NARUC– Impact of Tax Reform on Rate Cases

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Agenda

Objectives

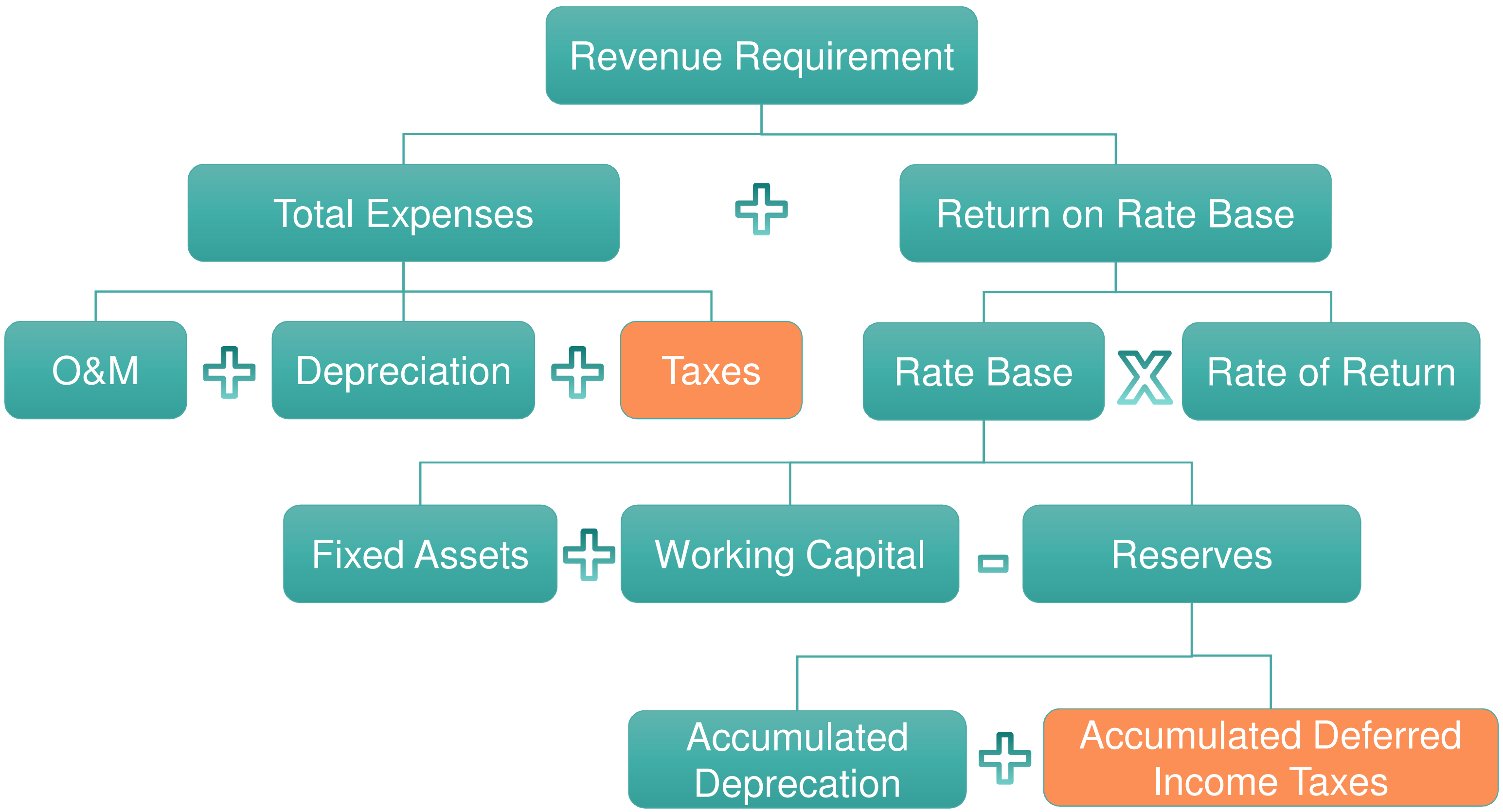
- Review the Ratemaking Formula
- Understand the Key Tax Reform Items Impacting Utilities
- Understand the Ratemaking Impacts of Key Tax Reform Items including:
  - Change in Federal Income Tax Rate
  - Loss of Interest Expense Deduction
  - 100% Expensing
- Understand How Commissions are Likely to React to Tax Reform
- Understand How to Prepare and Quantify Tax Reform Impacts

