

Rethinking Fundamental Concepts of Utility Regulation

OEB Consultations on Utility Remuneration
and Distributed Energy Resources

Jay Shepherd

School Energy Coalition

 Shepherd Rubenstein

School Energy Coalition

- Who are we?
 - Coalition of seven school board organizations
 - All school boards are active members
 - 5000 schools with 2 million students
 - Spend \$500 million+ per year on energy
 - Details posted on the Board's website
- Regulatory Principles
 - Always look for the win-win solution
 - Think long term
 - "Walk softly but carry a big stick"

Scope of this Stakeholder Session

- What **objectives** should the Utility Remuneration and Responding to DERs initiatives aim to achieve?
- What specific **problems or issues** should each initiative address?
- What **principles** should guide the development and selection of policy options?

Disruptive Technologies

- Distributed Generation
- Storage
- Backup Power/Load Management
- Electrification of non-electric loads
- Grid automation technologies
- Resource Sharing
- And, most important of all:
 - *Other technologies not yet known*

Staff Takeaways

1. Consumers Must Come First
2. Don't Lose Sight of Fundamental Regulatory Principles
3. Effective DER Integration is Critical
4. The Utility Business Model Needs to Evolve
5. Work to Support Sector Evolution Must be Co-ordinated

Fundamental Regulatory Principles

- OEB Staff examples:
 - The purpose of economic regulation is to address *market failures*
 - Regulation should facilitate an appropriate *risk/reward balance* between utilities and their customers
 - Cost responsibility should continue to be based on *cost causation*
- Additional Principles/Paradigms that many may assume to be inviolate:
 - **ROE and Similar Profit Bases:** Utility profits calculated based on capital invested or on spending levels
 - **Cost Recovery:** Utilities entitled to recover reasonably incurred costs to provide the monopoly service.
 - **Accounting principles** drive cost/price calculations
 - **Postage Stamp Rates:** Disparate customers have similar rates
 - **Asset Ownership:** Assets of the regulated business are owned by the utility
 - **Extent of the Monopoly:** The natural monopoly includes everything from the generator's interconnect right up to the customer meter.
 - **Affiliate Freedom:** Limitations on affiliate activities should be restricted to the minimum necessary to protect utility customers.

ROE: Spending-Based Compensation

- Fair Return Standard: theory that cost of capital is a cost of providing the service, just like any other cost
- Fiction that utilities don't get profits; they just get the "cost" of their equity capital
- Perverse incentives to spend
- Traditional ROE biases in favour of capital spending
- Alternatives like Totex are still based on spending
- None of this mimics the competitive markets; not really a market proxy
- Are there other ways to set prices, and hence profits, that do not tie higher profits to higher spending?
- Can "outcomes" be valued independently?
- Can some prices be set competitively?

Cost Recovery

- Related to ROE principle/Fair Return Standard
- Competitive companies are in whole or in part price-takers, so their prices are not set based on cost recovery
 - Balance sought between price and cost, with prices being adjusted upward, or costs downward, to achieve that balance
- IRM and other rate-setting techniques seek to decouple rates from costs (costs proxy)
- Can “appropriate” costs for rate-setting instead be established completely or partially externally to the utility?
 - Benchmarking
 - Competition
 - Comparison to prices in other sectors
 - Base vs. incremental costs
- Can costs be “adjusted” (as with stretch factors) in setting rates?

Accounting Principles

- Related to Cost Recovery
- Is GAAP (today, either IFRS or USGAAP) the appropriate default for setting costs recoverable in rates?
 - Accounting principles not designed for price-setting, but for financial disclosure
- From the customer's perspective, many alternatives are not driven by accounting principles
- Distinguishing the amount of a cost from the payment terms

Postage Stamp Rates

- Applied
 - Across the province for electricity transmission and commodity
 - In a few large areas for gas distribution and transmission
 - Within a larger number of disparate areas for electricity distribution
- Creates many examples where like customers do not pay like rates, esp. in electricity distribution
- New market entrants will not be tied to postage stamp rates; can exploit a regulated market anomaly
- Overcharging some customers, and undercharging others, is economically inefficient when new companies are entering the market

