	(0.4%)
50%	50	18,250	\$2,860.47	\$2,846.00	(\$14.47)	(0.5%)
50%	75	27,375	\$4,276.98	\$4,254.49	(\$22.50)	(0.5%)
50%	100	36,500	\$5,693.50	\$5,662.97	(\$30.53)	(0.5%)
50%	150	54,750	\$8,526.54	\$8,479.95	(\$46.58)	(0.5%)

	<u>Rates - Effective December 1, 2017</u>	<u>Rates - Proposed May 1, 2018</u>	<u>Difference</u>
Customer Charge	\$27.43	\$29.02	\$1.59
	<u>All kW</u>	<u>All kW</u>	<u>All kW</u>
Distribution Charge	\$10.35	\$10.53	\$0.18
Stranded Cost Charge	(\$0.11)	(\$0.11)	\$0.00
<b>TOTAL</b>	<b>\$10.24</b>	<b>\$10.42</b>	<b>\$0.18</b>
	<u>kWh</u>	<u>kWh</u>	<u>kWh</u>
Distribution Charge	\$0.00116	\$0.00000	(\$0.00116)
External Delivery Charge	\$0.02637	\$0.02637	\$0.00000
Stranded Cost Charge	(\$0.00011)	(\$0.00011)	\$0.00000
Storm Recovery Adj. Factor	\$0.00139	\$0.00119	(\$0.00020)
System Benefits Charge	\$0.00456	\$0.00456	\$0.00000
Default Service Charge	<u>\$0.09381</u>	<u>\$0.09381</u>	<u>\$0.00000</u>
<b>TOTAL</b>	<b>\$0.12718</b>	<b>\$0.12582</b>	<b>(\$0.00136)</b>

**Unitil Energy Systems, Inc.**  
**Typical Bill Impacts - December 1, 2017 vs. May 1, 2018**  
**Impacts do NOT include the Electricity Consumption Tax**  
**Impact on G2 kWh Meter Rate Customers**

<u>Average Monthly kWh</u>	<u>Total Bill Using Rates 12/1/2017</u>	<u>Total Bill Using Rates 5/1/2018</u>	<u>Total Difference</u>	<u>% Total Difference</u>
15	\$19.39	\$20.30	\$0.91	4.7%
75	\$27.85	\$28.41	\$0.55	2.0%
150	\$38.44	\$38.55	\$0.11	0.3%
250	\$52.55	\$52.06	(\$0.49)	(0.9%)
350	\$66.66	\$65.58	(\$1.09)	(1.6%)
450	\$80.77	\$79.09	(\$1.68)	(2.1%)
550	\$94.89	\$92.61	(\$2.28)	(2.4%)
650	\$109.00	\$106.12	(\$2.88)	(2.6%)
750	\$123.11	\$119.64	(\$3.47)	(2.8%)
900	\$144.28	\$139.91	(\$4.37)	(3.0%)

	<u>Rates - Effective December 1, 2017</u>	<u>Rates - Proposed May 1, 2018</u>	<u>Difference</u>
kWh Meter Customer Charge	<b>\$17.27</b>	<b>\$18.27</b>	<b>\$1.00</b>
	<u>All kWh</u>	<u>All kWh</u>	<u>All kWh</u>
Distribution Charge	\$0.01556	\$0.00979	(\$0.00577)
External Delivery Charge	\$0.02637	\$0.02637	\$0.00000
Stranded Cost Charge	(\$0.00057)	(\$0.00057)	\$0.00000
Storm Recovery Adjustment Factor	\$0.00139	\$0.00119	(\$0.00020)
System Benefits Charge	\$0.00456	\$0.00456	\$0.00000
Default Service Charge	<u>\$0.09381</u>	<u>\$0.09381</u>	<u>\$0.00000</u>
<b>TOTAL</b>	<b>\$0.14112</b>	<b>\$0.13515</b>	<b>(\$0.00597)</b>