Agenda

- Provide an Overview of Ratemaking Formula
- Provide an Overview of Key Tax Reform Items Impacting Utilities
- Discussion of Ratemaking Impacts of Key Tax Reform Items
  - Change in Federal Income Tax Rate
  - Loss of Interest Expense Deduction
  - 100% Expensing
- Likely Commission Actions given Tax Reform
- What Can I Do to Model Tax Reform Impacts?
- Q&A

Overview of Ratemaking Formula

Ratemaking Formula



Ratemaking Formula

- Allows operating expenses, including income taxes, to be recovered on a dollar for dollar basis in revenue requirements.
- Most state commissions and the Federal Energy Regulatory Commission (FERC) allow recovery of both current and deferred income taxes in income tax expense.
- Accumulated Deferred Income Taxes (ADIT) is an interest free loan from the government. It is treated by Commissions as either a RateBase reduction or as zero cost capital in the ratemaking formula. Either treatment serves to reduce revenue requirements.
  - Treatment as zero cost capital lowers the overall allowed return
  - Treatment as a RateBase offset reduces RateBase and a lower return will be produced in the RateBase x return part of the ratemaking formula

Overview of Tax Reform As Proposed

Proposed Tax Reform Items

- Reduction in Federal Corporate Income Tax Rate
  - Assumption used for examples is a reduction in Federal Income Tax rate from 35% to 20%

- Loss of interest expense deduction

- 100% Expensing in Year 1 for Tax Basis Plant in Service

Overview of Rate Impacts of Key Tax Reform Items

Reduction of Federal Corporate Income Tax Rate

- Two significant ratemaking impacts will be driven by this reduction.

  - Tax Expense goes down
  - RateBase goes up because zero cost capital ADIT goes down

Federal Tax Rate Reduction from 35% to 20% Impact on Tax Expense

	King in the North Power	Tax Rate Reduction	King in the North Power
Revenues	371.2		371.2
Expenses:			
Fuel Costs	93.6		93.6
Other Operating	115.9		115.9
Depreciation and Amortization	34.9		34.9
Taxes Other Than Income	31.8		31.8
Current Income Taxes	0.6	(0.3)	0.4
Deferred Income Taxes	23.5	(10.1)	13.4
Amortization of Excess Deferred Taxes	-		-
Total Tax Expense	24.2	(10.4)	13.8
Total Operating Expense	300.4	(10.4)	290.0
Operating Income	70.8	10.4	81.2
Interest Expense	25.9		25.9
Net Income (Equity Return)	44.9	10.4	55.2
Ratebase	846.9		846.9
Equity Return	11.0%		13.5%
Reduction of Corporate Tax Rate from 35% to 20%			
Federal Rate	35.00%		20.00%

- Immediate impact of tax rate reduction is to lower current and deferred tax expense by total of $10.4 million
- Note that King in the North Power was earning an 11.0% equity return prior to the tax rate reduction.
- If the Commission allows the Company to retain it's current rates, the equity return would increase to 13.5% from 11.0% because tax expense is less.

Federal Tax Rate Reduction from 35% to 20%, Commission Requires Rate Reduction

	King in the North Power	Tax Rate Reduction	King in the North Power	Revenue Reduction	King in the North Power
Revenues	371.2		371.2	(12.9)	358.2
Expenses:					
Fuel Costs	93.6		93.6		93.6
Other Operating	115.9		115.9		115.9
Depreciation and Amortization	34.9		34.9		34.9
Taxes Other Than Income	31.8		31.8		31.8
Current Income Taxes	0.6	(0.3)	0.4	(2.6)	(2.2)
Deferred Income Taxes	23.5	(10.1)	13.4		13.4
Amortization of Excess Deferred Taxes	-		-		-
Total Tax Expense	24.2	(10.4)	13.8	(2.6)	11.2
Total Operating Expense	300.4	(10.4)	290.0	(2.6)	287.4
Operating Income	70.8	10.4	81.2	(10.4)	70.8
Interest Expense	25.9		25.9		25.9
Net Income (Equity Return)	44.9	10.4	55.2	(10.4)	44.9
Ratebase	846.9		846.9		846.9
Equity Return	11.0%		13.5%		11.0%
Reduction of Corporate Tax Rate from 35% to 20%					
Federal Rate	35.00%		20.00%		20.00%

