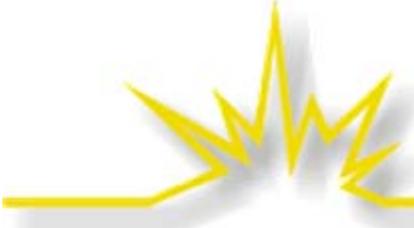


Decoupling: Weather and Other Risks

Presentation to the Minnesota Public Utilities
Commission
Decoupling Workshop
April 14, 2008

Presented by
Wayne Shirley

The Regulatory Assistance Project



50 State Street, Suite 3
Montpelier, Vermont USA 05602
Tel: 802.223.8199
Fax: 802.223.8172

27 Penny Lane
Cedar Crest, New Mexico USA 87008
Tel: 505.286.4486
E-Fax: 773.347.1512

110 B Water St.
Hallowell, Maine USA 04347
Tel: 207.623.8393
Fax: 207.623.8369

Website: <http://www.raonline.org>



Risks Affected By Decoupling

➤ Covered here:

- Weather
- Economic
- Regulatory Lag

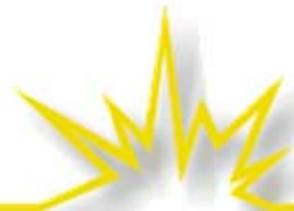
➤ Addressed later:

- Implications for financial & business risk of utility



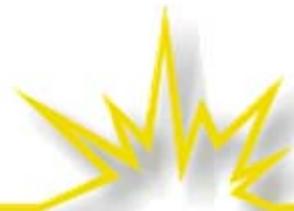
What is weather risk?

- Weather risk is the risk that revenues change on account of changes in weather
- If you receive more (or less) revenues or pay less (or more) in customer bills, then you face weather risk



Relationship of Utility Profits and Customer Bills to Weather

- Prices are usually determined using weather-normalized billing determinants
- In extreme weather, consumption goes up, along with profits and consumer bills
- In mild weather, consumption goes down, along with profits and consumer bills
- Both utility and customer face risk, with opposite economic effect



Decoupling Also Decouples Revenues From Weather

- Because Target Revenues are determined using weather-normalized values, decoupling eliminates effect of weather on utility net revenues.
- **Myth:** Decoupling “shifts” weather risk from utility to customer
- **Reality:** Utility and customer take (or avoid) weather risk together in near zero sum wealth transfer (taxpayers take part of risk as well). For every weather-related decoupling price increase, there is equally likely to be a weather-related decoupling decrease.
 - Wealth transfer is, therefore, a function of the vagaries of the weather – consider whether there are any public policies furthered by this phenomenon



Economic Risk

- Like weather, changes in economic conditions can change sales volume
- Decoupling has the effect of eliminating this risk as well because price adjustments are driven by actual sales
- Commission might consider off-ramps to account for significant changes in economic conditions



Regulatory Lag

- Because prices are periodically adjusted to reflect changes in sales, decoupling has effect of reducing regulatory lag
- May have cost of capital implications
- Should have effect of reducing lumpiness of price changes that occur in periodic full rate cases (i.e., to the extent that GRC increase is driven by changing sales/customer, these are tracked annually or in real-time by decoupling).



Outside the Effect of Decoupling

- Because decoupling drives revenues, not costs, utility profits remain a function of changes in underlying cost structure
- Utility ability to improve profits by reducing costs is not impacted



Questions?