

1 **Q. Please show the impact on revenue requirement and proposed rate increase for 2013**
2 **and 2014 for the following load forecast scenarios:**

- 3
4 **a. No change in load (i.e., 0% load growth) from current levels;**
5
6 **b. A 1% reduction in load (i.e., demand and energy) from current levels; and**
7
8 **c. A 1% increase in load (i.e., demand and energy) relative to forecast levels.**
9

10 **What is the probability of load falling within a band of 0% load growth to 1% load**
11 **growth above forecast?**
12

13 **A.** This response provides the estimated impact on revenue requirement for 2013 and 2014
14 and the percentage rate increase to achieve the revised 2014 revenue requirement for the
15 requested scenarios. A change in the proposed percentage rate increase may require a
16 change in the rate implementation approach for 2013.¹
17

- 18 **a.** Attachment A provides the impact on revenue requirement and the required rate
19 increase for a scenario with no change in peak demand and energy requirements
20 from 2012 levels. The analysis shows a reduction in revenue requirement of
21 \$1,663,000 in 2013 and \$2,504,000 in 2014. The required rate increase would be
22 reduced by 0.22% in 2014.
23
24 **b.** Attachment B provides the impact on revenue requirement and the required rate
25 increase for a scenario with a 1% reduction in load relative to 2012 peak demand
26 and energy levels. The analysis shows a reduction in revenue requirement of
27 \$1,986,000 in 2013 and \$2,957,000 in 2014. The required rate increase would
28 decrease by 0.23% for 2014.
29
30 **c.** Attachment C provides the impact on revenue requirement and the required rate
31 increase for a scenario with a 1% increase in load relative to forecast peak
32 demand and energy. The analysis shows an increase in revenue requirement of
33 \$297,000 in 2013 and \$306,000 in 2014. The required rate increase would be
34 reduced by 0.02% for 2014.
35

36 As indicated in Appendix D to the *Customer, Energy and Demand Forecast, Volume 2,*
37 *Exhibits & Supporting Materials, Reports Tab 4,* differences from forecast have ranged
38 from a high of 2.8% to a low of 0.1% with variance being $\pm 1\%$ or less in 6 of the past 10
39 years. Given the analysis above a variation from the Customer, Energy and Demand
40 forecast is unlikely to have a material impact on the revenue requirement or the required
41 rate change presented in the 2013/2014 General Rate Application.

¹ In 2013, the proposed revenue requirement is being met by the rate increase being implemented on March 1st and the deferral and amortization of the 2013 Revenue Shortfall. See *Volume 1, Application and Company Evidence, Section 3.5.4 2013 Revenue Shortfall*, page 3-55 to 3-56. The response assumes no change in the portion of the 2013 Revenue Shortfall amortization included in the 2014 revenue requirement.

**Detailed Impact Computations of No Peak Demand and No Energy Growth
from Current Levels**

**Impact on 2013 Revenue Requirement of
No Peak Demand and No Energy Growth from Current Levels¹
(\$000's)**

Impact on Proposed 2013 Revenue from Rates Including RSA and MTA

Proposed Total Revenue from Rates ²	\$719,402	
Change in Purchase Power Expense	(\$8,811)	= \$381,446 ³ - \$390,257 ⁴
Change in RSA	(\$1,244)	= (\$1,244) ⁵
Change in Municipal Taxes	<u>(\$235)</u>	= [(\$8,811) + (\$1,244)] x 2.337% ⁶
Revised Total Revenue from Rates	\$709,112	= \$719,402 - \$8,811 - \$1,244 - \$235

Impact on Existing 2013 Revenue from Rates Including RSA and MTA

Total Revenue from Existing Rates before impact	\$688,434	= \$691,126 ⁷ - \$2,692 ⁸
Change in Revenue From Existing Rates	(\$7,186)	= \$564,349 ⁹ - \$571,535 ¹⁰
Change in RSA	(\$1,244)	= (\$1,244) ⁵
Change in Municipal Taxes	<u>(\$197)</u>	= [(\$7,186) + (\$1,244)] x 2.337% ⁶
Revised Total Revenue from Existing Rates	\$679,807	= \$688,434 - \$7,186 - \$1,244 - \$197

Revised Increase in Total Revenue From Final Rates	\$29,305	= \$709,112 - \$679,807
Less: Proposed Increase in Total Revenue From Final Rates	<u>\$30,968</u>	= \$30,968 ¹¹
Impact on total revenue from Final Rates	(\$1,663)	

¹ Current level refers to the 2012 forecast of demand and energy from the *Customer, Energy, and Demand Forecast, Appendix B and C*.

