

Reform Connecticut Utility Planning and Procurement



**Environment
Northeast**

A Policy Proposal – 2007 Legislative Session

The region and the state are suffering from a lack of focus on energy costs and environmental impacts. The markets and players are fractured and there is little to no planning occurring as energy bills and greenhouse gas emissions increase. Significant energy resources such as energy efficiency and combined heat & power are powerful tools to lower energy bills and environmental impacts that are not being captured. It is time to reform and modernize the way Connecticut plans for and procures energy resources.

Price Trends Show an Increasing Energy Drain on the Connecticut Economy

Electricity and natural gas prices in Connecticut have risen sharply over recent years. There is a clear connection between rising electric prices and natural gas prices—with gas/oil power plants setting the price for electricity 87% of the time in New England. Since the price of natural gas and oil are outside of the state's control, and weather is the key driver of peak demand days and expensive price spikes, the region is likely to continue to see high electricity prices for years to come.

Escalating prices for electricity, natural gas and fuel oil hurt consumers, local businesses, and hamstringing our state's economy. Over reliance on natural gas and oil hinders our ability to achieve an affordable energy future, especially given the growing crisis in availability and cost of fossil fuels. Consider the following facts:

- Electricity prices are at 150% of their 2002 levels and further increases are on the way.
- Natural gas consumers saw the commodity portion of their bill rise from \$450 in 2003 to \$800 last year.
- The average resident's home heating oil bill rose from \$600 in 2003 to over \$1,200 last year.

The money Connecticut's consumers spend on increased fuel and electricity costs flows out of the region to energy producing states and foreign countries around the globe. Last year alone, Connecticut's energy trade deficit exceeded \$3.4 billion. That is \$3.4 billion no longer available to invest and circulate in the state's economy.

Gain Control over Connecticut's Energy Future

A new system of energy planning and procurement – *one that includes cost-effective, native energy resources* – is needed to gain control of current and future energy costs. Investments in cost-effective energy efficiency, co-generation, demand response, renewables, and clean distributed generation are the best way to take control of Connecticut's energy future, lower consumers' costs, create local jobs, and recapture billions of dollars the state loses each year. This proposal describes a process and regulatory structure that will allow Connecticut to capture cost-effective, clean local energy resources and reduce the burden of energy costs on local consumers and business.

Efficiency Resources Are Available at less than 50% of the Price of Supply

While electricity and natural gas prices are high and utilities continue to focus on the purchase of those resources to meet customers' needs, there is an overlooked energy resources available that is cheaper – energy efficiency. Energy investments in the state's electric energy efficiency programs save consumer \$4 dollars for every \$1 dollar invested.

Connecticut's annual spending on electric supply exceeds \$2.5 billion dollars, at an average price of \$80 per MWh. In contrast, the state invests just \$60 million annually in electric efficiency resources, which deliver MWh savings at a much lower cost of \$12-30 per MWh. Today's system does not purchase nearly enough of the cheapest energy resource on behalf of consumers – efficiency – resulting in unnecessarily high bills.

Utility Planning and Procurement Policy Proposal

Proposed Planning and Procurement Goals

Connecticut should adopt a new framework to achieve the following goals:

- Create an energy planning and procurement process for electricity and natural gas that seeks to minimize total consumer costs, maximize environmental benefits, and achieve the state's climate change goals;
- Increase investments in local energy resources like energy efficiency, renewables, and other distributed generation over imported energy resources like fossil fuels, to stem the flow of energy dollars out of the region and increase our energy independence;
- Procure all cost-effective energy efficiency investments, i.e. where: it is cheaper to assist consumers to use energy more efficiently than to supply them with another unit of electricity or natural gas (energy efficiency is also the most cost-effective option to mitigate greenhouse gas emissions).