**Unitil Energy Systems, Inc.**  
**Typical Bill Impacts - December 1, 2017 vs. May 1, 2018**  
**Impacts do NOT include the Electricity Consumption Tax**  
**Impact on G2 QRWH and SH Rate Customers**

<b>Average kWh</b>	<b>Total Bill Using Rates 12/1/2017</b>	<b>Total Bill Using Rates 5/1/2018</b>	<b>Total Difference</b>	<b>% Total Difference</b>
100	\$24.96	\$25.42	\$0.46	1.8%
200	\$40.78	\$41.16	\$0.38	0.9%
300	\$56.60	\$56.91	\$0.30	0.5%
400	\$72.42	\$72.65	\$0.22	0.3%
500	\$88.25	\$88.39	\$0.15	0.2%
750	\$127.80	\$127.75	(\$0.05)	(0.0%)
1,000	\$167.35	\$167.11	(\$0.24)	(0.1%)
1,500	\$246.46	\$245.83	(\$0.62)	(0.3%)
2,000	\$325.56	\$324.55	(\$1.01)	(0.3%)
2,500	\$404.67	\$403.27	(\$1.40)	(0.3%)

	<b>Rates - Effective December 1, 2017</b>	<b>Rates - Proposed May 1, 2018</b>	<b>Difference</b>
Customer Charge	<b>\$9.14</b>	<b>\$9.67</b>	<b>\$0.53</b>
	<b><u>All kWh</u></b>	<b><u>All kWh</u></b>	<b><u>All kWh</u></b>
Distribution Charge	\$0.03265	\$0.03208	(\$0.00057)
External Delivery Charge	\$0.02637	\$0.02637	\$0.00000
Stranded Cost Charge	(\$0.00057)	(\$0.00057)	\$0.00000
Storm Recovery Adjustment Factor	\$0.00139	\$0.00119	(\$0.00020)
System Benefits Charge	\$0.00456	\$0.00456	\$0.00000
Default Service Charge	<u>\$0.09381</u>	<u>\$0.09381</u>	<u>\$0.00000</u>
<b>TOTAL</b>	<b>\$0.15821</b>	<b>\$0.15744</b>	<b>(\$0.00077)</b>

**Unitil Energy Systems, Inc.**  
**Typical Bill Impacts - December 1, 2017 vs. May 1, 2018**  
**Impacts do NOT include the Electricity Consumption Tax**  
**Impact on G1 Rate Customers**

