

## Overview of Connecticut Bill No. 7501 An Act Concerning Energy Independence

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The following is overview of the bill and its energy elements. The full text of this lengthy bill can be found at: <http://www.cga.ct.gov/2005/TOB/h/pdf/2005HB-07501-R00-HB.pdf>. HB 7501 contains important new provisions designed to reform Connecticut's current electricity system to utilize additional energy efficiency, cogeneration, and competitive bidding for distributed generation.

### Energy Conservation & Efficiency Programs

- **New Efficiency and Combined Heat & Power Portfolio Standard**
  - The bill requires standard offer and competitive electric suppliers to obtain the following percentage of their output from energy conservation services and combined heat and power generation at commercial and industrial sites (Class III Renewables):
    - 1% by January 1, 2007,
    - 2% by January 1, 2008,
    - 3% by January 1, 2009, and
    - 4% by January 1, 2010.
  - This provision supplements the state's Renewable Portfolio Standard. It is designed to spur more diverse and cleaner sources of electricity to meet consumer demand.
  - Failure to meet the standard will result in a compliance payment of 5.5 cents per kWh with 75% of payments going to the electric conservation fund and 25% to the Clean Energy Fund.
  - The DPUC will conduct a proceeding to develop the administrative process and program specifications to satisfy the portfolio requirement and consider adding energy savings from residential customers.
  
- **Natural Gas Conservation:**
  - The bill does not establish a natural gas conservation fund but does establish a process to develop and oversee high quality natural gas efficiency in the same manner as electric conservation programs by having the independent Energy Conservation Management Board engaged in the utilities program planning..
  - The gas companies will have to prepare a gas conservation plan on an annual basis to implement cost-effective energy conservation and market transformation programs.
  - All supply and conservation options shall be evaluated within an integrated supply and demand planning framework and conservation programs must meet a cost-effectiveness test (value of savings greater than or equal to costs).
  - Programs and plans will be developed by the companies in conjunction with the Energy Conservation Management Board (ECMB) and each program must be reviewed and approved by the ECMB before the plan is submitted to the DPUC for final approval.
  - The ECMB must report to the legislature annually on gas conservation programs.
  - The ECMB shall have resources available to hire outside consultants to assist them in developing and reviewing plans.
  - The membership of the ECMB will be expanded to include two representatives of the gas companies, who will only be able to vote on gas related programs.
  - The gas and electric programs should consider opportunities to offer joint programs that reduce consumption of both fuels.

- **Municipal Electric Utility Conservation Programs**
  - Connecticut's municipal electric utilities, which serve about 5% of the state's customers, will now begin offering conservation and load management programs to their customers
  - The programs will be funded at a level not less than 1.0 mills in 2006 and ramp-up to 2.5 mills in 2011.
  - The programs shall be developed and administered by the municipal energy cooperative(s) with services provided to all participating municipalities.
  - The plans and programs shall be developed in conjunction with and approved by the ECMB.
  
- **Decoupling Utility Earnings from Sales**
  - The DPUC will conduct a study to assess how to best decouple the earnings of gas and electric distribution companies from sales.
  - Decoupling is designed to better align utility incentives with state energy policy by removing the disincentive to conserve energy.
  - The report will be completed by Jan. 1, 2006.
  
- **Coordination between Electric Conservation & Clean Energy Programs:** The ECMB and Advisory Board of the Clean Energy Fund shall form a joint subcommittee to work together to offer joint or complimentary programs and report back to the Legislature on an annual basis.

### **Customer-side Distributed Generation (CSDG) Incentives**

- The bill contains a number of new provisions designed to encourage the development of distributed generation (see definitions below), which are smaller, targeted generation units placed at or near the site of customer facilities.
  
- **Capacity Grants**
  - A one time capacity grant will be available to customer-side distributed generation (CSDG) in the amount of \$200 to \$500 per kilowatt, with the award amount set by the DPUC based on the ability of projects to reduce congestion charges.
  - The distribution companies are to educate, assist, and promote the development of CSDG and will receive an incentive of \$200 per kilowatt installed through 2008, declining to \$50 per kilowatt in 2011.
  
- **Project Financing**
  - The DPUC shall competitively select an entity to provide financing to CSDG projects to cover capital costs of equipment.
  - The department will implement a buydown mechanism to ensure that projects receive financing at a rate no greater than prime.
  - Billing for the financing program will be through the distribution companies
  
- **Natural Gas Distribution Cost Rebate**
  - CSDG that uses natural gas will be eligible for a rebate of gas delivery charges from the electric distribution company.
  - The rebate will be recovered through electric rates.