Asset Ownership

- Customers pay all of the costs of assets used to provide regulated services: depreciation, cost of capital, maintenance, operating costs, etc.
- Yet, the current paradigm is that the utility company is the owner of the asset (and any appreciation in value)
- To facilitate competition, it may be worth changing that rule so that asset ownership is attached to the monopoly franchise:
 - Utility owns assets as long as they have the franchise
 - If someone else gets the franchise, the utility transfers them to the new monopoly service provider at NBV
- Allows all or part of any franchise area to be put up for competitive bids
- Changes the valuation of utility companies
- Facilitates narrowing the definition of the monopoly utility
- Could also recognize value of customer and system data

Extent of the Monopoly

- Are there parts of the current distribution business, for example, that can be opened to competition?
 - Customer billing and collection
 - Connection to the grid and metering
 - Local grids or shared resource groups
- Are there parts of the current distribution business that should be separated from that business, even though still monopoly activities
 - Regulation of Grid connection
 - Aggregation and use of data
- Should private companies be allowed to propose competition with all or part of a current utility activity?
 - What principles should be applied when they do?

Control of Affiliates

- Current paradigm: Utility affiliates are free to conduct business without regulatory scrutiny, restricted only by statute, or by minimal rules governing the relationship with the regulated utility
- The default is business freedom
- Potential for unfair market advantages
 - Economies of scope can equal cross-subsidy
 - Trading on utility status for non-utility activities
 - Brand confusion
 - Access to capital – implicit ratepayer guarantee
 - Downside risk protection
 - Barriers to new market entrants – explicit and implicit
- Should the default instead be changed to a list of ALLOWED energy-related activities, with stricter controls

Fundamental Regulatory Principles

- Principles are not wrong
- Many will remain valid, even as the sector changes
- We only know if they remain valid if we are willing to ask the question
- Requires an open mind to accept fundamental change
- Even if no change, creates a context for looking at all of the other proposals

Guiding Principles – OEB Staff

1. Economic Efficiency and Performance: The regulatory framework promotes economic efficiency, cost-effectiveness and long-term value for consumers.

2. Customer Focus: The regulatory framework encourages cost containment, demonstrable value to customers, greater customer choice and control, and customer confidence in the sector. It also encourages efficient choices.

3. Stable yet Evolving Sector: The regulatory framework maintains the opportunity for utilities to earn a fair return; it neither precludes alternative business models that may be desirable nor impedes the entry of new entities.

4. Regulatory Simplicity: The regulatory framework is practical to administer in terms of cost and complexity while enabling appropriate oversight; it is predictable insofar as its rules and requirements are applied consistently in similar circumstances; it is also resilient, adaptable, flexible and sustainable.

Guiding Principles – Additional

- 1. Regulation Only When Necessary:** The regulator actively limits its rate regulation to the natural monopoly components of the sector, and facilitates competition where effective competition is possible.
- 2. Customer Protection:** Regulated utilities should operate regulated natural monopolies, and should generally not engage in competitive activities. Utility affiliate participation in competitive parts of the sector should be based on a level playing field, in which no aspect of being connected to a utility gives any advantage over new market entrants. Utility affiliates competing should face the same business, financial and other risks (and rewards) as new market entrants.
- 3. Acceptance That Sector May be Disrupted:** Stability should not be pursued at the expense of the right answer. Disruptive technologies may require massively different approaches. The regulator (and the legislator) should be open to them.
- 4. Flexibility of Regulatory Paradigms:** Regulatory paradigms should only be retained within the regulatory framework if they continue to reflect the best approach to customer focus and the market proxy concept. No paradigm should be treated as set in stone. And, no principle, even these ones, should be absolute.

Thank you

Jay Shepherd, Shepherd Rubenstein

jay@shepherdrubenstein.com

 Shepherd Rubenstein