² Revenue requirement from final rates, Exhibit 11, Page 1.

³ 2012 purchase power expense, Exhibit 3, Page 1.

⁴ 2013 proposed purchase power expense, Exhibit 6, Page 1.

⁵ 2013 proposed total energy sales (5,750.9 GWh) less 2012 energy sales (5,680.6 GWh) times RSA factor (\$0.01770) effective July 1, 2012. Energy sales from the *Customer, Energy, and Demand Forecast, Appendix B*.

⁶ MTA factor of 1.02337 effective July 1, 2012.

⁷ Total Existing Revenue from Rates including RSA and MTA, Exhibit 11, Page 1.

⁸ Total Price Elasticity Effect, Exhibit 11, Page 1.

⁹ 2012 Revenue from rates, Exhibit 3, Page 1.

¹⁰ Revenue from existing base rates (\$573,733) less price elasticity effects (\$2,198), Exhibit 11, Page 1.

¹¹ Proposed Increase in Total Revenue from Rates including RSA and MTA, Exhibit 11, Page 1.

**Impact on 2014 Revenue Requirement and Requested Rate Increase of
No Peak Demand and No Energy Growth from Current Levels¹
(\$000's)**

Impact on Proposed 2014 Revenue from Rates Including RSA and MTA

Proposed Total Revenue from Rates ¹²	\$738,433	
Change in Purchase Power Expense	(\$16,411)	= \$381,446 ¹³ - \$397,857 ¹⁴
Change in RSA	(\$2,515)	= (\$2,515) ¹⁵
Change in Municipal Taxes	<u>(\$442)</u>	= [(\$16,411) + (\$2,515)] x 2.337% ¹⁶
Revised Total Revenue from Rates	\$719,065	= \$738,433 - \$16,411 - \$2,515 - \$442

Impact on Existing 2014 Revenue from Rates Including RSA and MTA

Total Revenue from Existing Rates before impact	\$696,659	= \$704,402 ¹⁷ - \$7,743 ¹⁸
Change in Revenue From Existing Rates	(\$13,964)	= \$564,349 ¹⁹ - \$578,313 ²⁰
Change in RSA	(\$2,515)	= (\$2,515) ¹⁵
Change in Municipal Taxes	<u>(\$385)</u>	= [(\$13,964) + (\$2,515)] x 2.337% ¹⁶
Revised Total Revenue from Existing Rates	\$679,795	= \$696,659 - \$13,964 - \$2,515 - \$385

Revised Increase in Total Revenue From Final Rates	\$39,270	= \$719,065 - \$679,795
Less: Proposed Increase in Total Revenue From Final Rates	<u>\$41,774</u>	= \$41,774 ²¹
Impact on total revenue from Final Rates	(\$2,504)	

Revised Customer Rate Change	5.78%	= \$39,270 ÷ \$679,795
Less: Proposed Customer Rate Change ²²	<u>6.00%</u>	
Customer Rate Change Impact	(0.22%)	

¹² Revenue requirement from final rates, Exhibit 11, Page 2.

¹³ 2012 purchase power expense, Exhibit 3, Page 1.

¹⁴ 2014 proposed purchase power expense, Exhibit 6, Page 1.

¹⁵ 2014 proposed total energy sales (5,822.7 GWh) less 2012 energy sales (5,680.6 GWh) times RSA factor (\$0.01770) effective July 1, 2012. Energy sales from *Customer, Energy, and Demand Forecast, Appendix B*.
¹⁶ MTA factor of 1.02337 effective July 1, 2012.

¹⁷ Total Existing Revenue from Rates including RSA and MTA, Exhibit 11, Page 2.

¹⁸ Total Price Elasticity Effect, Exhibit 11, Page 2.

¹⁹ 2012 Revenue from rates, Exhibit 3, Page 1.

²⁰ Revenue from existing base rates (\$584,639) less price elasticity effects (\$6,326), Exhibit 11, Page 2.

²¹ Proposed Increase in Total Revenue from Rates including RSA and MTA, Exhibit 11, Page 2.

²² The proposed rate increase from Exhibit 11, Page 2. [\$41,774/(\$704,402 - \$7,743)].

