

Planning Maine's energy future

Maine Policy Review. (1991) Volume 1, Number 1

Response: Real world energy policy

by Matthew Hunter, President & CEO, Central Maine Power Company

Making energy policy is nothing like building models on your tabletop, where all the components are plainly marked, the pieces fit neatly, painful surprises are rare, and mistakes don't affect vital parts of your life.

Silkman and Flumerfelt lucidly remind us that the design challenge for energy (and most other) policy is that the institutions, forces, and behaviors of the real world are often only vaguely visible, hard to measure or forecast, linked to one another in complicated and unexpected ways, and bristling with hidden costs and trade-offs.

For example, narrow-focus, pure-extrapolation predictions that make no allowance for reactions to events are almost guaranteed to miss the mark. One reason that predictions of \$100-a-barrel oil never came true is that people reacted to the predictions by seeking efficiency, substitutes, and increased supplies. As a result, oil prices collapsed. Effective policymaking allows for reactions, countervailing forces, and unforeseen consequences.

Tunnel-vision pursuers of single objectives overlook this truth, in the same way that homeowners who get carried away with sealing air leaks discover that neither their woodstoves nor their lungs can get enough fresh air.

Discussions of energy policy sometimes proceed in an oxygen-starved environment that can dull enthusiasts' sensitivity to real-world considerations. With its focus on costs and consequences, the Silkman-Flumerfelt essay is a breath of fresh air in an area heavy with ritual incense.

Central Maine Power (CMP) agrees with the essay's diagnosis and prescriptions. The job of this response isn't to argue with the authors. It's to reinforce their point and to suggest one other policy initiative and pose one policy question that might benefit electric utility customers.

Customers are understandably concerned about recent trends toward higher electric rates. They might find it illuminating, if not comforting, to take note of the Silkman-Flumerfelt review of causes:

- Increasing efficiency and the economic recession require recovering more fixed costs in the price of each unit of energy sold.
- Federal and state requirements for buying non-utility energy lead to additional increases in rates.

- Conservation programs can have large initial costs that force rates up.
- Non-economic mandates for environmental protection or other social goals translate into rate increases that fund no perceptible change in the service customers are buying.
- The tension between customers' demands for adequate and reliable service, and their opposition to having power lines and other facilities in their vicinity, adds to the time and expense of improving and expanding the electric system.

The authors' discussion of the cost consequences of federal and state policy promoting non-utility generation illustrates the difficulty of reconciling policy goals with customers' interest in affordable and stable prices. As they note, the pressure for utilities to sign up projects before an effective, competitive auction had been designed to discipline prices led to some commitments for high-priced purchased energy that will be affecting CMP customers for some years yet, until those contracts expire.

An easy, policy-enthusiast response to that observation would be to say that even the early purchases were necessarily of benefit to customers because they were set at or below the "avoided costs" calculated at that time for utility resources. But a peculiar aspect of the policy for setting avoided costs, one not noted in the Silkman and Flumerfelt article, is that CMP's regulators determined that the resources that would be avoided by non-utility purchases would include the Seabrook Unit 2 reactor - a project that then-joint-owner CMP was voting to cancel, and which clearly was never going to be an energy resource of any kind, let alone an avoided resource.

The authors are also sensibly alert to the danger that the pursuit of efficiency can be carried so far as to burden the customers it is intended to help. Like other economic goods, efficiency isn't free. Many efficiency improvements with short paybacks or high internal rates of return still require significant up-front outlays. Even if electric customers are using the same discount rate as policymakers are using (normally, customers' revealed discount rates are much higher than any analyst's) gaining energy efficiency can require cash outlays that they view as burdensome, whatever the long-term advantage.

The outlays are even more burdensome when customers make them through electric rates to pay for programs that aren't immediately benefitting them. That's why CMP has supported the idea of amending the current regulatory benchmark for cost-effectiveness of demand-side programs (whether they reduce the net present value of the utility's revenue requirement) to place greater weight on the rate impacts they create for customers.

Silkman and Flumerfelt note that Maine energy policy "has been driven by two objectives: (1) a reduction in our state's dependence on oil and other non-renewable energy resources, and (2) a reduction in our overall consumption of energy through energy conservation programs, incentives, and other initiatives."

Just as the state at large has greatly reduced its reliance on oil, so has CMP. Between 1980 and 1990, the percentage of kilowatt-hours generated from oil for CMP customers fell two-thirds, from forty-eight to sixteen percent. For the first half of 1991, the oil-fired percentage of CMP energy generated stood at less than nine percent.

