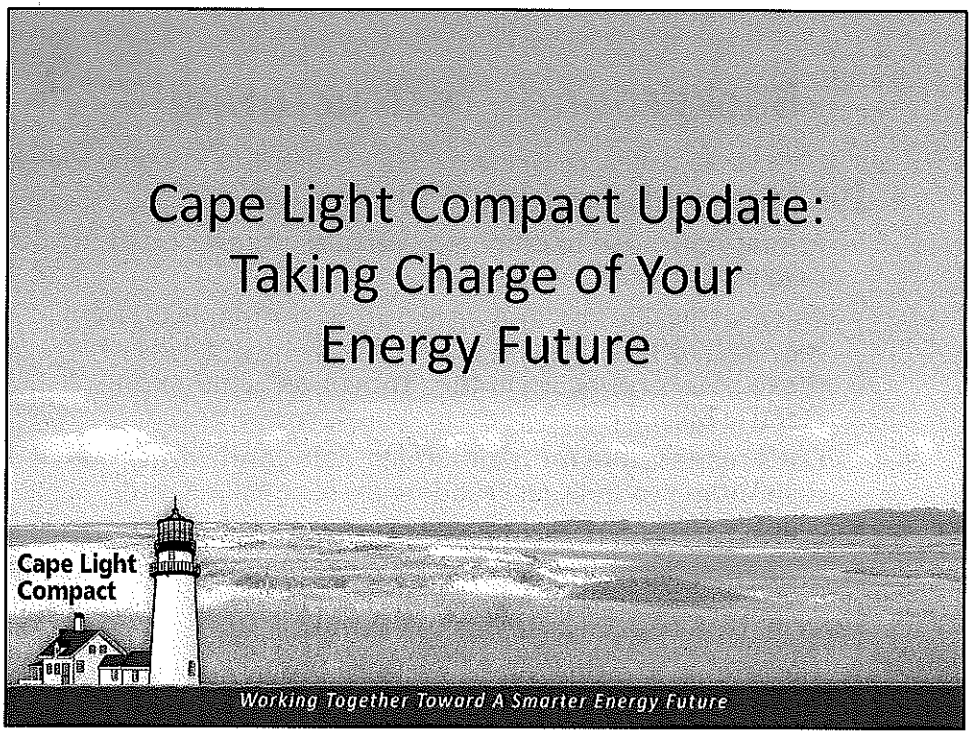
Cape Light Compact Update: Taking Charge of Your Energy Future



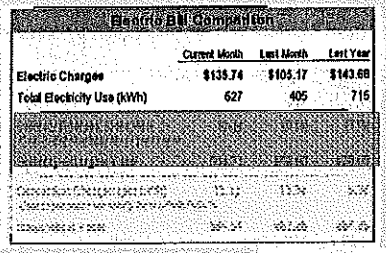
Agenda for Presentation

- Context
  - Restructuring Act
  - Municipal Aggregation
  - CLC Background
- Historical pricing comparison
- Retail power supply pricing components
  - Energy
  - Capacity
- CLC power supply procurement process
- Benefits of CLC power supply program

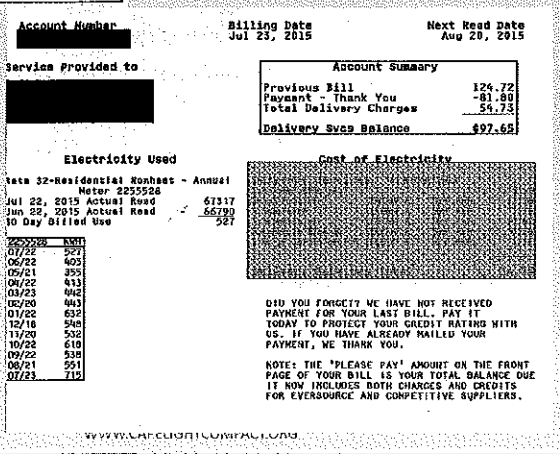
Background - restructuring

- 1997 Massachusetts Restructuring Act
  - Primary purpose to eliminate vertical integration in electric industry
  - Electric distribution and distribution companies (EDCs) required to sell off generation assets – profit/loss of these assets reflected in the "transition" charge on electric bills
  - EDCs responsible for maintaining poles and wires, responding to outages, reading meters, billing, etc.
- Result: third parties – "power suppliers" – able to compete to provide generation services
- How is this represented on the bill?