**Detailed Impact Computations of 1% Reduction in Peak Demand and Energy
from Current Levels**

**Impact on 2013 Revenue Requirement of a
1% Reduction in Peak Demand and Energy from Current Levels¹
(\$000's)**

Impact on Proposed 2013 Revenue from Rates Including RSA and MTA

Proposed Total Revenue from Rates ²	\$719,402	
Demand Supply Cost	(\$2,433)	= (1,280.13 MW ³ - 1,330.82 MW ⁴) x \$48
Energy Supply Cost	(\$12,336)	= (5,953.9 GWh ⁵ - 6,094.0 GWh ⁶) x \$0.08805
Change in RSA	(\$2,250)	= (5,623.8 GWh ⁷ - 5,750.9 GWh ⁸) x \$0.0177
Change in Municipal Taxes	<u>(\$398)</u>	= [(\$2,433) + (\$12,336) + (\$2,250)] x 2.337% ⁹
Revised Total Revenue from Rates	\$701,985	= \$719,402 - \$2,433 - \$12,336 - \$2,250 - \$398

Impact on Existing 2013 Revenue from Rates Including RSA and MTA

Total Revenue from Existing Rates before impact	\$688,434	= \$691,126 ¹⁰ - \$2,692 ¹¹
Change in Revenue From Existing Rates	(\$12,829)	= \$558,706 ¹² - \$571,535 ¹³
Change in RSA	(\$2,250)	= (5,623.8 GWh ⁷ - 5,750.9 GWh ⁸) x \$0.0177
Change in Municipal Taxes	<u>(\$352)</u>	= [(\$12,829) + (\$2,250)] x 2.337% ⁹
Revised Total Revenue from Existing Rates	\$673,003	= \$688,434 - \$12,829 - \$2,250 - \$352
Revised Increase in Total Revenue From Final Rates	\$28,982	= \$701,985 - \$673,003
Less: Proposed Increase in Total Revenue From Final Rates	<u>\$30,968</u>	= \$30,968 ¹⁴
Impact on total revenue from Final Rates	(\$1,986)	

¹ Current level refers to the 2012 forecast of demand and energy from the *Customer, Energy, and Demand Forecast, Appendix B and C*.

² Revenue requirement from final rates, Exhibit 11, Page 1.

³ This is 1% below actual Native Peak used for billing in 2012 [1,293.06 MW x (1 - 0.01)].

⁴ 2012 forecast Native Peak is the basis for the proposed purchased power 2013 demand charges. Native Peak from *Customer, Energy, and Demand Forecast, Appendix C*.

⁵ This is 1% below forecast 2012 Produced and Purchased Energy, [(6,014.0 GWh x (1 - 0.01)]. Produced and Purchased Energy from *Customer, Energy, and Demand Forecast, Appendix B*.

⁶ 2013 proposed Produced and Purchased Energy. Produced and Purchased Energy from *Customer, Energy, and Demand Forecast, Appendix B*.

⁷ 2012 forecast total energy sales less 1% [5,680.6 GWh x (1 - 0.01)]. Energy sales from *Customer, Energy, and Demand Forecast, Appendix B*.

⁸ 2013 proposed total energy sales. Energy sales from *Customer, Energy, and Demand Forecast, Appendix B*.

⁹ MTA factor of 1.02337 effective July 1, 2012.

¹⁰ Total Existing Revenue from Rates including RSA and MTA, Exhibit 11, Page 1.

¹¹ Total Price Elasticity Effect, Exhibit 11, Page 1.

¹² 2012 Forecast Revenue from Rates less 1% [\$564,349 x (1 - 0.01)]. Exhibit 3, Page 1.

¹³ Revenue from existing base rates (\$573,733) less price elasticity effects (\$2,198), Exhibit 11, Page 1.

¹⁴ Proposed Increase in Total Revenue from Rates including RSA and MTA, Exhibit 11, Page 1.

**Impact on 2014 Revenue Requirement and Requested Rate Increase of a
1% Reduction in Peak Demand and Energy from Current Levels¹
(\$000's)**

Impact on Proposed 2014 Revenue from Rates Including RSA and MTA

Proposed Total Revenue from Rates ¹⁵	\$738,433	
Demand Supply Cost	(\$3,469)	= (1,280.13 MW ¹⁶ - 1,352.41 MW ¹⁷) x \$48
Energy Supply Cost	(\$19,028)	= (5,953.9 GWh ¹⁸ - 6,170.0 GWh ¹⁹) x \$0.08805
Change in RSA	(\$3,521)	= (5,623.8 GWh ²⁰ - 5,822.7 GWh ²¹) x \$0.0177
Change in Municipal Taxes	<u>(\$608)</u>	= [(\$3,469) + (\$19,028) + (\$3,521)] x 2.337% ²²
Revised Total Revenue from Rates	\$711,807	= \$738,433 - \$3,469 - \$19,028 - \$3,521 - \$608

