
Does the New Mexico PRC Insure that you get a “Fair” Rate of Return on Your Money?

Dr. J. Thomas McGuckin
New Mexico State University

What Does the NMPRC have to do with your Money?

- Investor owned utilities (IOUs) such as PNM, SPS and EE are regulated by the NMPRC
 - Utilities are natural monopolies
 - Without regulation they could set any price (rate) they want.
 - Customers are “captured consumers”
 - Utilities provide essential services
 - Because utilities are natural monopolies of essential services, the State enforces a contract between the utility and the PRC
 - CCN – Certificate of Convenience and Necessity
 - Utility is granted exclusive right to serve a service territory
 - Must serve all qualifying customers - can not abandon service
 - Costs and investments must be prudently incurred
 - Rates are set so that the utility earns a “fair” rate of return on its investments

What is a fair rate of return (FROR)?

- A return to an investment is how much money per year the investment makes.
 - A rate of return (ROR) expresses this on a percentage basis of the total investment.
- In utilities, the rate base is considered the investment.
 - Stock holders, through the purchase of stocks have invested in the equity portion of the rate base (usually less than 100%).
 - Some of the rate base is financed by the issue of debt, mostly through bonds.
- It is accepted regulatory theory that rates for essential services should be set so that the equity portion of the rate base earns a rate of return that is competitive with other investments of equal risk (whatever that means).
 - In utilities this is about 9 to 12%. The FROR is granted by the PRC depending on the skill of the utility arguing for its case.
 - PNM is asking for 11.75% in its next rate case.
 - Lets assume 10% as a round number.

Is the Rate of Return Guaranteed?

- NO

- The PRC only sets rates going forward
 - The future is hard to predict
- $\text{Income} = \text{Revenue} - \text{Expenses}$
- Both revenues and expenses can vary
 - $\text{Revenue} = \text{Usage} \times \text{Rates}$
 - Usage can vary
 - Weather
 - Growth or recession

- What happens if a company doesn't earn its fair rate of return?

- It asks for a new rate case (PNM – Sept 22, 2008)

What is the Criteria for setting new Rates

- Lets examine a hypothetical (economist's favorite term) rate application of a utility
 - Enchantment Gas (EG)
- It has been several years since EG has had a rate adjustment
- EG believes its income (earning or profits) has fallen below the fair rate of return and it seeks a rate increase
 - Utilities never apply for a rate decrease
- The following is EG's claim about its current financial situation
 - I assume that you the stockholder are the owner of EG, so it's YOUR money
 - Did you ever see the movie "Other People's Money"?
 - Great movie
 - Danny Devito is "Larry the Liquidator"

EG Bottom Line before Rate Hearing

Your Investment - Rate base

Equity \$600,000

Debt \$400,000

\$1,000,000

Your Income

Revenues

\$500,000

Expenses

O&M \$200,000

Fuel \$100,000

Depreciation \$100,000

Taxes \$60,000

\$460,000

\$40,000

Interest

5% \$400,000

\$20,000

Your Return (net income or profit)

Return to equity

\$20,000

Rate of return on equity

3%

EG's Argument

- We have had the same rates for decades
- Inflation is eating us up
- We provide safe and reliable service to everybody including those rats that don't pay
- We are only earning a 3% rate of return
- If we don't get relief soon, the rating agencies will downgrade us to
 - JUNK BOND STATUS
- Our expensive 'Experts' tell us that we need the following rate increase

Points about EG's Argument

- EG's investment in its plant is called 'rate base'
 - \$1,000,000 total investment
 - \$400,000 was financed through bonds at 5% interest
 - Leaves \$600,000 financed by investors (equity)
 - $10\% \text{ FROR} \times \$600,000 = \$60,000$
- EG needs a return (net income of \$60,000) to earn its fair rate of return
 - We are only earning \$20,000, thus we have a deficiency of \$40,000
 - Because we also pay taxes on our return and the PRC has set 10% as an after tax rate of return,
 - we need to gross up the deficiency to pay for the extra taxes
- Gross up factor (actual term) is 1.5

EG Argument for Rate Increase

A fair rate of return	10%	Need to increase rates and thus revenues	
Equity	\$600,000	\$60,000	
Current return		\$20,000	Currently
Equity deficiency		\$40,000	Proposed
"Gross up factor"		1.5	This translates to
Revenue deficiency		\$60,000	Revenue
Change in Taxes		\$20,000	\$500,000
		<u>\$40,000</u>	\$560,000
			12% increase
			12% rate increase

Adjustments

- Lets assume that the PRC buys the argument.
- How does this change EG's bottom line?

