

APPENDIX H
COMMENT GRID

2014 IRP: General Comments

<u>Stakeholder(s)</u>	<u>Date Filed</u>	<u>Main Topic</u>	<u>Issue Addressed</u>
Robert Fromer	1/13/2015	Quality of Life Standards	Incorporate EU Quality of Life and Quality of Living Standards
		Statutory Requirements	§§ 16a-3a (a) to 16a-3a (d), G.S. as more fully set forth below. The Plan's narrative and information was not identified with a specific subsection of the statutes to demonstrate responsiveness to the legislative mandate.
		Natural Gas	Update future natural gas availability projections
		Nuclear Power	Exclude as is not economically viable, with low EROEI
		Peak Oil & Natural Gas Supplies	Update analysis re Bill Powers 1/9/10 Association for the Study of Peak Oil
		Energy Storage	IRP did not address
		Energy Assurance Plan	Recommends including a maintainability measure in Energy Assurance Plan
Tom McCormick	1/15/2015	Fixed Electric Charges	Requests an ACEEE position paper be entered into the record
Justin Paglino	2/5/2015	Natural Gas	Opposes expanded use of natural gas and recommends going "all-in" on renewables
Larry Richardson, ReEnergy Holdings	2/10/2015	Biomass	Supports IRP postponement of reducing biomass REC value
		Biomass	Recommends procurements that consider repowering idled generating assets, like in-state biomass
		DEEP Procurement	Recommends additional procurements under Section 8 PA 13-303 authority
		Biomass	Recommends reconsidering DEEP policy to limit the use of construction and demolition materials to generate Class I RECS
James King, CT Industrial Energy Consumers	2/11/2015	Natural Gas Pipeline Constraints	Recommends establishing a proceeding to examine potential solutions to current interstate natural gas pipeline capacity constraints
		Renewable Portfolio Standard	Supports increased flexibility in meeting RPS requirements, specifically providing up to 25% of Class I requirement through Class III sources like CHP

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Jeff Bishop, Brookfield Renewable Energy Partners	2/11/2015	New Transmission Lines	Supports new transmission lines to bring new wind projects and existing hydro throughout the region
		Large Hydro	Recommends exempting size and date requirements in RFP process for hydro when combined with Class I wind resources
Roger Smith, Clean Water Action	2/11/2015	Natural Gas and Global Warming	Request additional analysis on natural gas expansion impact on medium and long term climate goals
		DEEP Procurement	Supports procuring more regional renewable energy to reduce natural gas use for generation
		Residential Oil	Recommends emphasizing switches from oil to whole house air source and cold climate ductless heat pumps
		Grid Modernization	Recommends a process to consider the role of utilities with increased distributed generation and renewables
		Resiliency	Recommends Green Bank "Resilient Homes Pilot" to power individual homes and their neighbors during an outage
		Nuclear Power	Recommends considering nuclear safety and establishing an emergency response plan
		Energy Efficiency	Recommends continuing to expand energy efficiency with lead by example in towns and go beyond quick payback measures
		Class I Sources	Remove construction and demolition debris from Class I entirely
		Class III Sources	Recommends competitive Class III REC solicitations to remove market risk over REC prices
		Combined Heat and Power	Restrict declining block incentives for CHP to public and non-profit entities
Joel Gordes, Environmental Energy Solutions	2/11/2015	Grid Security	Recommends expanding grid security analysis and creating a plan for future emergencies rather than a list of committee and docket outcomes
		Grid Security	Recommends using a security lens and think through every energy-related action to determine its effects on physical and cyber security
		Grid Security	Recommends establishing metrics for involvement and attention to cybersecurity

