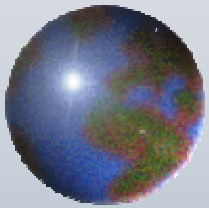

Utility Regulatory Policy: What Can Be Done

CEC: Building the Renewable Energy Market in North America

Ted Ferguson
Vice President, Energy and Environment
The Delphi Group

Electric Utility Options for Renewables

Overview

- Steps in Choosing Renewables for Electric Utilities Policy Options
- BC Hydro Example
- Ontario Example
- Other Canadian Jurisdictions and Policy Options

Complexity
Creativity
Change
Delphi

Electric Utility Options for Renewables

Drivers

- Renewable Portfolio Standards
- Preference for Renewables
- Desire to Diversify Energy Supply

Policy Options

- Renewable Energy Tariffs
- Emission Credits for Renewables (Set-Asides)
- Different Pricing for Different Resources
- Green Retail Marketing options

First Step

- Utilities must decide that Renewables are a strategically important direction for their energy planning
  - → Strategic in that they fulfill multiple goals
    - ✓ Environmental
    - ✓ Social (license to operate, low pollution)
    - ✓ Financial – can and must be done in an economic way

- Renewables as part of an integrated energy plan will require different policies and actions than if fossil generating stations were being tendered/built

Next Step – Policy Choices

- Must decide on the best way to bring renewables on-line
  - → Depends on the natural resources available
- Hydro, wind, solar, biomass: all offer different price, supply and capacity realities
- Customers may prefer a certain type of renewable energy – wind is currently ‘en vogue’
- Need to consider existing incentives (wind power tax incentives in the US and Canada, capital cost tax provision in Canada)

Next Step – Choice of Specific Mechanism to be Used

How To Commission Renewables?

1. Utility develops it – flows costs through in the rates

or

2. Tender for Renewables
   - Fixed price – with environmental pricing
   - Open bid – lowest price picked first

✓Tender should include natural resource variability pricing – proximity to load, time of day, capacity factors etc.

✓Tariff approach – automatic feed in premium tariff awarded to various classes of renewables technology

✓Reduces costs for the generator

BC Hydro's Approach

Two Green Power Tenders

- Tender – fixed price of $55/MWh with up to $8/MWh in green credits
  - $5 for Ecologo
  - $3 for GHG
- Natural resource variability pricing – up to $5/MWh based on
  - Capacity
  - Time of day/year when generation mostly occurs
  - Proximity to load

Ontario's Renewables Tender

- Looking for 300MW of Renewable energy
  - No price cap – open bid
  - Renewables criteria must be met
  - No green pricing, government owns all green value
  - If green value is realized, 25% will be returned to the proponent
- Analysis
  - Ontario needs price discovery – tender will help
  - Renewables variability has not been used to the advantage of the system – peak time production, location pricing.

Other Regions

Quebec	Tender for specific renewable types (biomass, wind)
Saskpower	Tender for low impact renewables
Alberta	Open market, wind being developed, Green power retail markets operating
Nova Scotia	Tender for Wind
Manitoba Hydro	Testing for wind, large hydro under development

Additional Utility Policy Options

- Intermittent resource close to load? Offer pricing which encourages its development eg. peak time solar
- Hydro system with wind options? Offer storage in the reservoir
- Long term energy planning? Incorporate emission costs into pricing
- If tendering to IPPs, consider barriers created by interconnection charges, and delivery costs
- Work with government on sitting approvals
- Allow industrial customers to contract directly with renewable IPPs

The Delphi Group

Business Units

- Clean Energy and Environmental Technologies
- Climate Change
- Health and the Environment
- Corporate Sustainability

Contact info:

Ted Ferguson

tferguson@delphi.ca

Website: www.delphi.ca