Understanding the potential impact of tax reform on 2018 net revenues

March 14, 2018

In brief

The Tax Cut and Jobs Act (the Act), signed into law by President Trump on December 22, 2017, reduced the federal corporate income tax rate from 35% to 21% effective for tax years beginning after December 31, 2017. Many regulators and utilities are quantifying the impacts of tax reform so that they potentially can adjust rates/tariffs to provide the benefits of such changes to customers.

This insight is intended to help utilities consider the potential impact of tax reform on their 2018 net revenues. The key takeaway is that the impact of tax reform on existing revenues/tariffs established prior to tax reform is due primarily to the effects of:

- Current income tax expense from the change in the tax rate from 35% to 21% (including the effects of tax gross-ups)
- Originating book/tax differences resulting in deferred income taxes now being measured at 21% vs. 35% (including the effects of tax gross-ups).

Important note: Reversing book/tax differences should not be impacted by tax reform unless the reversal period for non-protected book/tax differences is adjusted.

This is the first in our series of 'Day 2' Tax Reform Insights, dealing with a topic relevant to many of our clients in 2018 and beyond — potential revenue subject to refund considerations related to the reduction in the federal income tax rate.

In detail

Tax reform: Regulated utilities

The Act reduced the corporate tax rate applicable to regulated utilities from 35% to 21%. However, unlike commercial and industrial companies where the tax rate reduction will reduce both current and deferred income taxes, regulated utilities are subject to normalization provisions, which require a certain treatment of excess accumulated deferred income taxes (ADIT) resulting from the corporate income tax rate reduction. Section 13001 of the Act defines 'excess ADIT' as: the excess of—

i. the reserve for deferred taxes (as described in section 168(i)(9)(A)(ii) of the Internal Revenue Code of 1986) as of the day before the corporate rate reductions provided in the amendments made by this section take effect, over

ii. the amount which would be the balance in such reserve if the amount of such reserve were determined by assuming that the corporate rate reductions provided in this Act were in effect for all prior periods.

The excess ADIT normalization requirements apply only to accelerated federal tax method/life depreciation differences on public utility property; they do not apply to excess ADIT on other book/tax temporary differences.

The excess ADIT normalization provision requires that excess deferred income taxes be used to reduce revenue requirements and revenue no sooner than would occur as the book/tax difference reverses. Under this method — referred to as the Average Rate Assumption Method (ARAM) — the utility identifies the deferred tax reversal pattern (comparing book depreciation versus tax depreciation) and reverses the excess ADIT beginning when book depreciation exceeds tax depreciation and the deferred tax turnaround occurs.

An alternative approach — the Reverse South Georgia Method (RSGM) — is permitted if the utility is unable to identify when book/tax differences originate and reverse. RSGM cannot be used to reverse excess ADIT if the utility has the records to calculate the reversal under ARAM. Under RSGM, the excess ADIT is spread ratably over the estimated book life if the utility is unable to identify the reversal pattern of utility plant components.

Under either approach, the excess ADIT is used to reduce rates charged to customers over the estimated remaining book life of the related assets; however, under RSGM, the reduction is straight line beginning immediately while, under ARAM, the reduction does not occur until the book/tax difference begins to reverse.

Importantly, a normalization violation occurs if the excess ADIT is used to reduce rates more rapidly than would occur under these approaches. The penalty for a normalization violation is severe and two-fold: (1) currently payable income tax is increased by the amount by which the utility reduced its excess tax reserve more rapidly than permitted under ARAM or RSGM, and (2) the utility will be unable to claim accelerated depreciation for income tax purposes.

Ratemaking process

Under traditional rate regulation, utilities are permitted to charge rates/tariffs to recover their costs of providing service. A rate case is the vehicle by which regulated utilities present such costs to the state/federal regulator for approval. Utilities compute a revenue requirement using a test period reflective of costs expected to be incurred when new rates become effective. The rate case generally includes the utilities' rate base (primarily net book value of property, plant, and equipment, working capital, and a reduction for ADIT) representing the investor supplied capital funding such assets. The rate base is multiplied by the company's authorized rate of return resulting in an operating income requirement that is combined with the operating costs necessary to provide service to customers. Operating expenses include operating and maintenance costs, depreciation, taxes other than income, and income taxes. The operating income requirement plus operating expenses results in the revenue requirement. The revenue requirement is converted into a tariff for residential, commercial, and industrial customers used for billing purposes.

