Testimony of

The United Illuminating Company

Before the Environment Committee

Re:

Raised Senate Bill No. 385
AA CREATING INCENTIVES FOR THE DEVELOPMENT OF SOLAR ENERGY AND OTHER RENEWABLE ENERGY RESOURCES

Legislative Office Building
March 12, 2010

Good afternoon, Senator Meyer, Representative Roy and members of the Environment Committee. My name is Alan Trotta, and I am the Manager of Wholesale Power Contracts for The United Illuminating Company (UI). In that capacity I manage all aspects of the power procurement process for UI's Standard Service and Last Resort Service customers, including the procurement of renewable energy.

Raised Senate Bill No. 385, AA CREATING INCENTIVES FOR THE DEVELOPMENT OF SOLAR ENERGY AND OTHER RENEWABLE ENERGY RESOURCES (the Bill) proposes to increase the quantity of Class I and Class II Renewable Energy Certificates (RECs) that must be procured by load serving entities (LSEs), with the stated goal of promoting the development of solar energy and other renewable resources. As is discussed in detail below, the Bill will not incent the development of solar energy, and may be unlikely to incent the development of any other Class I renewable resources. However, the Bill could add $32 million or more annually to the electric bills of Connecticut electric customers, much of which may flow to out of state Class II renewable resources. For these reasons, UI opposes the Bill and urges that the Environment Committee to reject it.

1. The Bill will not incent the development of solar energy.

The Connecticut Renewable Portfolio Standard (RPS) has a tiered structure with three classes of resources. Here are the class definitions in the Connecticut RPS regulation:

- Class I resources include energy derived from solar, wind, fuel cell, methane gas from landfills, ocean thermal, wave, tidal, run-of-river hydropower (<5MW, began operation after July 1, 2003), and sustainable biomass (NO_X emission <0.075 lbs/MMBtu of heat input).
- Class II resources include biomass (NO_X emission <0.2 lbs/MMBtu of heat input, began operation before July 1, 1998), small run-of-river hydroelectric (<5MW, began operation before July 1, 2003), and trash-to-energy facilities.
- Class III resources include customer-sited combined heat and power (with operating efficiency >50 percent of facilities installed after January 1, 2006), waste heat recovery systems (installed on or after April 1, 2007), electricity savings from conservation, and load management programs (began on or after January 1, 2006).

As can be seen above, Class I resources are the low or non emission emitting renewable resources such as solar and wind, whereas Class II resources are primarily from older, pre-existing facilities.

Table 1 below shows the Connecticut RPS through 2020:

Table 1
Connecticut RPS Requirements
(Percentage of Retail Load)

Year	Class I	Class II or Class I (add'l)	Class III	Total
2008	5.0%	3.0%	2.0%	10.0%
2009	6.0%	3.0%	3.0%	12.0%
2010	7.0%	3.0%	4.0%	14.0%
2011	8.0%	3.0%	4.0%	15.0%
2012	9.0%	3.0%	4.0%	16.0%
2013	10.0%	3.0%	4.0%	17.0%
2014	11.0%	3.0%	4.0%	18.0%
2015	12.5%	3.0%	4.0%	19.5%
2016	14.0%	3.0%	4.0%	21.0%
2017	15.5%	3.0%	4.0%	22.5%
2018	17.0%	3.0%	4.0%	24.0%
2019	19.5%	3.0%	4.0%	26.5%
2020	20.0%	3.0%	4.0%	27.0%

Source: Conn. Gen. Stat § 16-245a et seq. and Public Act No. 07-242, § 40-44.

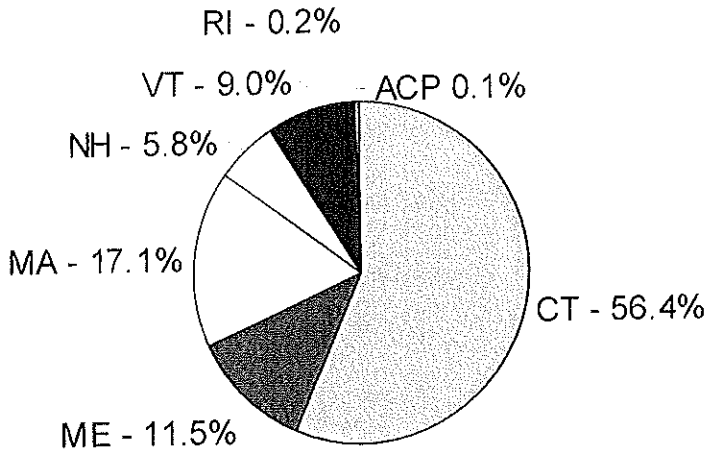
The Bill proposes to increase the additional Class II or Class I requirement from 3% to 5% annually (the middle column above). Currently Class I RECs sell for around 2 cents per kWh, while Class II RECs sell for less than 0.1 cents per kWh. In other words, Class I RECs currently cost more than ***twenty times*** the price of Class II RECs. This means that suppliers will most likely meet this additional requirement by procuring cheaper Class II RECs instead of Class I RECs. For the Bill to incent the development of any new Class I resources, Class II prices would have to increase ***twenty-fold*** relative to Class I REC prices.

Further, solar photovoltaic (PV) is one of the most expensive renewable technologies. Solar PV requires a subsidy of nearly 30 cents/kWh to be competitive with onshore wind energy. Even if the Bill resulted in closure of the twenty-fold gap between Class I and II REC prices, other Class I renewable technologies, which are less expensive than solar energy, would be the likely beneficiaries. Solar energy cannot be developed in Connecticut without substantial subsidies directed specifically to solar energy, which the Bill does not provide.

2. The Bill will increase customer costs, and a high percentage of those dollars would flow to existing out-of-state Class II renewable resources.

The Bill would raise the Class II or Class I requirement from 3% to 5%. As was shown above, suppliers will most likely meet this increase through the purchase of Class II RECs until such time as Class II prices achieve parity with Class I prices. The most recent Department of Public Utility Control (DPUC) docket regarding RPS compliance (Docket No. 08-09-15) provides some very relevant information. The 3% Class I or II requirement in Connecticut for 2007 was

933,477 Class I or II RECs. This requirement was met by load serving entities providing 1,406,295 Class II RECs . In other words, although the law allows this requirement to be met with either Class I or Class II RECs, the marketplace met all of the requirement (plus a 50% surplus) with the less expensive Class II RECs. The chart below from the DPUC's decision in Docket No. 08-09-15 shows that nearly 50% of these Class II RECs were sourced from outside of Connecticut:



Since there is a current surplus of Class II RECs, it is possible that the Bill would not substantially increase Class II REC prices. If this is the case, then the estimated customer cost impact of the Bill would simply be the cost of procuring Class II RECs at a price of around $1 per REC for an additional 2% of load, or around $660,000. If the surplus of Class II RECs were to be eliminated, and Class II REC prices increased twenty-fold (approaching the current Class I REC price), the impact would be around $32 Million.

A $32 Million bill increase has the following impacts on the average residential, commercial and industrial customers:

Annual Residential Bill Impact	$	8.15
Annual Commercial Bill Impact	$	130.45
Annual Industrial Bill Impact	$	2,115.38

Thank you for the opportunity to testify on **Raised Senate Bill No. 385 AA CREATING INCENTIVES FOR THE DEVELOPMENT OF SOLAR ENERGY AND OTHER RENEWABLE ENERGY RESOURCES.** I would be happy to answer any questions.