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		Resiliency	Recommends developing a resiliency approach based on all hazards and not just the two catastrophic storms
		Transmission	Large transmission projects may become stranded costs and make the grid more complex and prone to failure
		Grid Security	Recommends including various forms of security threats in definition section and discussion, including electromagnetic pulse and coronal mass ejections
		Grid Security	Integrate deterrence as a primary goal of security
		Grid Security	Recommends using third parties to make periodic no notice attacks on critical infrastructure
New England Clean Energy Council	2/11/2015	Energy Efficiency	Recommends DEEP establish an oil heat efficiency program to ensure funds collected are used for the intended purpose
		Energy Efficiency	Supports including peak demand reduction in energy efficiency programs to address winter peak demand and reliability and recommends specific program changes to incorporate demand reduction programs in upcoming C&LM Plan
		Energy Efficiency	Recommends utility-funded behavioral energy efficiency programs for small to medium businesses
		Demand Response	Recommends regional program to secure the benefits of the ISO-NE active demand response program in the event that it can no longer participate in the Forward Capacity Market
		Demand Response	Recommends a statewide peak demand reduction standard
		Winter Peak Demand	Timing of different source availability should be recognized in determining the scale of resource investment to meet winter peak demand
		Winter Peak Demand	Recommends modifying procurement language to include smaller existing hydro when used in combination with a Class I firm source to improve cost-effectiveness of transmission
		Winter Peak Demand	Recommends DEEP conduct another Section 8 PA 13-303 procurement

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		Combined Heat and Power	Recommends increasing monetary incentive and using a phased approach to allow investors to recover some initial investment before CHP is operational
		Offshore Wind	Recommends a program to procure offshore wind
		LREC/ZREC	Supports continuation of LREC/ZREC programs
		Grid Modernization	Along with distributed energy resources discussed in the IRP, recommends including advanced metering, time varying rates, and microgrids deployment as part of grid modernization planning
		Grid Modernization	Recommends DEEP conduct a cost/benefit analysis and look to RMI study
		Grid Modernization	Recommends a community solar program that builds on other states programs and is larger than 3 MW
		Biomass	Supports the proposed approach to postpone any reduction in REC value for biomass
Aegis Energy Services	2/11/2015	Combined Heat and Power	Recommends the proposed CHP incentive program specify the total pool available, the start and end dates of availability, and a fixed per kWh grant amount available through the life of the grant. Recommends raising incentive levels
Materials Innovation and Recycling Authority	2/11/2015	Waste-to-Energy Facilities	Recommends classifying all waste-to-energy facilities as Class I rather than Class II source, or at least classify combustion of biogenic carbon based fraction of MSW wastestream
Covanta	2/11/2015	Waste-to-Energy Facilities	Recommends policies that ensure WTE facilities have RECs to maintain their long term viability
		Biomass	Supports the postponement of any reduction in the value of biomass RECs
Connecticut Fund for the Environment	2/11/2015	Distributed Generation	Recommends swift action on grid modernization to value DG and develop a value of DG tariff
		Shared Solar	Recommends authorizing community shared solar and not through a pilot program

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		Electric Vehicles	Recommends monetary incentives to make electric vehicles more cost-competitive and other incentives (HOV lane access, free parking, charging station requirement in large garages)
		Electric Vehicles	Recommends steps to ensure utilities and the grid are prepared to support increased electric vehicles
		Climate	Recommends articulated measures to meet Global Warming Solutions Act goals
CPV Towantic	2/11/2015	Market Capacity	Resource Strategy #3 underestimates retirements in the region and does not consider environmental regulations that will have an adverse impact on New England generation
		Natural Gas Capacity	Recommends expressly recognizing the role that new dual fuel-capable facilities can play in easing short term gas supply constraints
		Market Capacity	Recommends contingency planning regardless of the condition of the capacity markets in case of a generation shortfall
Eversource Energy	2/11/2015	Natural Gas Capacity	Requests to include EDCs in 13-303 procurements and other similar procurements as soliciting parties to have access to bid information immediately
		Natural Gas Capacity	Requests the proposed solicitation process be separate, rather than all inclusive, for transmission, natural gas, and demand response/energy efficiency
		Long Term Contracts	Request proposals involving long term contracts for EDCs include proper remuneration to EDCs for using their balance sheets
		Energy Efficiency	Recommends changing the IRP recommendation from "refocusing efficiency programs on lowering peak demand" to "continuing to focus energy efficiency programs on cost effective measures that provide values to customers by reducing energy and/or peak demand"
		Demand Response	Before directing EDCs to implement demand response programs, ensure they are cost effective and recovery mechanisms are in place