- If Commission requires King in the North Power to come in for a rate case or generic proceeding, a rate reduction would be required.
- Note that the $10.4 million tax reduction generates a $12.9 million revenue reduction ($10.4 million/(1-tax rate)), because the rate reduction reduces tax expense
- Note that after this rate reduction, King in the North Power continues to earn its allowed 11.0% equity return

Federal Income Tax Rate Decrease – Impact on ADIT

King in the North Details of Deferred Taxes

	ADIT At 35%	Temp Difference	Required ADIT At 20%	Change in ADIT
Account 190	64.7	184.9	37.0	(27.7)
Account 282	(236.2)	(674.9)	(135.0)	101.2
Account 283	(6.8)	(19.5)	(3.9)	2.9
Total ADIT	(178.3)	(509.5)	(101.9)	76.4

- Prior to Tax Reform, ADIT was ($178.3) million, which equates to a temporary difference of ($509.5) million.
- Post tax reform, the required ADIT related to this temporary difference would be $(101.9) million, for a decrease in ADIT of $76.4 million.
- Current thinking is that the IRS will require the protected "excess" deferred taxes to be flowed back to income using the Average Rate Assumption Method (ARAM).

Recording the Regulatory Liability for "Excess" ADIT

King in the North Details of Deferred Taxes

	ADIT At 35%	Temp Difference	Required ADIT At 20%	Change in ADIT	Decrease in ADIT @ Rev Req Lvl	ADIT As Adjusted
Account 190	64.7	184.9	37.0	(27.7)	(34.7)	30.0
Account 282	(236.2)	(674.9)	(135.0)	101.2	126.5	(109.7)
Account 283	(6.8)	(19.5)	(3.9)	2.9	3.7	(3.2)
Total ADIT	(178.3)	(509.5)	(101.9)	76.4	95.5	(82.8)
Income Tax Reg Liability - Excess Deferred Taxes		95.5	19.1			
Total Temporary Difference		(414.0)	(82.8)			

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Journal Entries:

Non-Regulated			Regulated		
Dr. ADIT	**76.4**		**Dr. ADIT**	**95.5**	
Cr. Deferred Tax Expense		**76.4**	**Cr. Income Tax Reg Liab**		**95.5**

RateBase Overview for King in the North Power

	King in the North Power	Rate Change ADIT @ Rev Req Lvl	King in the North Power
Assets/Rate Base			
Plant in Service	1,500.5		1,500.5
Accumulated Depreciation	(492.3)		(492.3)
Net Plant	1,008.2		1,008.2
Accumulated Deferred Income Taxes	(178.3)	95.5	(82.8)
Additional Excess Deferred Tax Reg Liability		(95.5)	(95.5)
Materials and Supplies	18.1		18.1
Regulatory Assets	1.5		1.5
Other Debits	7.9		7.9
Working Capital	(0.7)		(0.7)
Customer Deposits and CIAC	(9.9)		(9.9)
Total RateBase	846.9	-	846.9
Total Capitalization			
Long Term Debt	437.4		437.4
Total Shareholders Equity	409.5		409.5
Total Liabilities and Shareholders Equity	846.9	-	846.9

- Note that post tax reform ADIT is now $95.5 million lower and that an offsetting Income Tax Regulatory Liability has Been Recorded.
- RateBase remains the same at $846.9 million.

Amortization of Excess ADIT

- Assume for our example that the Amortization of Excess ADIT will take place evenly over twenty years. ($95.5 million/ 20 Years = $4.8 million)

- The following entry is required to record the Amortization of the Excess ADIT:

DR. Regulatory Liability – EADIT			$4.8	
	CR.	Amortization of EADIT		$3.8
	CR.	ADIT		$1.0

- Over time the Reg Liability-EADIT is amortized to zero, which will increase RateBase.