		A fair rate of return 10%			
<u>EG Bottom Line before Rate Hearing</u>		<u>Hearing Adjustments</u>		<u>Bottom Line After Rate Hearing</u>	
<u>Your Investment - Rate base</u>				<u>Your Investment - Rate base</u>	
Equity	\$600,000			Equity	\$600,000
Debt	\$400,000			Debt	\$400,000
	\$1,000,000				\$1,000,000
<u>Your Income</u>				<u>Your Income</u>	
Revenues	\$500,000	\$60,000		Revenues	\$560,000
Expenses				Expenses	
O&M	\$200,000			O&M	\$200,000
Fuel	\$100,000			Fuel	\$100,000
Depreciation	\$100,000			Depreciation	\$100,000
Taxes	\$60,000	\$20,000		Taxes	\$80,000
	<u>\$460,000</u>				<u>\$480,000</u>
	\$40,000				\$80,000
Interest				Interest	
5%	\$400,000	\$20,000		5%	\$400,000
					\$20,000
<u>Your Return (net income or profit)</u>				<u>Your Return (profit)</u>	
Return to equity	\$20,000			Return to equity	\$60,000
Rate of return on equity	3%			Rate of return on equity	10%

Counter Arguments

- The PRC Commissioners are elected by ratepayers
 - They don't like to raise rates
 - Sometimes they might work backwards
 - OK we will grant EG a 3% increase in rates that is fair to our voters
 - The “fair” rate of return is some theoretical argument by economists
 - The Commissioners never liked economics

Other Malcontents

- Consumer Advocates (CAs), can put forth a more sophisticated argument to achieve the same thing:
 - We don't think that the company has invested wisely...
 - We believe the rate base should be reduced for "excessive" investments by \$200,000...
 - CEO's pension fund, etc.
 - With these type of adjustments, CAs argue the PRC should only grant a 6% rate increase.

Consumer's Advocate Argument for Rate Increase

A fair rate of return	10%			
Equity	\$400,000	\$40,000		
Current return		\$20,000	Currently	Revenue
Equity deficiency		\$20,000	Proposed	\$500,000
				\$530,000
"Gross up factor"		1.5	This translates to	6% increase
				6% rate increase
Revenue deficiency		\$30,000		
Change in Taxes		\$10,000		
		\$20,000		

		A fair rate of return 10%			
<u>EG Bottom Line before Rate Hearing</u>		<u>Hearing Adjustments</u>		<u>Bottom Line After Rate Hearing</u>	
<u>Your Investment - Rate base</u>				<u>Your Investment - Rate base</u>	
	Equity \$600,000		-\$200,000		Equity \$400,000
	Debt \$400,000				Debt \$400,000
	\$1,000,000		-\$200,000		\$800,000
<u>Your Income</u>				<u>Your Income</u>	
	Revenues \$500,000		\$30,000		Revenues \$530,000
	Expenses				Expenses
	O&M \$200,000				O&M \$200,000
	Fuel \$100,000				Fuel \$100,000
	Depreciation \$100,000				Depreciation \$100,000
	Taxes \$60,000		\$10,000		Taxes \$70,000
	<u>\$460,000</u>				<u>\$470,000</u>
	\$40,000				\$60,000
	Interest				Interest
	5% \$400,000 \$20,000				5% \$400,000 \$20,000
<u>Your Return (net income or profit)</u>				<u>Your Return (profit)</u>	
	Return to equity \$20,000				Return to equity \$40,000
	Rate of return on equity 3%				Rate of return on equity 10%

Where does the stockholder fit in this picture?

- The net income and ROR on rate base roughly translates into return on stocks.
 - The higher the return, the higher the value of the stock.
 - Contrasting the EG presentation and the Consumer Advocates, the same 10% ROR does not translate into the same return to the stockholder.
 - The CA's net income is \$40,000 less than EG's.
- The stock market and rating agencies often judge the regulatory environment and...
 - NM does not rate high in these assessments.

What to do?

- Does the PRC always give utilities a fair rate of return? – NO
- What to do: Intervene
- The company's interests are not always perfectly aligned with the stockholder.
 - They will claim otherwise
- Stockholders are Voters
 - The PRC always notices Voters
- Questions???