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		Combined Heat and Power	Any future CHP programs receiving ratepayer support should ensure benefits run to all ratepayers in excess of costs
		Grid Modernization	Recommends formal regulatory proceeding to determine appropriate rate design and valuation for distributed generation
Utilidata	2/11/2015	Grid Modernization	Recommends the cost/benefit study encompass all distributed energy resources and/or energy efficiency measures
Acadia Center	2/11/2015	General Analytical Limitations	Note that this IRP did not model the policy options and recommended strategies like in previous IRPs
		General Analytical Limitations	Note that the IRP does not analyze the economic impacts of an all cost-effective energy efficiency scenario
		Energy Efficiency	Incorporate latest savings information from the most recent C&LM Plan
		Energy Efficiency	Make it clear that customer expenditures are always lowered from energy efficiency investments
		Energy Efficiency	Recommends including a clear accounting of energy savings in all state-run energy efficiency initiatives and criteria for assessing potential
		C-PACE	There is no support for the assertion that C-PACE is improving the cost effectiveness of C&LM programs
		Energy Efficiency	Recommends valuing energy efficiency targeted at peak demand periods
		Energy Efficiency	Identify specific complementary policies
		Winter Peak Demand	Any competitive procurement should be crafted to solicit electric resources that can address winter peak demand
		Winter Peak Demand	Data needs to be updated, like wholesale electric prices and resource costs
		Winter Peak Demand	Remove or correct statements on the costs and amount of efficiency needed to address winter peak demand - calculations are based on price of summer electric peak demand reductions
		Grid Modernization	Recommends establishing a planning process to periodically identify opportunities to deploy distributed energy resources to defer new infrastructure buildout

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Biomass Power Association	2/11/2015	Biomass	Supports IRP's deferral of a phasedown in biomass REC value
EDP Renewables	2/11/2015	Regional Planning	Supports IRP but points to urgency and continued leadership in procuring wind and potentially complementary transmission or small hydro
GDP SUEZ Energy North America	2/11/2015	Natural Gas Infrastructure	Ensure reliability in the most cost efficient manner and use existing resources before spending money
		Biomass	Continue to monitor regional markets and re-evaluate biomass value
HQUS	2/11/2015	Winter Peak Demand	Incorrect assumption in IRP that economic-based winter deliveries would never exceed 700 MWh
		Hydro	Questions IRP statement that contracting for large-scale hydro at fixed or indexed prices is riskier than market prices
Kimberly-Clark Corporation	2/11/2015	Combined Heat and Power	Recommends monitoring the supply/demand balance of the Class III REC program as part of promoting CHP
		Natural Gas Infrastructure	Supports timely development of appropriate natural gas infrastructure
National Biodiesel Board	2/11/2015	Biodiesel	Recommends implementing policies to encourage early switching by generators from natural gas to renewable biodiesel during peak demand
		Emissions	Recommends requiring no. 6 fuel for generators be blended with biodiesel to reduce emissions
		Combined Heat and Power	Recommends an increased emphasis on using biodiesel in combined heat and power programs
		Renewable Portfolio Standard	Recommends adding a renewable thermal component of RPS like in New Hampshire
New England Power Generators Association	2/11/2015	Natural Gas Infrastructure	Regional policy conversations around natural gas constraints should support competitive market solutions
		Natural Gas Infrastructure	Recommends allowing aggregated small local hydro to compete in procurements along with large hydro
		Large Hydro	Subsidizing large hydro likely leads to higher electricity prices and doesn't guarantee reliability or environmentally-friendly
		Capacity	Does not support IRP's proposal to procure capacity resources if FCA 9 did not attract necessary capacity