- **Annual Reporting:** the DPUC will report annually to the Legislature on the contributions of CSDG to achieving fuel diversity, transmission support, and energy independence

### Long-term Capacity Contracts for New Generation

- A competitive solicitation will be developed by the DPUC to secure the development of new generation (DG and conservation projects will also be eligible) that will reduce congestion charges by contacting long-term for new capacity.
- These projects could consist of Customer-side Distributed Resources, grid-side distributed resources, new generation facilities, including expanded and re-powered facilities, or the purchase of long-term capacity contracts.
- The contact will transfer all capacity rights (forward reserve capacity, locational forward reserve capacity, and similar rights not including energy) to the distribution company for a period not to exceed 15 years.
- Customer-side distributed generation will not be eligible for the other \$200-500 capacity grant if they participate in these contracts.
- Distribution companies are eligible to participate in this competitive solicitation up to a total capacity of 250 megawatts state-wide.
- For new grid-side distributed generation projects, the distribution companies will receive a one time payment of \$25 per kilowatt for projects sited before the end of 2009, \$15 per kW before 1/1/2011, and \$5 per kW before 1/1/2012.

### Renewable & Clean Energy Programs

- **Connecticut Clean Energy Fund:** The Fund will now be able to provide support to combined heat and power and thermal storage technologies.
- **Renewable Portfolio Standard:** the bill requires the Renewable Portfolio Standard supplies to be sourced within New England until 2010 with details to be developed by the DPUC.
- **Long-term Contracts for 100 MWs of Renewable Energy**
  - The existing requirement to have the distribution companies provide long-term contracts for at least 100 MW of renewable generation to satisfy a portion of RPS requirements has been adjusted slightly.
  - Projects must be sited in Connecticut and
  - The contracts must be complete by July 1, 2008 instead of 2007.
  - Developers have the option of having a contract that is indexed to natural gas prices and fuel cell projects are eligible for additional tax credits and 50% ownership of renewable energy certificates.

### New Electric Rates

- **Time of Use Rates:**
  - Optional time of use rates will be offered to all customers by June 1, 2006
  - Mandatory time of use rates will be developed for peak, shoulder, and off-peak periods for customers with a maximum demand above 350 kW, by Jan. 1, 2007.

- Prior to implementing mandatory time of use rates, the distribution company will complete a comparative analysis of the impacts of the new rates on customers.
- The DPUC will only approve new mandatory rates if they provide economic benefits and do not adversely impact consumers
- The DPUC will also develop standards and a process by which customers could be exempt from mandatory time of use rates until 2010.
  
- **Interruptible or Load Response:** Optional interruptible or load response rates will be offered to all customers with a maximum demand above 350 kW, by Jan. 1, 2007.
  
- **Seasonal Rates:**
  - Optional seasonal rates will be offered to all customers by June 1, 2006.
  - Mandatory seasonal rates will be developed by the distribution company by April 1, 2007
  - Prior to implementing mandatory seasonal rates, the distribution company will complete a comparative analysis of the impacts of the new rates on customers.
  - The DPUC will only approve new mandatory rates if they provide economic benefits and do not adversely impact consumers
  
- **Back-up Power Rates:**
  - If a customer develops a customer-side distributed generation project after Jan. 1, 2006 and the capacity is less than their peak load they will not have to pay back-up power rates.

### Important Definitions

- **Customer-side Distributed Generation (CSDG):**
  - Generation of not more than 65 megawatts on the premises of the end user which would include but not be limited to fuel cells, photovoltaic systems, or wind turbines;
  - Or, a reduction in demand on the premises of an end user due to demand response or conservation projects.
  
- **Grid-side Distributed Resources (GSDR):** Generation not in excess of 65 megawatts connected to the transmission or distribution system.
  
- **Class III Renewable Energy Source:** electricity output from combined heat and power systems (electric and thermal energy from a single source) with an operating efficiency no less than fifty percent that are sited at a commercial or industrial end-user's site or the electricity savings created at commercial or industrial facilities from conservation and load management programs constructed or initiated after January 1, 2006. (Note: although these resources are not "renewable" this allows for a new portfolio standard to support CHP and energy efficiency that is separate from the rest of the RPS).
  
- **Federally Mandated Congestion Charges (FMCC):** Costs associated with FERC or standard market design programs such as locational marginal pricing, locational installed capacity payments, or any costs approved by the DPUC to reduce FMCC associated with this bill.