Reading the Bill


Electric Bill Comparison

	Current Month	Last Month	Last Year
Electric Charges	$135.74	$105.17	$143.68
Total Electricity Use (kWh)	627	405	715


Account Number [redacted]

Billing Date Jul 23, 2015

Next Read Date Aug 20, 2015

Service Provided to [redacted]

Account Summary

Previous Bill	124.72
Payment - Thank You	-81.80
Total Delivery Charges	54.73
Delivery Svcs Balance	$97.65

Electricity Used

Rate G2-Residential Nonheat - Annual
Meter 2255526

Jul 22, 2015 Actual Read		67317
Jun 22, 2015 Actual Read	-	66790
30 Day Billed Use		527

Read Date	kWH
07/22	527
06/22	405
05/21	355
04/22	433
03/23	442
02/20	443
01/22	632
12/18	544
11/20	532
10/22	610
09/22	538
08/21	551
07/23	715

Cost of Electricity

DID YOU FORGET? WE HAVE NOT RECEIVED PAYMENT FOR YOUR LAST BILL. PAY IT TODAY TO PROTECT YOUR CREDIT RATING WITH US. IF YOU HAVE ALREADY MAILED YOUR PAYMENT, WE THANK YOU.

NOTE: THE 'PLEASE PAY' AMOUNT ON THE FRONT PAGE OF YOUR BILL IS YOUR TOTAL BALANCE DUE IT NOW INCLUDES BOTH CHARGES AND CREDITS FOR EVERSOURCE AND COMPETITIVE SUPPLIERS.

Reading the Bill, cont.

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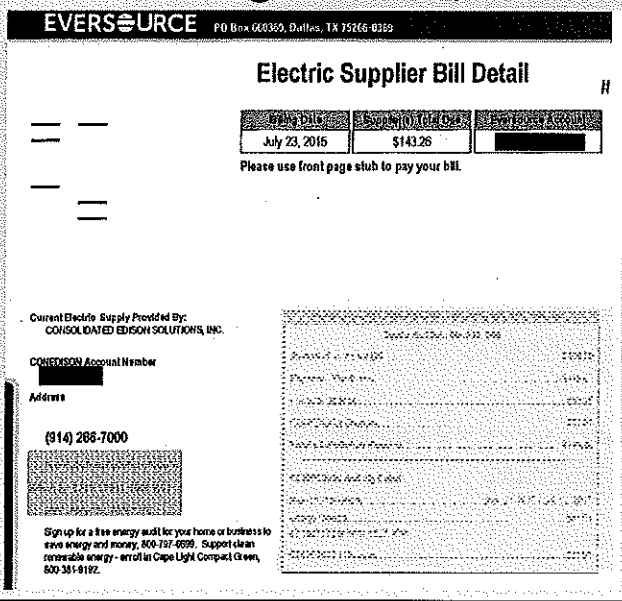
EVERSOURCE PO Box 660369, Dallas, TX 75266-0369

Electric Supplier Bill Detail

Billing Date	Supplier(s) Total Due	Eversource Account
July 23, 2015	$143.26	[redacted]

Please use front page stub to pay your bill.

Current Electric Supply Provided By:
CONSOLIDATED EDISON SOLUTIONS, INC.

CONEDISON Account Number
[redacted]

Address

(914) 286-7000

Sign up for a free energy audit for your home or business to save energy and money, 800-797-6699. Support clean renewable energy - enroll in Cape Light Compact Green, 800-381-9192.

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Municipal Aggregation

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- 1997 Restructuring Act also included provisions allowing for the creation of municipal aggregations (MGL Ch. 164 §134)
- Allows municipalities or groups of municipalities to negotiate power supply contracts that become the default power supply option
- In addition to the Compact, more than 50 municipalities in MA have approved aggregation plans

CONTACT US AT 800-797-6699 OR
WWW.CAPELIGHTCOMPACT.ORG

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Cape Light Compact

- Award-winning energy services organization operated by the 21 towns and 2 counties on Cape Cod and Martha's Vineyard
- Mission: serve customers through delivery of
  - proven energy efficiency programs
  - effective consumer advocacy
  - competitive electricity supply and green power options

- Model for other community choice aggregation programs in MA and nationally

Cape Light Compact

- Consumer Advocacy – (i.e.) $25 M returned to Cape & Vineyard customers from the sale of Canal Generating Plant
- Energy Efficiency – more than $600 M in savings to the region through 2014
- Competitive Power Supply/Green Power Options