Income Statement Overview for King in the North Power – Amortization of EADIT

	King in the North Power	FlowBack Of Excess	King in the North Power	Revenue Reduction	King in the North Power
Revenues	358.2		358.2	(4.8)	353.4
Expenses:					
Fuel Costs	93.6		93.6		93.6
Other Operating	115.9		115.9		115.9
Depreciation and Amortization	34.9		34.9		34.9
Taxes Other Than Income	31.8		31.8		31.8
Current Income Taxes	(2.2)		(2.2)	(1.0)	(3.2)
Deferred Income Taxes	13.4		13.4		13.4
Amortization of Excess Deferred Taxes	-	(3.8)	(3.8)		(3.8)
Total Tax Expense	11.2	(3.8)	7.4	(1.0)	6.4
Total Operating Expense	287.4	(3.8)	283.6	(1.0)	282.6
Operating Income	70.8	3.8	74.6	(3.8)	70.8
Interest Expense	25.9		25.9		25.9
Net Income (Equity Return)	44.9	3.8	48.7	(3.8)	44.9
Ratebase	846.9		846.9		846.9
Equity Return	11.0%		11.9%		11.0%
Reduction of Corporate Tax Rate from 35% to 20%					
Federal Rate	20.00%		20.00%		20.00%

- Similar to the overall effect of the tax rate reduction, if the amortization of EADIT of $3.8 million is recorded without a Commission ratecase, the equity return will increase to 11.9%.
- If the Commission requires a rate adjustment for amortization of EADIT a refund of $4.8 million would be required, which represents the $3.8 grossed up to the revenue requirement level.

Balance Sheet Overview – Amortization of EADIT

	King in the North Power	Rate Change ADIT @ Rev Req Lvl	King in the North Power	Amort of Excess	King in the North Power
Assets/Rate Base					
Plant in Service	1,500.5		1,500.5		1,500.5
Accumulated Depreciation	(492.3)		(492.3)		(492.3)
Net Plant	1,008.2		1,008.2		1,008.2
Accumulated Deferred Income Taxes	(178.3)	95.5	(82.8)	(1.0)	(83.8)
Additional Excess Deferred Tax Reg Liability		(95.5)	(95.5)	4.8	(90.8)
Materials and Supplies	18.1		18.1		18.1
Regulatory Assets	1.5		1.5		1.5
Other Debits	7.9		7.9		7.9
Working Capital	(0.7)		(0.7)		(0.7)
Customer Deposits and CIAC	(9.9)		(9.9)		(9.9)
Total RateBase	846.9	-	846.9	3.8	850.7
Total Capitalization					
Long Term Debt	437.4		437.4		437.4
Total Shareholders Equity	409.5		409.5		409.5
Total Liabilities and Shareholders Equity	846.9	-	846.9		846.9

- Note that as the Regulatory Liability for EADIT is amortized the related ADIT follows:
- Ratebase increased by $3.8 million based on one year of amortization.
- Additional Sources of Capitalization will be Required Over Time to Replace the Interest Free Loan from the Government

Loss of Interest Deduction

- If the interest deduction is not allowed for tax purposes, a “permanent” item will be required in the tax expense calculation.
- This item will add interest expense back as a reconciliation from book to tax income. The income tax impacts of this non-deductible item will be added to income tax expense and the income tax related revenue requirement will increase.

(See attached example to demonstrate this)

Loss of Interest Expense Deduction

King in the North Power

	Synchronized	Weighting	After Tax Return	After Tax Weighted	Pre Tax Reform After-Tax Return	Pre-Tax Return	Pre Tax Return
Long Term Debt	437.4	52%	5.9%	3.06%	25.9	3.06%	25.9
Shareholders Equity	409.5	48%	11.0%	5.30%	44.9	8.15%	69.0
Total Capitalization	846.9	100%		8.36%	70.8	11.21%	94.9
Current Tax Rate				35.00%			
Proof of Tax Calc:							
Pre Tax Return							94.9
Deduct: Interest Expense							(25.9)
Taxable Return							69.0
Tax at 35%							24.2
After Tax Equity Return							44.9

	Synchronized	Weighting	After Tax Return	After Tax Weighted	Loss of Interest Deduction After-Tax Return	Pre-Tax Return	Pre Tax Return
Long Term Debt	437.4	52%	5.9%	3.06%	25.9	3.83%	32.4
Shareholders Equity	409.5	48%	11.0%	5.30%	44.9	6.62%	56.1
Total Capitalization	846.9	100%		8.36%	70.8	10.45%	88.5
Assumed Tax Rate				20.00%			
Proof of Tax Calc:							
Pre Tax Return							88.5
Deduct: Interest Expense							-
Taxable Return							88.5
Tax at 20%							17.7
After Tax Equity and Debt Return							70.8

- Note that required return pre-tax reform is $94.9 million and interest is deductible.
- Required return with tax reform is $88.5 million which is lower than pre-tax reform because the Federal Income tax rate is only 20% but applies to a larger number because both interest and equity need to be grossed up to recover taxes.

