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**Testimony of UTC Power  
Regarding**

**Senate Bill No. 450  
AN ACT CONCERNING ENERGY CONSERVATION AND RENEWABLE ENERGY**

**Before the Energy and Technology Committee  
March 20, 2012**

Senator Fonfara, Representative Nardello and members of the Committee:

UTC Power appreciates the opportunity to convey its support for **Senate Bill No. 450, An Act Concerning Energy Conservation and Renewable Energy**.

UTC Power, a United Technologies company located in South Windsor for the last 50 years, employs approximately 430 people in the development, design, production and service of fuel cells for use in stationary, transportation, space and defense applications. We'd like to thank the leadership of the Energy & Technology Committee for their multidisciplinary approach to clean energy, infrastructure resiliency and conservation embodied in Senate Bill 450.

Today UTC Power is providing fuel cell solutions for stationary and transportation applications. Fuel cell technology solutions benefit customers by providing higher system efficiencies within a broad range of applications. A fuel cell converts its input fuel directly into electricity, allowing the fuel cell to operate at much higher electrical efficiencies than an internal combustion engine. More simply, a fuel cell produces a larger amount of electricity than a combustion engine with the same fuel input. UTC Power's stationary solution is a sustainable energy generation system, with a combined heat and power efficiency approaching 90%. Our stationary fuel cells operate without combustion, make minimal noise and meet the strictest air standards in the United States.

We support the inclusion of Section 8(d) which provides necessary information to the Electric Distribution Companies (EDC) about their ability to own and operate Class I renewable generation in order to increase the amount of electricity available during natural disasters or other emergencies.

We respectfully suggest the removal of permissive language at the beginning of Section 8(d), where "any electric distribution company *may* include in any application for approval of a ten-year plan....to petition the authority to own and operate...any renewable resource facilities, combined heat and power systems and fuel cells....that will improve availability of electric service to critical or emergency facilities during natural disasters or other emergencies." All EDCs should be required to include a petition to own or operate Class I renewable generation, including combined heat and power systems, to facilitate the improved availability of electricity to critical facilities through the use of micro grids.

We also recommend that the benefits of heat availability during an emergency or disaster be recognized. Section 8(d) should read "combined heat and power systems that produce electric *and thermal* energy.

Additionally, we appreciate the language in Section 8(d)(e) regarding further definition of state or federal incentive but respectfully request the language be clarified. As written, this section would suggest that Class I renewable projects made operational at a critical or emergency facility would be eligible for the Low Emissions Renewable Credit (LREC) program pursuant to Section 110 of Public Act 11-80. This possibility is referenced in Section 13(b). We fully support this incentive eligibility and would simply suggest language be added to address this particular state incentive within Section 8(d)(e).

We recommend modification to the pilot program language in Section 8(d)(e) to read that "no more than five municipalities" shall be allowed to participate in the pilot program.

We suggest a revision to Section 13(a) to include an increased efficiency requirement for a combined heat and power (CHP) system utilized in a micro grid configuration. One of the many goals of a micro grid infrastructure is to implement an overall cleaner, more reliable and less expensive energy delivery system. Currently, CHP systems must meet an efficiency of no less than 50% to qualify for Class III RECs. In order to increase the amount of clean technology operating in the State, the efficiency requirement for any Class III qualifying technology should be no less than 60% when installed as a portion of a micro grid.

We respectfully suggest the twenty-five percent (25%) minimum micro-grid requirement within Section 14(c) be added to the current Renewable Portfolio Standard (RPS) goal rather than offset the goal, thereby reducing the Class I renewable requirement. The deployment of micro grids should help motivate the State to increase its RPS goals instead of decreasing them.

We support the amendments to Section 20(e) which increase both the aggregate amount of operational Class I renewable generation facilities beyond 30 megawatts and the amount of Class I renewable generation at any EDC owned facility beyond 10 megawatts. The increases in allowable EDC quantities of Class I renewable generation will aid in the deployment of micro grids within each EDC territory and at EDC owned facilities throughout the State.

We support the amendments to Section 28(f), increasing the combined heat and power (CHP) incentive amount to five hundred dollars per kilowatt. The incentive increase will help establish combined heat and power facilities, aiding the State in meeting its Class III RPS goals.

We would also suggest the State consider meeting its Class I RPS goals by allowing Class I renewable generators that also provide waste heat in a combined heat and power application to merge the CHP incentive with other state or federal incentives for Class I generation. The incentive would not necessarily be an aggregate amount, but rather an amount that falls between any Class I incentive and the aggregate Class I plus CHP incentive. If the Class I renewable source operates in a CHP application using natural gas as fuel, the project should also qualify for natural gas pricing minus the distribution cost, as stated in Section 28(f)(2).

Thank you for the opportunity to express our support for SB 450's intent to meet the State's objective of the cleanest and most cost effective energy policy possible, and to provide comments as to how the intent of SB 450 could facilitate additional positive economic impacts in the State of Connecticut. We would be pleased to provide any information to the Committee and the staff in support of the consideration of this bill.