However, CMP still maintains modern oil-fired units that total nearly 600 megawatts of generating capacity - more than a third of our system capability.

While we've reduced our dependence on oil-fired power, we retain the option to use it. As the long-term CMP Energy Resource Plan recently filed with the Maine Public Utilities Commission demonstrates, that is not a bad thing. That significant in-place capacity, burning low-sulfur oil in a time of low oil prices, constitutes a valuable peak-demand resource for our customers.

We can offer a similar clarifying caveat on the other policy motive the authors mention, reducing overall energy use.

Energy, while very important, is just one of many inputs to the economy. There's no obvious reason to assume that reducing energy use is a goal that ought to be pursued with no consideration to whether the costs of reduced use outweigh the advantages, even if the energy sources involved are non-renewable.

Maine could greatly reduce the use of fossil fuel, for example, by banning cars and mandating the use of bicycles in all urban areas and on interstate highways. That would save fuel, but greatly increase the time and expense of moving goods and people; that time and those dollars would become unavailable for use in producing other goods like education and health care. We'd be grossly worse off as a state for taking such a one-dimensional view of the virtue of reducing energy use.

Energy is a scarce commodity. The fact that it has a price tells us that. But by that same test, so are labor, physical and financial capital, entrepreneurship, time, and other economic inputs.

Sensible policy shouldn't try to dictate the input composition of economic activity without reference to the costs of different mixes. As Silkman and Flumerfelt argue, the better approach is to promote price signals that encourage optimizing the mix as circumstances change, and use regulation to modify demand in light of obvious-but-unpriced costs like environmental pollution.

As they point out, many energy policies have been based on assumptions and predictions that were shredded by experience and have produced unintended and perverse consequences. More prudent and more promising policy will focus on promoting efficient pricing, eliminating unjustified subsidies, and otherwise encouraging flexibility and innovation in energy markets.

Having endorsed the State Planning Office comments on energy policy in general, CMP endorses the five specific policy initiatives proposed in the article:

(1) *Promoting natural gas*: Success in bringing additional natural-gas supply to Maine could offer economic and environmental benefits, including giving CMP another power-plant fuel option for existing units and a gas-turbine option for economical peaking capacity.

(2) *Expanding biomass use*: Several studies, including one commissioned by CMP in the course of preparing its Energy Resource Plan, indicate that the biomass harvest from the Maine woods could be significantly increased without threatening the sustainability of the resource or running

undue risk of supply pressure from competing uses. Success would reduce reliance on imported, non-renewable energy sources. The trade-offs, however, could include increased carbon-dioxide emissions and exposure to energy-supply shocks such as blight or sudden changes in harvesting or reforestation regulations by future policymakers.

(3) *Preserving the energy-export option*: Maine exports education, fish, forest products, granite, insurance coverage, blueberries, and other goods and services. There's no reason the list shouldn't include energy, so long as price signals aren't being distorted and appropriate environmental safeguards are observed. Apart from offering increased employment here, increasing energy exports could help reduce the revenues that Maine electric companies must raise through sales in Maine.

(4) *Increasing transportation efficiency and fuel options*: These are both useful suggestions, so long as mandates for efficiency and alternative fuels are based on a reasonable calculus of costs and benefits.

(5) *Promoting cost-effective conservation*: Both the proposal for bond-financing for efficiency projects whose energy savings will more than cover debt service, and the proposal to energy-rate buildings are sensible. The first would promote Maine's overall energy efficiency and economic well-being with minimal distortion of market mechanisms; the second would actually enhance market operation by offsetting consumers' tendency to expect irrationally high rates of return on energy-saving investments and by encouraging more favorable financing for well-rated structures.

In the spirit of the Silkman/Flumer-felt essay, CMP would suggest one additional proposal, followed by a policy question:

Countering the NIMBY Syndrome

As the State Planning Office authors observe, "Consumers expect all the services and benefits energy provides... but exhibit a growing intolerance for the infrastructure that is necessary to deliver those services," whether from not-in-my-backyard reflex or from concern over environmental or health issues.

CMP can testify to the truth of that remark, even though its ample supply of generating capacity removes any need to fight for siting new power plants for years to come. But consumers also object to transmission lines and substations. It took more than a decade to win local approval to upgrade a line into one coastal town to ensure that minimal reliability standards could be met. Another town insisted that CMP run transmission lines across a river by affixing them, expensively, to a bridge rather than impinge on the view with overhead lines.