Pricing history

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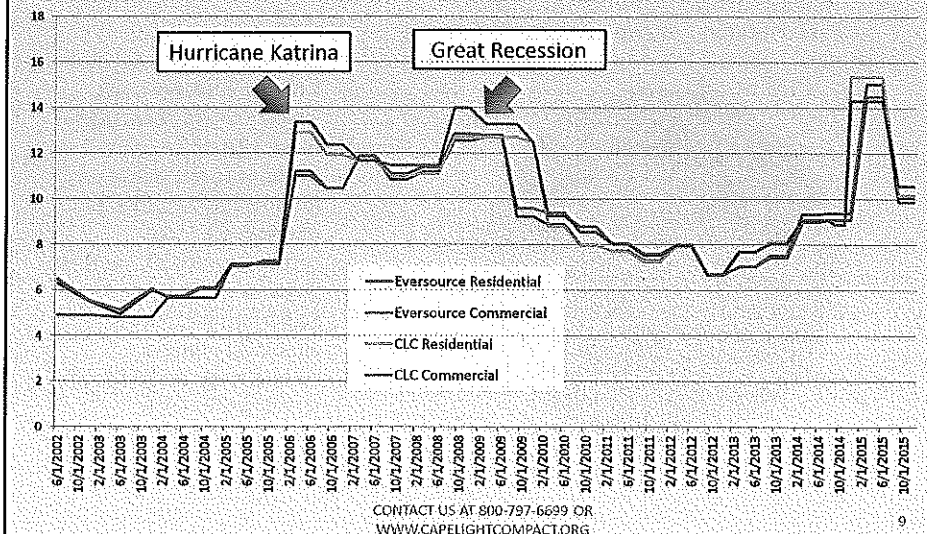

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Basic Service

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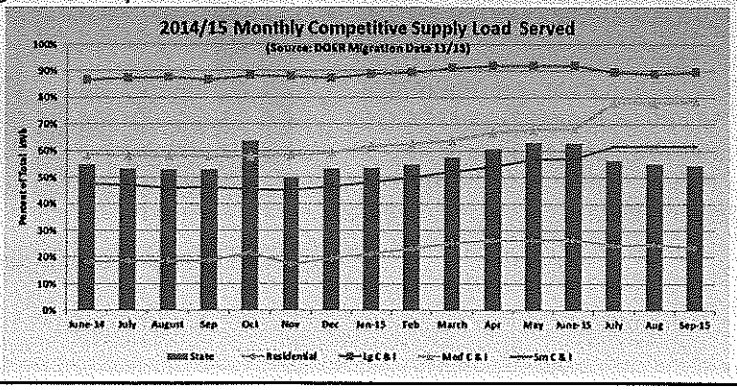
- Originally intended to be a service of last resort
- Residential and commercial prices change every 6 months, industrial 3
- For res and commercial – 12 month contracts for 50% of load signed every 6 months



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What makes up the price?

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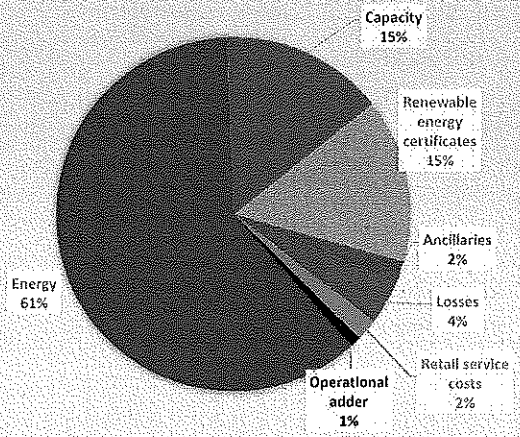
POWER SUPPLY PRICING COMPONENTS
(ILLUSTRATIVE – CHANGE REGULARLY)



- Price primarily driven by wholesale energy costs, which also are generally the most volatile
- All items to the right except for operational adder and renewable energy certificates (RECs), are New England-wide
- Significant volatility in almost all of these components, and different strategies for each