Impact on Existing 2014 Revenue from Rates Including RSA and MTA

Total Revenue from Existing Rates before impact	\$696,659	= 704,402 ²³ - 7,743 ²⁴
Change in Revenue From Existing Rates	(\$19,607)	= \$558,706 ²⁵ - \$578,313 ²⁶
Change in RSA	(\$3,521)	= (5,623.8 GWh ²⁰ - 5,822.7 GWh ²¹) x \$0.0177
Change in Municipal Taxes	<u>(\$541)</u>	= [(\$19,607) + (\$3,521)] x 2.337% ²²
Revised Total Revenue from Existing Rates	\$672,990	= \$696,659 - \$19,607 - \$3,521 - \$541

Revised Increase in Total Revenue From Final Rates	\$38,817	= \$711,807 - \$672,990
Less: Proposed Increase in Total Revenue From Final Rates	<u>\$41,774</u>	= \$41,774 ²⁷

Impact on total revenue from Final Rates (\$2,957)

Revised Customer Rate Change	5.77%	= \$38,817 ÷ 672,990
Less: Proposed Customer Rate Change ²⁸	<u>6.00%</u>	

Customer Rate Change Impact (0.23%)

¹⁵ Revenue requirement from final rates, Exhibit 11, Page 2.

¹⁶ This is 1% below actual Native Peak used for billing in 2012 [1,293.06 MW x (1 - 0.01)].

¹⁷ 2013 proposed Native Peak is the basis for the proposed purchased power 2014 demand charges. Native Peak from *Customer, Energy, and Demand Forecast, Appendix C*.

¹⁸ This is 1% below forecast 2012 Purchased and Produced Energy, [(6,014.0 GWh x (1 - 0.01)]. Purchased and Produced Energy from *Customer, Energy, and Demand Forecast, Appendix B*.

¹⁹ 2014 proposed Purchased and Produced Energy. Purchased and Produced Energy from *Customer, Energy, and Demand Forecast, Appendix B*.

²⁰ 2012 forecast total energy sales less 1% [5,680.6 GWh x (1 - 0.01)]. Energy sales from *Customer, Energy, and Demand Forecast, Appendix B*.

²¹ 2014 proposed total energy sales. Energy sales from *Customer, Energy, and Demand Forecast, Appendix B*.

²² MTA factor of 1.02337 effective July 1, 2012.

²³ Total Existing Revenue from Rates including RSA and MTA, Exhibit 11, Page 2.

²⁴ Total Price Elasticity Effect, Exhibit 11, Page 2.

²⁵ 2012 Forecast Revenue from Rates less 1% [\$564,349 x (1 - 0.01)]. Exhibit 3, Page 1.

²⁶ Revenue from existing base rates (\$584,639) less price elasticity effects (\$6,326), Exhibit 11, Page 2.

²⁷ Proposed Increase in Total Revenue from Rates including RSA and MTA, Exhibit 11, Page 2.

²⁸ The proposed rate increase from Exhibit 11, Page 2. [\$41,774/(\$704,402 - \$7,743)].

**Detailed Impact Computations of 1% Increase in Peak Demand and Energy
Relative to Forecast Levels**

**Impact on 2013 Revenue Requirement of a
1% Increase in Peak Demand and Energy Relative to Forecast
(\$000's)**

Impact on Proposed 2013 Revenue from Rates Including RSA & MTA

Proposed Total Revenue from Rates ¹	\$719,402	
Demand Supply Cost	\$639	= 1,330.82 MW ² x 1% x \$48
Energy Supply Cost	\$5,366	= 6,094.0 GWh ³ x 1% x \$0.08805
Change in RSA	\$1,018	= \$1,018 ⁴
Change in Municipal Taxes	<u>\$164</u>	= [\$639 + \$5,366 + \$1,018] x 2.337% ⁵
Revised Total Revenue from Rates	\$726,589	= \$719,402 + \$639 + \$5,366 + \$1,018 + \$164

Impact on Existing 2013 Revenue from Rates Including RSA and MTA

Total Revenue from Existing Rates before impact	\$688,434	= \$691,126 ⁶ - \$2,692 ⁷
Change in Revenue From Existing Rates	\$5,715	= \$571,535 ⁸ x 1%
Change in RSA	\$1,018	= \$1,018 ⁴
Change in Municipal Taxes	<u>\$157</u>	= [\$5,715 + \$1,018] x 2.337% ⁵
Revised Total Revenue from Existing Rates	\$695,324	= \$688,434 + \$5,715 + \$1,018 + \$157

Revised Increase in Total Revenue From Final Rates	\$31,265	= \$726,589 - \$695,324
Less: Proposed Increase in Total Revenue From Final Rates	<u>\$30,968</u>	= \$30,968 ⁹
Impact on total revenue from Final Rates	\$297	

¹ Revenue requirement from final rates, Exhibit 11, Page 1.