<u>Load Factor</u>	<u>Average Monthly kVa</u>	<u>Average Monthly kWh</u>	<u>Total Bill Using Rates 12/1/2017</u>	<u>Total Bill Using Rates 5/1/2018</u>	<u>Total Difference</u>	<u>% Total Difference</u>
25.0%	200	36,500	\$6,005.92	\$6,000.60	(\$5.32)	(0.1%)
25.0%	400	73,000	\$11,859.44	\$11,839.97	(\$19.47)	(0.2%)
25.0%	600	109,500	\$17,712.96	\$17,679.34	(\$33.62)	(0.2%)
25.0%	800	146,000	\$23,566.48	\$23,518.71	(\$47.77)	(0.2%)
25.0%	1,000	182,500	\$29,420.00	\$29,358.08	(\$61.92)	(0.2%)
25.0%	1,500	273,750	\$44,053.80	\$43,956.50	(\$97.30)	(0.2%)
25.0%	2,000	365,000	\$58,687.60	\$58,554.93	(\$132.67)	(0.2%)
25.0%	2,500	456,250	\$73,321.40	\$73,153.36	(\$168.04)	(0.2%)
25.0%	3,000	547,500	\$87,955.20	\$87,751.78	(\$203.42)	(0.2%)
40.0%	200	58,400	\$8,644.43	\$8,609.33	(\$35.11)	(0.4%)
40.0%	400	116,800	\$17,136.46	\$17,057.42	(\$79.04)	(0.5%)
40.0%	600	175,200	\$25,628.50	\$25,505.52	(\$122.97)	(0.5%)
40.0%	800	233,600	\$34,120.53	\$33,953.62	(\$166.91)	(0.5%)
40.0%	1,000	292,000	\$42,612.56	\$42,401.72	(\$210.84)	(0.5%)
40.0%	1,500	438,000	\$63,842.64	\$63,521.96	(\$320.68)	(0.5%)
40.0%	2,000	584,000	\$85,072.72	\$84,642.21	(\$430.51)	(0.5%)
40.0%	2,500	730,000	\$106,302.80	\$105,762.46	(\$540.34)	(0.5%)
40.0%	3,000	876,000	\$127,532.88	\$126,882.70	(\$650.18)	(0.5%)
57.0%	200	83,220	\$11,634.75	\$11,565.88	(\$68.86)	(0.6%)
57.0%	400	166,440	\$23,117.09	\$22,970.54	(\$146.55)	(0.6%)
57.0%	600	249,660	\$34,599.44	\$34,375.20	(\$224.24)	(0.6%)
57.0%	800	332,880	\$46,081.78	\$45,779.85	(\$301.93)	(0.7%)
57.0%	1,000	416,100	\$57,564.13	\$57,184.51	(\$379.62)	(0.7%)
57.0%	1,500	624,150	\$86,269.99	\$85,696.15	(\$573.84)	(0.7%)
57.0%	2,000	832,200	\$114,975.86	\$114,207.79	(\$768.06)	(0.7%)
57.0%	2,500	1,040,250	\$143,681.72	\$142,719.44	(\$962.28)	(0.7%)
57.0%	3,000	1,248,300	\$172,387.58	\$171,231.08	(\$1,156.51)	(0.7%)
71.0%	200	103,660	\$14,097.36	\$14,000.70	(\$96.66)	(0.7%)
71.0%	400	207,320	\$28,042.31	\$27,840.17	(\$202.15)	(0.7%)
71.0%	600	310,980	\$41,987.27	\$41,679.64	(\$307.63)	(0.7%)
71.0%	800	414,640	\$55,932.23	\$55,519.10	(\$413.12)	(0.7%)
71.0%	1,000	518,300	\$69,877.18	\$69,358.57	(\$518.61)	(0.7%)
71.0%	1,500	777,450	\$104,739.58	\$103,957.25	(\$782.33)	(0.7%)
71.0%	2,000	1,036,600	\$139,601.97	\$138,555.92	(\$1,046.05)	(0.7%)
71.0%	2,500	1,295,750	\$174,464.36	\$173,154.60	(\$1,309.76)	(0.8%)
71.0%	3,000	1,554,900	\$209,326.75	\$207,753.27	(\$1,573.48)	(0.8%)

	<u>Rates - Effective December 1, 2017</u>	<u>Rates - Proposed May 1, 2018</u>	<u>Difference</u>
Customer Charge	\$152.40	\$161.23	\$8.83
	<u>All kVA</u>	<u>All kVA</u>	<u>All kVA</u>
Distribution Charge	\$7.42	\$7.60	\$0.18
Stranded Cost Charge	(\$0.14)	(\$0.14)	\$0.00
<b>TOTAL</b>	<b>\$7.28</b>	<b>\$7.46</b>	<b>\$0.18</b>
	<u>All kWh</u>	<u>All kWh</u>	<u>All kWh</u>
Distribution Charge	\$0.00116	\$0.00000	(\$0.00116)
External Delivery Charge	\$0.02637	\$0.02637	\$0.00000
Stranded Cost Charge	(\$0.00014)	(\$0.00014)	\$0.00000
Storm Recovery Adjustment Factor	\$0.00139	\$0.00119	(\$0.00020)
System Benefits Charge	\$0.00456	\$0.00456	\$0.00000
Default Service Charge*	\$0.08714	\$0.08714	\$0.00000
<b>TOTAL</b>	<b>\$0.12048</b>	<b>\$0.11912</b>	<b>(\$0.00136)</b>

\* Default Service Charge for the G1 class is determined monthly. For purposes of this comparison, the March 2018 rate is unchanged.