Energy

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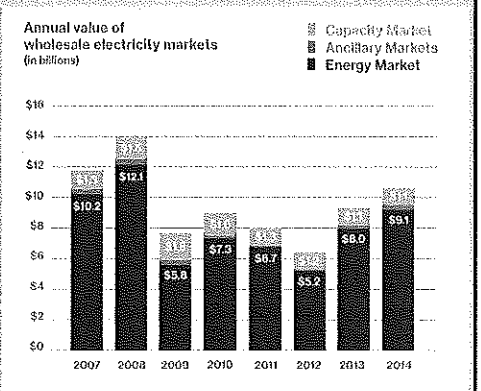
- Electricity prices in New England are set through a vary volatile market, much like the stock market.
- This market is organized by ISO-NE, the regional grid operator
- The two main wholesale electricity markets are the real-time and day-ahead markets.
- Hedges can also be purchased to reduce exposure to future price changes



ISO-NE 2015 Regional Electricity Outlook

New England's increasing reliance on gas

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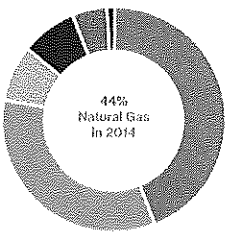
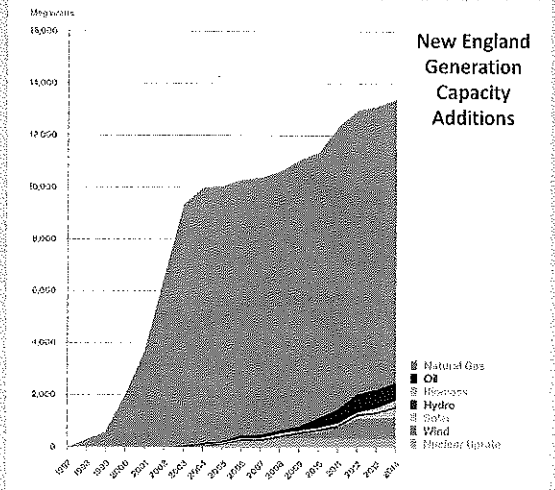


NET ENERGY	2000	2014
Natural Gas	15%	44%
Nuclear	31%	34%
Renewables	8%	9%
Hydro	7%	8%
Coal	18%	5%
Oil	22%	1%



New England Generation Capacity Additions

ISO-NE 2015 Regional Electricity Outlook

Result – electricity prices largely set by gas prices

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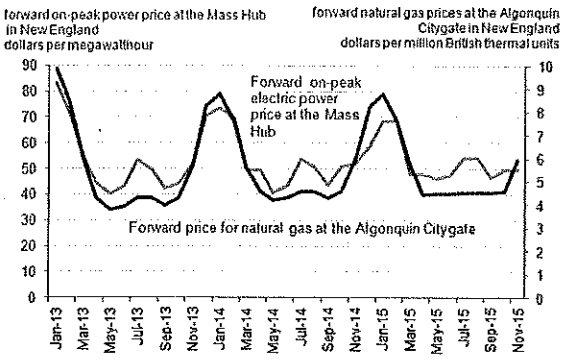
Figure 13. Forward electric power and natural gas prices in New England



Source: EIA, http://www.eia.gov/forecasts/steo/special/pdf/2013_sp_01.pdf

Challenge: we're at the end of the natural gas pipeline

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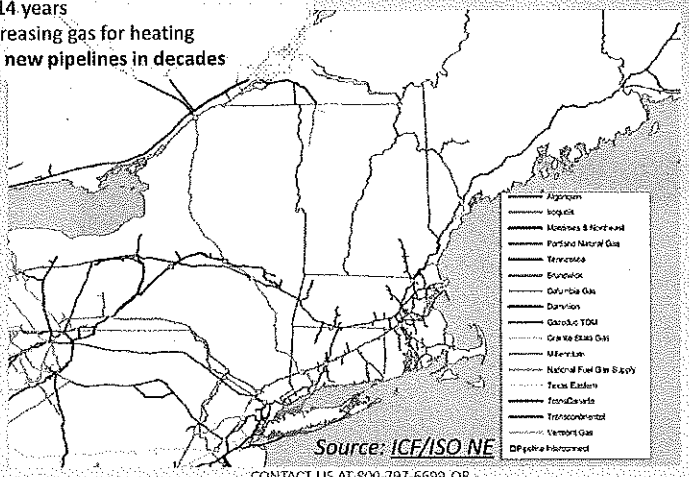
- Roughly Tripled % electricity from gas in 14 years
- Increasing gas for heating
- **No new pipelines in decades**