² 2012 forecast Native Peak is the basis for the proposed purchased power 2013 demand charges. Native Peak from *Customer, Energy, and Demand Forecast, Appendix C*.

³ 2013 proposed Produced and Purchased Energy. Produced and Purchased Energy from *Customer, Energy, and Demand Forecast, Appendix B*.

⁴ RSA Impact equals 2013 proposed total energy sales of 5,750.9 GWh times 1% times the July 1, 2012 RSA factor \$0.01770. Energy sales from the *Customer, Energy, and Demand Forecast, Appendix B*.

⁵ MTA factor of 1.02337 effective July 1, 2012.

⁶ Total Existing Revenue from Rates including RSA and MTA, Exhibit 11, Page 1.

⁷ Total Price Elasticity Effect, Exhibit 11, Page 1.

⁸ Revenue from existing base rates (\$573,733) less price elasticity effects (\$2,198), Exhibit 11, Page 1.

⁹ Proposed Increase in Total Revenue from Rates including RSA and MTA, Exhibit 11, Page 1.

**Impact on 2014 Revenue Requirement and Requested Rate Increase of a
1% increase in Peak Demand and Energy Relative to Forecast
(\$000's)**

Impact on Proposed 2014 Revenue from Rates Including RSA & MTA

Proposed Total Revenue from Rates ¹⁰	\$738,433	
Demand Supply Cost	\$649	= 1,352.41 MW ¹¹ x 1% x \$48
Energy Supply Cost	\$5,433	= 6,170.0 GWh ¹² x 1% x \$0.08805
Change in RSA	\$1,031	= \$1,031 ¹³
Change in Municipal Taxes	<u>\$166</u>	= [\$649 + \$5,433 + \$1,031] x 2.337% ¹⁴
Revised Total Revenue from Rates	\$745,712	= \$738,433 + \$649 + \$5,433 + \$1,031 + \$166

Impact on Existing 2014 Revenue from Rates Including RSA and MTA

Total Revenue from Existing Rates before impact	\$696,659	= \$704,402 ¹⁵ - \$7,743 ¹⁶
Change in Revenue From Existing Rates	\$5,783	= \$578,313 ¹⁷ x 1%
Change in RSA	\$1,031	= \$1,031 ¹³
Change in Municipal Taxes	<u>\$159</u>	= [\$5,783 + \$1,031] x 2.337% ¹⁴
Revised Total Revenue from Existing Rates	\$703,632	= \$696,659 + \$5,783 + \$1,031 + \$159

Revised Increase in Total Revenue From Final Rates	\$42,080	= \$745,712 - \$703,632
Less: Proposed Increase in Total Revenue From Final Rates	<u>\$41,774</u>	= \$41,774 ¹⁸
Impact on total revenue from Final Rates	\$306	

Revised Customer Rate Change	5.98%	= \$42,080 ÷ \$703,632
Less: Proposed Customer Rate Change ¹⁹	<u>6.00%</u>	
Customer Rate Change Impact	(0.02)%	

¹⁰ Revenue requirement from final rates, Exhibit 11, Page 2.

¹¹ 2013 forecast Native Peak is the basis for the proposed purchased power 2014 demand charges. Native Peak from *Customer, Energy, and Demand Forecast, Appendix C*.

¹² 2014 proposed Produced and Purchased Energy. Produced and Purchased Energy from *Customer, Energy, and Demand Forecast, Appendix B*.

¹³ RSA Impact equals 2014 proposed total energy sales of 5,822.7 GWh times 1% times the July 1, 2012 RSA factor \$0.01770. Energy sales from the *Customer, Energy, and Demand Forecast, Appendix B*.

¹⁴ MTA factor of 1.02337 effective July 1, 2012.

¹⁵ Total Existing Revenue from Rates including RSA and MTA, Exhibit 11, Page 2.

¹⁶ Total Price Elasticity Effect, Exhibit 11, Page 2.

¹⁷ Revenue from existing base rates (\$584,639) less price elasticity effects (\$6,326), Exhibit 11, Page 2.

¹⁸ Proposed Increase in Total Revenue from Rates including RSA and MTA, Exhibit 11, Page 2.

¹⁹ The proposed rate increase from Exhibit 11, Page 2. [\$41,774/(\$704,402 - \$7,743)].