Unitil Energy Systems, Inc. Typical Bill Impacts - December 1, 2017 vs. May 1, 2018 Impacts do NOT include the Electricity Consumption Tax Impact on OL Rate Customers *								
	Nominal Watts	Lumens	Type	Average Monthly kWh	Total Bill Using Rates 12/1/2017	Total Bill Using Rates 5/1/2018	Total Difference	% Total Difference
<u>Mercury Vapor:</u>								
1	100	3,500	ST	43	\$18.41	\$18.67	\$0.27	1.4%
2	175	7,000	ST	71	\$24.37	\$24.65	\$0.28	1.2%
3	250	11,000	ST	100	\$30.09	\$30.39	\$0.30	1.0%
4	400	20,000	ST	157	\$40.65	\$40.94	\$0.29	0.7%
5	1,000	60,000	ST	372	\$88.33	\$88.84	\$0.51	0.6%
6	250	11,000	FL	100	\$31.23	\$31.56	\$0.32	1.0%
7	400	20,000	FL	157	\$42.11	\$42.44	\$0.33	0.8%
8	1,000	60,000	FL	380	\$84.95	\$85.34	\$0.39	0.5%
9	100	3,500	PB	48	\$19.17	\$19.43	\$0.25	1.3%
10	175	7,000	PB	71	\$23.52	\$23.78	\$0.26	1.1%
<u>High Pressure Sodium:</u>								
11	50	4,000	ST	23	\$16.11	\$16.41	\$0.29	1.8%
12	100	9,500	ST	48	\$20.93	\$21.24	\$0.30	1.5%
13	150	16,000	ST	65	\$23.16	\$23.43	\$0.27	1.2%
14	250	30,000	ST	102	\$31.61	\$31.93	\$0.33	1.0%
15	400	50,000	ST	161	\$43.95	\$44.31	\$0.36	0.8%
16	1,000	140,000	ST	380	\$88.82	\$89.31	\$0.49	0.5%
17	150	16,000	FL	65	\$25.43	\$25.76	\$0.34	1.3%
18	250	30,000	FL	102	\$33.20	\$33.56	\$0.36	1.1%
19	400	50,000	FL	161	\$43.42	\$43.77	\$0.35	0.8%
20	1,000	140,000	FL	380	\$89.18	\$89.67	\$0.49	0.5%
21	50	4,000	PB	23	\$15.12	\$15.40	\$0.27	1.8%
22	100	95,000	PB	48	\$19.79	\$20.06	\$0.27	1.4%
<u>Metal Halide:</u>								
23	175	8,800	ST	74	\$28.82	\$29.19	\$0.37	1.3%
24	250	13,500	ST	102	\$34.06	\$34.44	\$0.38	1.1%
25	400	23,500	ST	158	\$41.94	\$42.26	\$0.32	0.8%
26	175	8,800	FL	74	\$31.83	\$32.28	\$0.46	1.4%
27	250	13,500	FL	102	\$37.17	\$37.63	\$0.46	1.2%
28	400	23,500	FL	158	\$44.30	\$44.69	\$0.39	0.9%
29	1,000	86,000	FL	374	\$78.85	\$79.11	\$0.26	0.3%
30	175	8,800	PB	74	\$27.57	\$27.91	\$0.34	1.2%
31	250	13,500	PB	102	\$32.27	\$32.60	\$0.33	1.0%
32	400	23,500	PB	158	\$40.69	\$40.98	\$0.29	0.7%
Luminaire Charges For Year Round Service:								
Rates - Effective December 1, 2017								
		<u>Mercury Vapor Rate/Mo.</u>		<u>Sodium Vapor Rate/Mo.</u>		<u>Metal Halide Rate/Mo.</u>		