The authors propose increased consumer education on needs, costs (including the notion that conservation efforts are free), and tradeoffs to counter this tendency. That's an effort that needs to be pressed and expanded, but it won't change the minds of the hard-core NIMBY opposition or the zero-risk/no-tradeoff absolutists on health and environmental issues.

Such people are entitled to their opinions. But at some point society has to draw a line beyond which opposition and obstruction by individuals, groups, or local governments will not be allowed to delay or deny an energy project that has satisfied all the tests of need and suitability that the general public's representatives have required.

The need to address that issue led to legislation creating a facilities-siting council in Massachusetts with broad powers to determine the need for and location of energy facilities. CMP has endorsed similar but less sweeping legislation for Maine.

That's not a call for trampling anyone's rights or making local governments mere pawns of Augusta, although legally, towns are creations of the state and are subject to its control in any case.

Such a reform would simply recognize and remind citizens of the fact that the franchise of a public utility like CMP carries legal obligations with it. For CMP, that includes the obligation to be ready with safe and adequate facilities to meet the electric demands of the nearly three-quarters of Maine's population that lives and works in its 11,000-square-mile service area.

It would be not only inconsistent with legislative intent, but a disservice and possibly a hardship to hundreds of thousands of consumers, if obstructionist tactics by a few localities delayed or prevented the construction, or inflated the costs of necessary facilities that had satisfied all the requirements of the state government, which created the general obligation to serve.

At first glance, the siting issue may look like a real-estate quibble for gangs of competing lawyers. It isn't. None of the SPO's useful suggestions for good policy and specific initiatives can achieve their full effect if no counter-weight is applied to the growing forces of obstruction that threaten the goal of an adequate and economical energy supply.

On a related note, CMP would suggest that anyone considering the adequacy of Maine energy policy raise a policy question:

Is economic regulation coordinated with socio-political policy?

The overriding motive behind our system of public-utility regulation is economic: to protect consumers against the market power of natural monopolies, and to promote affordable and stable rates over the long term.

The complex processes of litigating revenue requirements, reviewing the prudence of management decisions, and determining the reasonableness of additions to rate base all hinge on economic tests.

It's getting increasingly common, however, for regulated utilities to be forced to seek economics-tested recovery of expenses they incur for social or political reasons.

Excavating prehistoric campsites as part of hydroelectric relicensing and altering power-line routes to mitigate visual impact, to cite two examples, are responses to policy decisions that may

be commendable from many points of view. But none of them fits neatly into the framework of economic regulation, and some may conflict with its objectives.

As uncoordinated mandates are handed to public utilities, they increase pressure on prices. Silkman and Flumerfelt note the way that policies intended to promote the use of indigenous energy resources and conservation have had this effect.

The paradoxical result of policy pressures on price is that the utility may also be pressed into service as a surrogate welfare agency. In October 1991, CMP was ordered to prepare to assign income-and-usage-determined credits to the bills of 10,000 very low-income customers for whom electric service has become unaffordable. The estimated \$2.8 million annual cost will be passed on to other customers.

The plight of these low-income customers is real, and the policy response is understandable. But one reason their situation drew the attention of legislators (who instructed regulators to mandate this program) is that the costs of complying with non-economic policy mandates is driving up the price of electricity.

Further, carrying out this new social program will grate against other long-standing regulatory policies: that rates be cost-based, and that they not include inter-customer subsidies. Because electric bills are based on usage rather than ability to pay, raising rates to carry out socio-political mandates necessarily means accepting a lower level of equity and efficiency than if the socio-political agenda were funded through taxes, which do purport to be based on ability to pay. That result has disturbing implications for Maine's attractiveness to new or expanding businesses, the engines of job creation, if they are sensitive to energy costs.

Regulated energy companies are creatures of public policy and must carry out its mandates. That makes them attractive vehicles for shifting or obscuring costs, even at the risk of inflating or misallocating those costs.

Somehow and soon, social policy and economic regulation have to be coordinated, with a clear eye fixed on costs and tradeoffs, before a new set of marching orders is cut. An anarchy of agenda-driven mandates invites economic decline, hardship, and consumer revolt.

With a one policy proposal added and a policy question emphasized, the Silkman/Flumerfelt essay can stand as a realistic and useful handbook for anyone thinking about the direction Maine energy policy should take in the 1990s.

Matthew Hunter is president and chief executive officer of Central Maine Power Company. He also has served as CMP's vice president for administrative services, senior vice president for customer services and division operation, executive vice president, and chief operating officer. He is chairman of the Governor's Committee for Supported Employment.

Full cite: Hunter, Matthew. 1991. **Response: Real world energy policy.** Vol. 1(1): 65-70.