Source: ICF/ISO NE

Result – winter price blowouts

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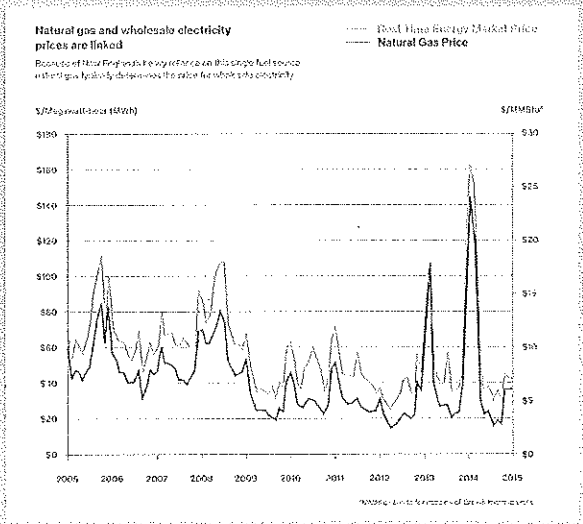
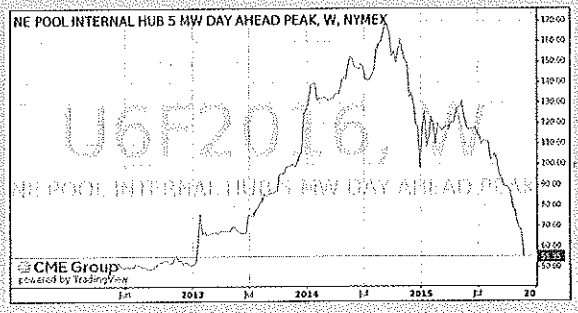


ISO-NE 2015 Regional Electricity Outlook

- Increasing use of gas for both heating and electricity production in the winter has led to near-full utilization of gas pipelines serving New England
- The result is skyrocketing winter prices

Some good news

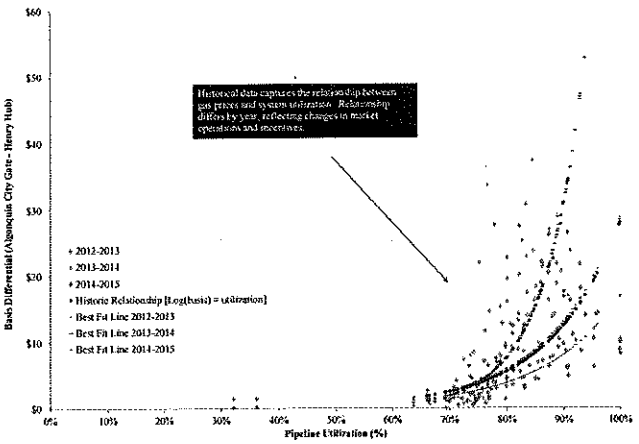


- Winter gas, electricity prices have been decreasing from their peaks

ISO-NE Jan '16 on-peak day ahead forwards
Source: CME Group

Some good news

Figure 4: Pipeline Utilization and Natural Gas Prices, Winters 2012-2015



Power System Reliability in New England
http://www.mass.gov/ago/docs/energy-utilities/reros-study-final.pdf

Energy – geographic considerations

- Differences in ISO-NE prices in different areas w/in New England due to congestion and losses
- Congestion – takes into account availability and cost of generation in specified area relative to New-England weighted average
- Losses – takes into account electricity lost in transmission in specified area relative to New England and weighted average
- For both, SE Massachusetts zone (SEMA) is slightly (~1%) above the New England average

Energy – looking ahead

- **Continued volatility** – as conditions change and as expectations of future conditions change, electricity prices, both in real time and forward prices, will continue to be enormously volatile
- Factors that will have large impacts on energy prices:
  - Completion of pipeline expansion projects underway
  - Decisions about additional pipeline expansions
  - Implementation of new ISO-NE rules (pay for performance)
  - EDCs, LDCs (gas distribution companies), and power suppliers contracting for LNG (liquefied natural gas) shipments
  - Oil prices
  - Winter weather
  - Long-term - energy efficiency and distributed generation

Bottom line – several factors mentioned above could result in continued moderation of prices, but considerable potential for additional winter blowouts will mean continued volatility