Combined Impact of Federal Rate Reduction and Loss of Interest Deduction

	(Tax Rate Reduction without Interest Deduction)				
	King in the North Power	**Tax Rate w/Rev Reduction**	**King in the North Power**	**Interest Non Deductible**	**King in the North Power**
Revenues	371.2	(12.9)	358.2	6.5	364.7
Expenses:					
Fuel Costs	93.6		93.6		93.6
Other Operating	115.9		115.9		115.9
Depreciation and Amortization	34.9		34.9		34.9
Taxes Other Than Income	31.8		31.8		31.8
Current Income Taxes	0.6	(2.9)	(2.2)	6.5	4.3
Deferred Income Taxes	23.5	(10.1)	13.4		13.4
Amortization of Excess Deferred Taxes	-		-		-
Total Tax Expense	24.2	(12.9)	11.2	6.5	17.7
Total Operating Expense	300.4	(12.9)	287.4		293.9
Operating Income	70.8	0.0	70.8		70.8
Interest Expense	25.9		25.9		25.9
Net Income (Equity Return)	44.9	0.0	44.9		44.9
Ratebase	846.9		846.9		846.9
Equity Return	11.0%		11.0%		11.0%
Reduction of Corporate Tax Rate from 35% to 20%					
Federal Rate	35.00%		20.00%		20.00%

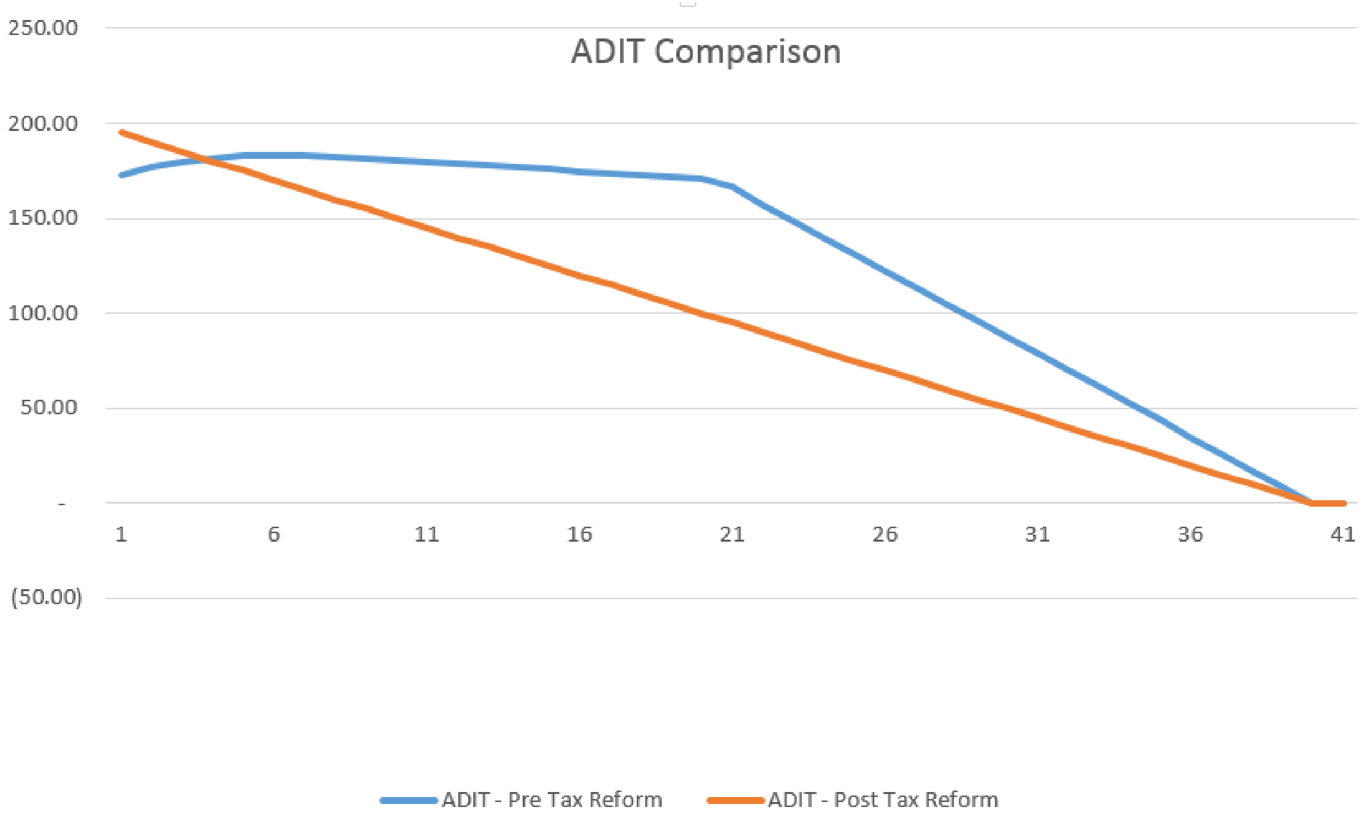
- Tax Rate Reduction is same as Previously Illustrated
- Interest Revenue Requirement Impact
  - 25.9 million of Interest x 20%/(1-20%)
- Note that Total Revenue Requirement decreased by about $6.5 million.