One operating cost utilities can recover is income tax expense. Regulated utilities utilize provisions of the tax law that accelerate deductions, such as accelerated depreciation, which reduces current income tax expense in the period in which accelerated tax depreciation exceeds book depreciation and increases current income tax expense in the period in which book depreciation exceeds tax depreciation. In the periods where current income tax expense and currently payable income taxes are reduced by accelerating tax depreciation deductions, deferred income tax expense and ADIT are recorded/included as a cost of service and will reverse as the book/tax differences reverse. In this manner, the ADIT balance is sometimes referred to as an interest free loan from the US Department of the Treasury. The accelerated depreciation provisions in the tax law are meant to provide incentives to taxpayers who can use the interest free loan for investment, construction, and other economy-stimulating activities. In the ratemaking process, the utility's rate base is generally reduced by the ADIT or, in certain jurisdictions, the ADIT balance is included in the utility's capital structure at zero cost.

To prevent regulators from excluding deferred income tax expense as a recoverable cost in the ratemaking process, the tax law contains the normalization provisions for public utility property that prevent regulators from flowing through the benefits of accelerated depreciation.

The normalization provisions apply to accelerated tax depreciation compared to straight-line book depreciation, certain excess ADIT due to reductions in the income tax rate as noted above, and to the investment tax credits.

In rate cases, a total income tax expense generally is calculated based on:

- The amount of equity return
- Permanent and flow-through book/tax differences
- Statutory income tax rates.

The total income tax so calculated is separated into current and deferred income tax expense components. In this manner, the revenues and non-income tax expense components comprising the revenue requirement form the basis for the related income tax expense. Prior to tax reform, income taxes in rate cases were based on a 35% federal income tax rate applied to pre-tax income considering permanent and flow-through of book/tax differences. Most book/tax differences are temporary and affect current and deferred income taxes equally — when a book/tax difference provides a current income tax benefit, an equal and offsetting deferred income tax expense is calculated.

Before tax reform, the methodology for reversing book/tax differences was to determine the amount reversing and apply the tax rate expected to apply to the deferred income taxes in the year of reversal. This methodology typically was used for all book/tax differences on which deferred taxes were provided.

This methodology continues after tax reform. However, given that the tax rate expected to apply to the deferred taxes in the year of reversal changes, the reversal is separated into two pieces — the first is the reversal of book/tax differences at the new rate (21%), and the second piece is the reversal of that same book/tax difference at the difference between the new tax rate and the originally expected rate (generally the 14% excess of 35% over 21%). Essentially, this results in the book/tax difference reversals continuing to reverse at the original tax rate on which they were recorded.

The ARAM accomplishes a similar ADIT reversal for book/tax differences protected under the normalization provisions of the tax law. Utilities are expected to determine the excess ADIT first. The excess ADIT then is reversed as the book/tax difference reverses. A normalization violation occurs if the excess ADIT is used to reduce rates more rapidly than would have occurred if tax reform had not occurred — no sooner than the reversal of the book/tax difference turnaround takes place.

Before tax reform, most non-protected ADIT followed this approach as well — reversing such ADIT at the tax rates in effect when the book/tax difference originated. Excess ADIT on this group of book/tax differences is not subject to the normalization rules, and thus not required to use ARAM. As a result, the excess ADIT for these book/tax differences potentially can be used to reduce income tax expense over a shorter period of time.

Revenue subject to refund

Many regulatory commissions have issued orders directing utilities to calculate the impacts of tax reform on existing rates/tariffs, primarily the difference caused by the income tax rate reduction, and defer revenue effects, such as revenues subject to refund, until the commission has had a chance to review the calculations.

The Department of Public Utilities in Massachusetts case is typical of actions taken by regulatory commissions. That regulatory commission opened an investigation because "the reduction in the federal corporate income tax rate results in both a lower tax expense on current income and booked ADIT that are in excess of future liabilities. Accordingly, the Department finds that the statutory reduction in the federal corporate income tax rates pursuant to the Act constitutes evidence that the rates being charged by each Affected Company [regulated utilities in Massachusetts] may no longer be just and reasonable as of January 1, 2018."