Customers and Energy Resources

Restructuring of electric and natural gas utilities has led to competitive wholesale energy markets but little competition to supply residential and smaller commercial customers. As a result, policy makers and energy companies need to provide better planning and services for these customers. There are also critical energy resources and markets that policy makers should focus on to ensure system reliability and lower costs for all customers; examples are: ensuring enough energy supply to meet peak energy demands (capacity), providing access to energy efficiency programs that capture the full cost-effective potential, and ensuring that state-wide targets for new energy resources like renewables are met.

Independent Oversight and Regulatory Approval

Under today's system, ratepayers do not have adequate input in the energy planning & procurement decisions which they pay for directly. Establishment of a new Procurement Stakeholder Board will help ensure that residential ratepayers, business consumers, and environmental interests have real input into energy planning. The participation of relevant stakeholders (who ultimately pay the bill and bear environmental burdens) will also help ensure that economically-

sound and farsighted decisions are made for the state's consumers. Membership on the Board would likely include state agencies (such as Office of Policy Management's Energy Office, Department of Environmental Protection, Attorney General, and Consumer Counsel) and business and residential consumer and environmental representatives. The utilities and Department of Public Utility Control (DPUC) should have ex-officio membership. The Board would exclude entities with a financial interest in the procurement plan.

The Board would provide significant input to and interactions with the utilities in the planning and procurement process. Board members would be supported by outside consultants retained by the Board to advise them in this process. The board should be modeled on but not replace the CT Energy Conservation Management Board (ECMB).

The Proposed Planning & Procurement Process

A planning process should assess both supply and demand resources to meet the state's energy needs, as well as factoring in environmental impacts and goals. This should be an opportunity to assess all resources in a transparent and analytical way comparing lifetime costs and environmental impacts. The utilities, in coordination with the Board, would conduct a 2-part planning process every three years. An energy and environmental review would be conducted to assess needs, options, costs, risks, and environmental issues. This would be followed by the development of a procurement plan that would detail what the utilities would procure on behalf of their customers, with specific implementation details and timelines.

Planning and procurement of the following energy resources should occur on behalf of customers:

- Planning and contracting for capacity resources that ensure the ability to meet peak energy demands would be considered on behalf of all customers;
- Procurement of all cost-effective energy efficiency, available at lower cost than supply options, would be completed on behalf of all customers;
- Procurement of renewable energy or other resources like Combined Heat and Power (CHP) to achieve the state's portfolio standard

or other goals would be considered on behalf of all customers

- Procurement of energy contracts would be completed to meet the demands of standard offer or default customers

Part 1 – Energy and Environmental Review

The energy and environmental review should assess the state’s and distribution company customer’s energy and capacity requirements over a multi-year period, such as 3, 5 and 10 years. It should examine the state’s environmental goals and identify existing requirements and costs, coming regulations, and regulatory risk associated with future changes in order to incorporate this into the planning process (i.e. Renewable Portfolio Standards (RPS) requirements, greenhouse gas goals, state energy plan goals, new Department of Environmental Protection regulations or State Implementation Plan (SIP) requirements, etc). The review should assess energy independence and economic risks associated with different resource choices to identify both risks and the need to address issues such as fuel diversity. It should also examine available supply and demand side resources and estimates of costs (cost-effective energy efficiency, renewable resource availability and cost, cost-effective CHP potential, traditional supply costs, etc). Finally it should present options and differences between resource types in terms of procurement methods. This review would be presented to the Procurement Stakeholder Board for review and input prior to the development of the procurement plan.

The energy resources examined for electric customers should include but not be limited to:

- Energy efficiency programs and projects
- Renewable energy supply options
- Demand response
- High efficiency and low-emitting distributed resources like CHP
- Traditional, commercial generating sources
- Options for additional imports and transmission infrastructure
- Different ownership options, including utility ownership, could be considered as long as there was third-party analysis and review of costs and benefits (likely by Board consultants)

The energy resources examined for natural gas customers should include but not be limited to:

- Energy efficiency programs and projects
- Demand response and interruptible service

- Traditional supply and storage contracts
- Options for additional imports and transmission infrastructure
- Renewable energy supply options

Part 2 – Development and Implementation of the Procurement Plan

Based on the energy and environmental review a specific procurement plan would be developed to minimize consumer costs, risks, and environmental impacts. The plan would detail the amount and costs of the various resources to be procured, over what time periods, and would be in effect for a three year period. Some contracts or resource decisions might be for periods of longer than three years and would carry over into future planning and procurement cycles. The plans could be developed separately or jointly by the distribution utilities, but at a minimum should be developed in a coordinated fashion.

