Office of the Public Advocate

Presentation to Commission to Study the Economic, Environmental and Energy Benefits of the Maine Biomass Industry

August 2, 2016

Tim Schneider
Maine Public Advocate

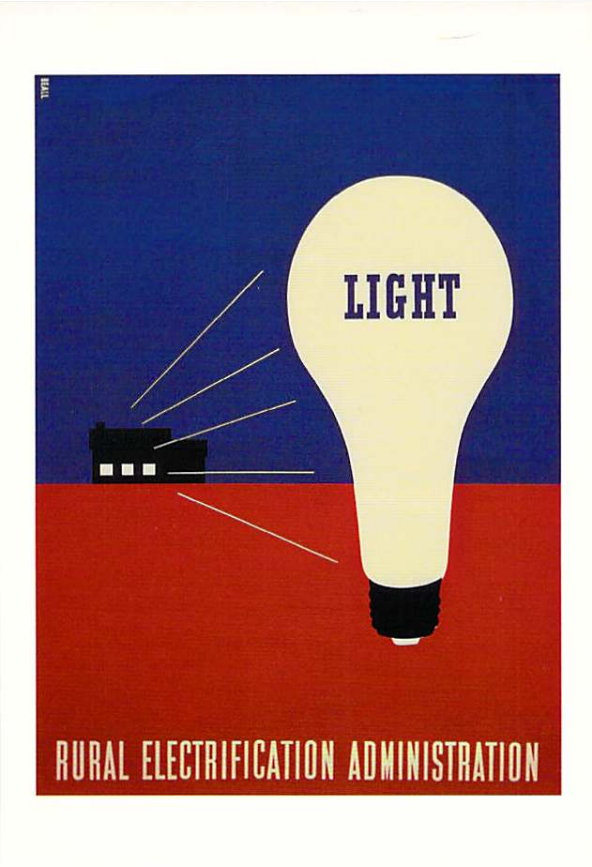
Overview

- Things to consider when using a surcharge on electricity rates as a revenue source

- Principles to evaluate renewable energy policy proposals
  - Clearly Defined Goals
  - Targeted
  - Equitable
  - Sustainable

Paying for Renewables Incentives

- In general, costs are allocated to customers on a per kWh basis
- Inherently regressive
  - Surcharge on a basic necessity of daily life
  - Limited ability to reduce usage through behavior
  - Usage does not necessarily correlate with income
  - Compare to other means of collecting revenue
- Energy costs are a core driver of costs for commercial and industrial customers



Customer Classes

Class	Examples	Average Monthly Usage (kWh)	Annual Usage (kWh)
Residential	Single family home or separately metered apartment	540	6,480
Small Commercial & Industrial	Small restaurant or café, manufacturer of polyurethane products	850	10,200
Medium Commercial & Industrial	Bank or drug store branch, supermarket, precision manufacturer	13,000	156,000
Large Commercial & Industrial	Large hospital or college, lumber/forest product company	500,000	6,000,000

Rate Impact Rules of Thumb

- A 1 ¢/kWh increase in electricity prices will increase the average residential bill by $5.40 a month, or $65 a year.
- That same increase will cost the average large commercial or industrial customer $5,000 a month, or $60,000 a year.
- $120 million per year, spread across all Maine ratepayers on a per kWh basis, will increase rates by ~1 ¢/kWh
  - Total Maine retail electricity sales 2015 =12 million MWh
- But rate impact is rarely this simple . . .

Paying for Renewables Incentives

This doesn't mean don't do it. But, do it with care.

- Clearly Defined Goals
- Targeted
- Equitable
- Sustainable

Clearly Defined Goals

"If you don't know where you are going, you'll end up somewhere else." – Yogi Berra

- Necessary first step in deciding which policy is the best means to achieve that goal
- How will we know if our policies have succeeded?
- Provides guidance to administrative agencies in implementing policy

Targeted

- Spend what we need to achieve our stated goals, and no more
- This has implications for both program structure and duration

Equitable

- Ensure that those who pay the costs also receive the benefits, and vice versa

- Factors to consider:
  - Geography
  - Customer class
  - Usage
  - Income

Sustainable

- Provide path to transition away from government support, but enough certainty to enable market transformation and avoid boom/bust cycle
- Understand magnitude of risk and cost trend over time and include appropriate controls
- Structure programs to allow us to learn from experience and build on success

it appears that market prices for biomass generation are below even short term break even production costs and certainly below the level of prices needed for longer term business success. Given these conditions, significant adjustments in operating cost and market prices appear to be needed to assure the continued viability of the biomass power industry.

the regional market segment for renewables is not uniform because of significant differences in State definitions and eligibility requirements under various state RPS rules, thus Maine plants may not qualify to participate in out-of-state markets.

The sawmill industry sees the current situation occurring as a result of past public policies that encouraged, even demanded, the creation of biomass power plants that would operate on the basis of the ample supply of lower cost fuels available from the mills, while at the same time the DEP has revised waste management rules, predicated on the enduring existence of an energy market, that result in severely limited and expensive disposal options.

The sawmills have become very dependent on the existence of biomass power plants to provide viable market opportunities for the sale of mill residues. Any loss of these markets would have a negative economic ripple effect back through the trucking companies to the sawmills, creating a very expensive waste disposal situation that could force mills to close

Report of the Committee on Sawmill Biomass

December 31, 1999

Thank you.

tim.schneider@maine.gov