100% Expensing Vs. Current 50% Bonus Depreciation

	Year 1 Before Tax Reform	Year 1 Post Tax Reform	Difference
Plant (Book = Tax)	1,000	1,000	
Bonus Depreciation at 50%	(500)	-	
Tax Plant after Basis Reduction	500	1,000	
MACRS Rate (100% for Tax Reform)	3.75%	100%	
Tax Depreciation	19	1,000	
Initial Bonus Depreciation	500	-	
Total Tax Depreciation	519	1,000	
Total Book Depreciation	25	25	
Tax > Book	494	975	
Corporate Federal Income Tax Rate	35%	20%	
Deferred Taxes	173	195	22
Federal Income Tax Rate	35%	20%	
MACRS Life	20	20	
Book Life	40	40	

- Prior to tax reform the 50% bonus plus initial year MACRS half year convention yields $173 of ADIT in Year 1
- Post Tax Reform 100% expensing yields $195 of ADIT in Year 1 of Asset Life

100% Expensing in Year 1 of Tax Capital Additions



- Post Tax Reform ADIT is at its Apex in Year 1 and Reverses in Years 2 to 40 of Book Life
- Before Tax Reform ADIT Continues to Grow through Year 6 and then Reverses in Years 7 to 40 of Book Life. Note that reduction accelerates after year 20 when tax life runs out.

Impact of 100% Expensing in Year 1 of Tax Capital Additions

↓ Taxable Income

↓ ADIT lower over life of asset because of lower Federal tax rate

↑ NOLs and increasing NOLs likely

Will 100% Expensing be under Section 162 (Expensing) or Section 168 (Depreciation)?

Likely to be “Protected” under IRS Rules

Likely Commission Actions Given Tax Reform

Likely Commission Actions

- Based on a review of regulatory actions after the Tax Reform Act of 1987 –
  - The Commissions will likely initiate generic cost proceedings or specific company proceedings to review Tax Reform impact
  - Proceedings will require utilities to adjust revenue requirements for Federal tax rate reductions.
  - The Commissions may also investigate protected and non-protected excess ADIT and determine how to address these items with a keener focus on non-protected excess ADIT.

How Can I Prepare to Quantify Tax Reform Impacts?

How Can I Prepare Analysis of Tax Reform Items?

- Run PowerTax scenario cases to quantify “Excess” at various rates.
- Determine reversal pattern with forecasted PowerTax cases
- Create new permanent items for disallowed tax deductions
- Determine tax expense impacts by running forecasted Provision cases
- If you have Rate Case and ROE Management (Suite), run these scenarios through a projected test period to determine revenue requirements

Summary Tax Reform Impacts

- Tax expense will go down decreasing revenue requirements for the federal tax rate reduction
- Similarly, ADIT will go down over time increasing rate base and eventually requiring other debt and equity financing sources
- Loss of tax deductions for interest expense or other costs necessary for utility service will generate additional tax expense for new “permanent” items which will increase revenue requirements
- 100% Tax Expensing post tax reform will decrease taxable income and may lead to Net Operating Losses (NOLs) which will also tend to increase ratebase

With Clarity Comes Confidence.

Questions ?

Questions ?