A hypothetical electric procurement plan might look something like the following:

- Contracts or investments in expanded energy efficiency programs that ramp-up to capture all cost-effective efficiency on behalf of all customers;
- Expanded contracts for demand response projects that can be called upon to reduce peak demand on hot summer days on behalf of all customers;
- New capacity contracts for additional peaking generation to meet the state’s remaining peak summer energy demand on behalf of all customers;
- Procurement of renewable energy to meet or exceed the state’s RPS goals, with a mix of long and short-term contracts ;
- Procurement of traditional energy contracts to meet the balance of standard offer load through a mix of short and long term contracts to hedge against fuel price volatility;

The plan(s) would be reviewed by the Procurement Stakeholder Board and their consultants. The plan would be approved through a supermajority or consensus vote of the Board and the plan, with necessary supporting background material, would then be submitted to the DPUC through an open docket for final approval. Unresolved issues would be defined for review and determination by the DPUC.

Implementation of the plan would be the responsibility of the utility(s) under DPUC oversight. The utility would be under typical rules of prudence, confidentiality, and review by the DPUC as they implemented the plan and entered into contracts for resources. The utility would provide quarterly updates to the Procurement Stakeholder Board describing their progress in implementing the plan.

Potential Planning & Procurement Timeline

The following is a proposed timeline for this process, which assumes legislative changes during the 2007 session and an accelerated planning and procurement process leading up to the first three year procurement period.

Task	Time Period
1 st Energy & Environmental Review	9/2007 to 12/2007
1 st Development of Procurement Plan	1/2008 to 4/2008
1 st Approval of Plan by DPUC	By 6/2008
1 st Procurement Period	2009 to 2011
2 nd Energy & Environmental Review	1/2010 to 6/2010
2 nd Development of Procurement Plan	7/2010 to 12/2010
2 nd Approval of Plan by DPUC	By 3/2011
2 nd Procurement Period	2012 to 2014
Subsequent periods follow the timeline of the 2 nd planning and procurement period	Ongoing

Transition Period Efficiency Investments

Because the planning and procurement process will not lead to significant decisions and new investments until 2009, the electric and natural gas utilities should develop energy efficiency program budgets for 2008 that invest in all cost-effective opportunities, recognizing a reasonable rate of

program expansion over a one year period. Expanded program costs, if cost-effective, should be recovered through distribution or capacity charges as deemed appropriate by the DPUC.

Utility Rate & Incentive Reforms

In order to align utility incentives with the goals of this planning and procurement process, there should be reforms to the way distribution utilities are compensated for the services they provide.

Decoupling: Electric distribution companies currently recover most fixed costs through kilowatt-hour charges that create an incentive for the utility to maximize sales. To remove this powerful disincentive for investments in energy efficiency and distributed resources, modest, regular true-ups in rates should be established to ensure that any fixed costs recovered through kilowatt-hour charges are not dependent on sales volumes.

Performance incentives: Distribution companies should recover reasonable and prudent costs incurred in implementing this planning and procurement process. The DPUC would conduct a proceeding to establish a performance-based incentive plan, tied to objective benchmarks, for gas and electric distribution companies to provide an incentive to lower the cost and variability of energy to consumers through the procurement planning and acquisition process. The DPUC proceeding could be preceded by a procurement board review with the utilities of a proposed incentive program.



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Environment Northeast is a nonprofit research and advocacy organization focusing on the Northeastern United States and Eastern Canada. Our mission is to address large-scale environmental challenges that threaten regional ecosystems, human health, or the management of significant natural resources. We use policy analysis, collaborative problem solving, and advocacy to advance the environmental and economic sustainability of the region.