Capacity

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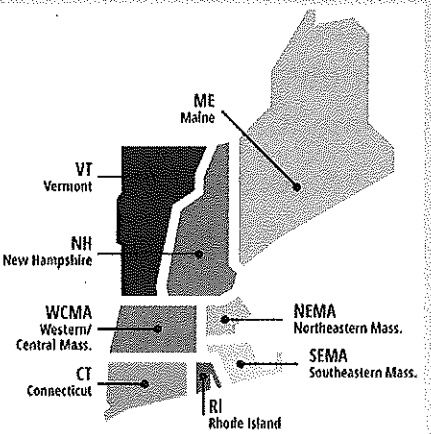
- Compensates generators for being *available* to generate electricity in the future, regardless of whether or not they actually are called on to generate
- If/when they are called on to operate, they are compensated through *energy* markets
- Accounts for ~15% of retail cost



Wholesale Load Zones in New England

Capacity – geographic considerations

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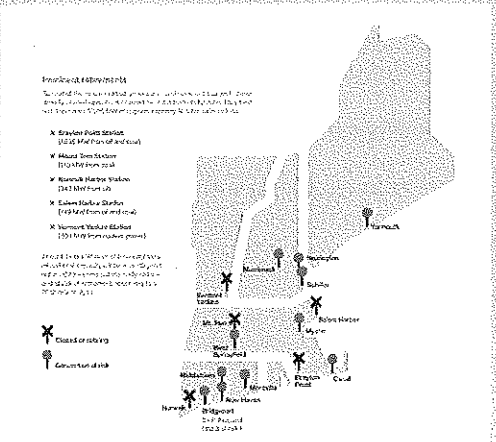

ISO-NE 2015 Regional Electricity Outlook

Note – image above published before Pilgrim's closure announcement

- SEMA projected to experience a capacity deficiency, due to anticipated closures (Brayton Point, Pilgrim)
- Result will be capacity prices in SEMA will be considerably higher than other parts of New England
- NEMA/Boston will experience similar increase in capacity costs

Compact Power Supply Procurement

- The Compact contracts for all-requirements power supply (includes all components mentioned above)
- Procured through a competitive bidding process
- Contract term generally 2-4 years with option to extend
- RFP includes stated goals of the program, contract template, and load data for those bidders that sign a confidentiality agreement

RFP process

- Process consists of:
  - RFP distributed to potential bidders, which include load-serving entities registered in GIS, and posted/distributed through relevant organizations
  - Interested bidders sign a confidentiality agreement and are provided with load data
  - Modifications to contract template are negotiated with each interested bidder
  - On specified day, bidders provide:
    - Required qualification information
    - Proposed pricing strategy
    - Amount and form of proposed financial surety
  - In-person interviews (each commonly lasting up to a full day) are scheduled with finalist (usually top three) bidders
  - Specific contract language memorializing pricing strategy/mechanism negotiated with finalists
  - Final selection and bid award

RFP process, continued

- Who from the Compact reviews bids and negotiates contracts?
  - Compact Administrator and Power Supply Planner
  - Compact Counsel – BCK Law
  - Independent energy consultant – Resource Insight
  - Several Compact Board Members, last RFP included:
    - Robert Schofield (has participated in every Compact power supply solicitation)
    - Peter Cocolis (Compact Treasurer)
    - Tom Donegan (Chair, Provincetown Board of Selectmen)
    - David Anthony (Director of Property and Risk Management, Town of Barnstable)

Benefits of Power Supply Program

- **Favorable contract terms.** The Compact, unlike many suppliers, does not include:
  - Termination fees
  - Introductory rates
  - Language allowing it to increase price during pricing term if wholesale prices increase
- **Renewable Options.** Customers can choose to support local (Most on the Cape and all in New England) renewable resources.
- **Advocacy.** Effective advocacy, beginning with the sale of the Canal Plant in 1997, has saved Cape and Vineyard consumers millions in distribution charges, and ensures our area's interests are represented at the state level.
- **Innovative programs.** The Compact's power supply program enabled the creation of CVEC, which led to the installation of approximately 28 MW of solar PV and will save Cape and Vineyard communities an estimated $68 million over the life of the contracts. The Compact is also actively working on "smart grid"-related programs that will help customers control their energy costs.
- **Award-winning energy efficiency programs.** The Compact's energy efficiency programs have yielded over $600 million in savings to Cape and Vineyard businesses and residents, often exceeding the incentives available through other efficiency administrators in the state. The Compact must have a power supply program to run its efficiency program.
- **A safe, locally-controlled, and trustworthy option.**

Contact information

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