Customer Charge	\$0.00	1	\$12.96	11	\$13.20	23	\$19.44	
		2	\$15.37	12	\$14.85	24	\$21.13	
	<u>All kWh</u>	3	\$17.42	13	\$14.92	25	\$21.92	
Distribution Charge	\$0.00116	4	\$20.75	14	\$18.68	26	\$22.45	
External Delivery Charge	\$0.02637	5	\$41.19	15	\$23.55	27	\$24.24	
Stranded Cost Charge	(\$0.00057)	6	\$18.56	16	\$40.67	28	\$24.28	
Storm Recovery Adj. Factor	\$0.00139	7	\$22.21	17	\$17.19	29	\$31.46	
System Benefits Charge	\$0.00456	8	\$36.80	18	\$20.27	30	\$18.19	
Default Service Charge	<u>\$0.09381</u>	9	\$13.09	19	\$23.02	31	\$19.34	
<b>TOTAL</b>	<b>\$0.12672</b>	10	\$14.52	20	\$41.03	32	\$20.67	
		21	\$12.21	22	\$13.71			
Rates - Proposed May 1, 2018								
		<u>Mercury Vapor Rate/Mo.</u>		<u>Sodium Vapor Rate/Mo.</u>		<u>Metal Halide Rate/Mo.</u>		
Customer Charge	\$0.00	1	\$13.28	11	\$13.52	23	\$19.91	
		2	\$15.75	12	\$15.22	24	\$21.65	
	<u>All kWh</u>	3	\$17.85	13	\$15.28	25	\$22.45	
Distribution Charge	\$0.00000	4	\$21.26	14	\$19.14	26	\$23.01	
External Delivery Charge	\$0.02637	5	\$42.20	15	\$24.13	27	\$24.84	
Stranded Cost Charge	(\$0.00057)	6	\$19.02	16	\$41.67	28	\$24.88	
Storm Recovery Adj. Factor	\$0.00119	7	\$22.76	17	\$17.61	29	\$32.23	
System Benefits Charge	\$0.00456	8	\$37.71	18	\$20.77	30	\$18.63	
Default Service Charge	<u>\$0.09381</u>	9	\$13.41	19	\$23.59	31	\$19.81	
<b>TOTAL</b>	<b>\$0.12536</b>	10	\$14.88	20	\$42.04	32	\$21.17	
		21	\$12.51	22	\$14.04			
Difference								
	<u>Difference</u>	<u>Mercury Vapor-Difference</u>		<u>Sodium Vapor-Difference</u>		<u>Metal Halide-Difference</u>		
Customer Charge	\$0.00	1	\$0.32	11	\$0.32	23	\$0.47	
		2	\$0.38	12	\$0.37	24	\$0.52	
	<u>All kWh</u>	3	\$0.43	13	\$0.36	25	\$0.53	
Distribution Charge	(\$0.00116)	4	\$0.51	14	\$0.46	26	\$0.56	
External Delivery Charge	\$0.00000	5	\$1.01	15	\$0.58	27	\$0.60	
Stranded Cost Charge	\$0.00000	6	\$0.46	16	\$1.00	28	\$0.60	
Storm Recovery Adj. Factor	(\$0.00020)	7	\$0.55	17	\$0.42	29	\$0.77	
System Benefits Charge	\$0.00000	8	\$0.91	18	\$0.50	30	\$0.44	
Default Service Charge	<u>\$0.00000</u>	9	\$0.32	19	\$0.57	31	\$0.47	
<b>TOTAL</b>	<b>(\$0.00136)</b>	10	\$0.36	20	\$1.01	32	\$0.50	
		21	\$0.30	22	\$0.33			

\* Luminaire charges based on All-Night Service option.