The Department ordered that regulated utilities "as of January 1, 2018, account for as a regulatory liability any revenues associated with the difference between the previous and current federal income tax rates and excess accumulated deferred income taxes resulting from the lower federal corporate income tax rate and…shall submit a proposal to revise rates consistent with the directives contained herein."

As discussed above, the change in tax rates will impact previously determined current income taxes and deferred income taxes on originating book/tax differences; however, the change in tax rates will not impact the deferred income taxes on reversing protected book/tax differences. With or without tax reform, for protected book/tax differences, the reversing book/tax differences are calculated at the tax rate in effect at the time the book/tax difference originated.

Example

The example in Exhibit 1 demonstrates that the impact of tax reform on the existing rates being charged by regulated utilities consists of changes in current income taxes and originating deferred income taxes. Note that the change in revenue requirements pre- and post-tax reform ($295,849) equals the change in current income taxes measured at the 35% income tax rate versus the 21% income tax rate. The Act does not impact reversal of the existing ADIT balance (on protected book/tax differences at a minimum).

Originating deferred income taxes are not shown in the example. Such originating deferred income taxes will affect current income taxes and deferred income taxes equally (if the book/tax difference reduces current income tax, it will increase deferred income tax by the same amount and vice versa).

In each of the revenue requirement calculations, the reversal of existing book/tax differences produces a reduction in deferred income tax expense of $19,125 as in all calculations, $50,000 of book/tax differences are reversing at 38.25%. However, pre-tax reform, the entire amount was reversing at 38.25% while post tax reform two different tax rates are applied to the reversing $50,000 book/tax difference — $50,000 at the new 24.95% tax rate and $50,000 at the excess 13.30% tax rate.

As this $6,650 excess deferred tax is reversing through the income tax provision each year, the regulatory liability and ADIT debit reverse on the balance sheet at the gross-up values:

Reversal of excess	$6,650
Gross-up	1.3324
Reversal	$8,860.50

Balance sheet entry:

Dr. Regulatory liability	$8,860.50
Cr. ADIT	$8,860.50

At the end of 10 years, the excess ADIT will have reduced tax expense and revenues by $66,500 and the regulatory liability/ADIT balance sheet entry ($88,605 established at the time of tax reform) will have been reduced to zero.

The takeaway

Utilities and their regulators are quantifying the impacts of tax reform. While tax reform will affect current income taxes and originating book/tax differences, tax reform does not impact the reversal of existing protected book/tax differences. Such existing protected book/tax differences have historically reversed at the tax rate in existence when the book/tax difference originated, and under the ARAM methodology, that same approach will continue, although the reversal will occur in two calculations (21% and 14% excess). It will be important to consider these impacts to ensure revenue subject to refund is determined appropriately.

Let's talk

If you would like to discuss these or other income tax regulatory issues, please let us know:

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Exhibit I

Consider a utility with the following facts:

Assumptions for Example										
Post Tax Equity Return	$1,000,000									
Tax Rates	Federal	State	Federal net of State	Totals	Gross up					
Pre reform	35%	5%	33.25%	38.25%	1.6194332					
Post reform	21%	5%	19.95%	24.95%	1.332445					
Temporary Difference/	Book Basis	Tax Basis	Difference	State DTL	Federal Difference	Pre Tax Reform Fed DTL	Post Tax Reform Fed DTL	Excess	Gross up	EDIT Regulatory Liability
Plant	$500,000	-	($500,000)	($25,000)	($475,000)	($166,250)	($99,750)	($66,500)	($22,108)	($88,608)
Regulatory liability										
EDIT	($88,608)	-	$88,608	$4,430	$84,177		$17,677	($22,108)		
Total	$ 411,392	-	($411,392)	($20,570)	($390,823)		($82,073)	($88,608)		

Assume 10 years remaining on the book life of the asset (each year book depreciation will be $50,000)

Prior to tax reform, the utility would have computed a revenue requirement to recover return, depreciation and income taxes as follows:

Pre-Tax Reform	
Equity return	$1,000,000 (a)
+/- permanent differences	0
Adjusted equity return	$1,000,000
Tax gross-up	.6194 (see assumptions)
Income taxes to be recovered	$619,433 (b)
Revenue requirement:	
Equity return	$1,000,000 (a) above
Income taxes	$619,433 (b) above
Depreciation	$50,000 (see assumption)
Revenue requirement	$1,669,433

The current and deferred income tax expense would be calculated as follows:

	Current	**Deferred**	**Total**
Pre-tax operating income	$1,619,433		$1,619,433
Book/tax difference:			
Depreciation	$50,000	($50,000)	
Taxable income	$1,669,433	($50,000)	$1,619,433
Tax rate	38.25%	38.25%	
Income taxes @38.25%	$638,558	($19,125)	$619,433

Proof	
Revenue	$1,669,433
Depreciation	$50,000
Income before income tax	$1,619,433
Income taxes:	
Current	$638,558
Deferred	($19,125)
Total tax	$619,433
Operating/net income	$1,000,000

With the passage of tax reform and reduction in federal tax rates, ADIT are remeasured:

Entry to record the remeasurement of ADIT:		
Debit – ADIT	$88,605	Excess ADIT times combined tax gross-up of 1.3324
Credit - Regulatory liability	$88,605	
Compute revenue requirement for return, depreciation and income taxes (post tax reform)		
Equity return	$1,000,000 (a)	
+/- permanent differences	($6,650)	Tax rate differential – difference in tax rate times reversing book/tax difference ($50,000)[i]
Adjusted equity return	$993,350	
Tax gross-up	.33245	
Income taxes to be recovered before permanent differences	$330,234	
+/- permanent differences	($6,650)	From above. Needed because the permanent amount is a tax number
Income taxes in rate case	$323,584	(b)
Equity return	$1,000,000	(a) Above
Income taxes	$323,584	(b) Above
Depreciation	$50,000	See assumption
Revenue requirement	$1,373,584	

[i] *To calculate the recoverable rate case income tax expense, you need to first calculate the pre-tax return. To do this, you (1) begin with equity return (which is after-tax) and (2) adjust for the components of the effective tax rate differences (permanent differences, flow-through). The excess deferred income tax reversal is one of these components.*

The current and deferred income tax expense would be calculated as follows:

	Current	**Deferred**	**Total**
Pre-tax operating income	$1,323,584		$1,323,584
Book/tax difference:			
Depreciation	$50,000	($50,000)	
Taxable income	$1,373,584	($50,000)	$1,323,584
Tax rate	24.95%	24.95%	
Income taxes @24.95%	$342,709	($12,475)	$330,234
Excess ADIT @13.30%		($6,650)	($6,650)
Total tax	$342,709	($19,125)	$323,584

Proof	
Revenue	$1,373,584
Depreciation	$50,000
Income before income tax	$1,323,584
Income taxes:	
Current	$342,709
Deferred	($19,125)
Total tax	$323,584
Operating/net income	$1,000,000

Comparing the pre-tax reform amounts the post-tax reform amounts, produces lower revenue requirements of:

Pre-tax reform	$1,669,433
Post-tax reform	$1,373,584
Difference	$295,849
and lower income tax expense of:	
Pre-tax Reform	$619,433
Post-tax Reform	$323,584
Difference	$295,849

Another way of looking at the impact is to perform a total income tax analysis. This calculation is as follows:

	Pre-tax reform existing rates	**Tax reform adjustment**	**Difference**
Equity return	$1,000,000	$1,000,000	$0
Recovery of tax	$382,500	$242,850[ii]	$139,650[ii]
Gross-up	$236,933	$80,734	$156,199
Revenue for taxes & return	$1,619,433	$1,323,584	$295,849
@ Tax rate	38.25%	24.95%	
Income tax expense	$619,433	$330,234	$289,199
Excess ADIT amortization		($6,650)	$6,650
Total income tax expense	$619,433	$323,584	$295,849

[ii] *Equity Return x tax rate less excess ADIT amortization. ($1,000,000 times 23.95%) - $6,650 = $242,850*