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NRG	2/11/2015	Solar	Recommends expanding solar with streamlined rooftop solar permitting and shared solar
		LREC/ZREC	Supports extending the LREC/ZREC programs
		Procurement	Supports extending and revitalizing Section 127 procurement
		Microgrid	Recommends addressing problems in microgrid program, including interconnection policy for multiple DG sources on single microgrid and property taxes
		Microgrid	Supports including renewable energy generation in microgrid grant
		Distributed Generation	Supports reforming utility tariffs to align customer demand charges with customer use of the grid and benefits of DG
		Net Metering	Current net metering rules do not reflect transmission and distribution values that DG provides to the grid
		Demand Response	Supports immediate stakeholder process to implement state program to take the place of ISO-NE programs, if necessary
		Reliability	Recommends valuing the benefits of current conventional generation fleet and developing contingencies to manage large scale generation loss
RENEW Northeast	2/11/2015	Renewable Portfolio Standard	Recommends any solicitation involving Class I sources contain at least 30% RPS resources to attain RPS goals
		Hydro	Provide long-term contracting opportunities for existing small hydro
		Transmission	Recommends upgrading the bulk transmission system to access regional wind
		Natural Gas	Recommends noting that last year natural gas was responsible for over half of New England's overall electricity generation and concluding that natural gas pipelines will make the region more dependent on natural gas
Alliance for Industrial Efficiency	2/11/2015	Combined Heat and Power	Recommends increasing monetary incentive and using a phased approach to allow investors to recover some initial investment before CHP is operational
CT Green Bank	2/11/2015	Energy Efficiency	Specific language changes (see comments)

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		LREC/ZREC	Increase the frequency of LREC/ZREC auctions to more frequently than once annually
		Microgrid	Specific language changes (see comments)
		C-PACE	Specific language changes (see comments)
		Class I RECs	Provided updated number on Class I average REC prices
		Fuel Cells	Consider long-term contracts for RECs produced from fuel cells
		CGB Residential Solar Incentive Program	Updated program numbers included (see comments)
Energy Efficiency Board	2/11/2015	Energy Efficiency	Recommends modeling an alternative scenario of energy efficiency savings commensurate to national best practices
		Energy Efficiency	Focus Resource Strategy 1 on achieving all cost effective savings and suggests strategy title change
		C&LM	Recommends using financing to leverage up existing C&LM resources
		C&LM	Recommends establishing regulatory parameters for tracking cost-effectiveness of energy efficiency programs
Northeast Energy Efficiency Partnerships	2/11/2015	Natural Gas Capacity	Recommends conducting an assessment of non-transmission alternatives on both utility and customer scale
		Fixed Electric Charges	Carefully consider requests for increases in fixed customer service charges
ThinkEco	2/11/2015	Technology	Recommends increased use of connected devices for demand management programs
Sierra Club	2/11/2015	Natural Gas	Recommends against increasing regional overreliance on natural gas
		Energy Efficiency	Supports all cost effective energy efficiency measures and accounting for non-energy benefits in cost-effectiveness testing
		Class I Renewables	Recommends conducting solicitations to procure additional Class I resources
		Bridgeport Harbor Station	Energy planning should plan for Bridgeport Harbor Station retirement

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Veolia North America	2/11/2015	Combined Heat and Power	Recommends increasing monetary incentive and using a phased approach to allow investors to recover some initial investment before CHP is operational
SolarCity	2/11/2015	Distributed Energy Resources	Recommends providing time series load information at distribution circuit level to DER developers
		Grid Modernization	Recommends including power quality, reliability, and resiliency in cost/benefit analysis of DER
UIL Holdings	2/11/2015	Long Term Contracts	Concerned with public policy solutions that rely on using EDC's balance sheets
		Demand Response	Recommends coordinating any change in demand response program with ISO to avoid any confusion that might arise from parallel ISO and state programs
		Procurement	Before using procurement authority, seek legislative clarification to ensure cost recovery language is appropriate in 16a-3b
		Winter Peak Demand	Supports natural gas transmission pipeline as solution to winter peak demand rather than large procurement
		Combined Heat and Power	Recommends examining benefits of having utility plan for CHP deployment in the same way it would deploy other efficiency measures
		Grid Modernization	Any cost/benefit analysis of distributed generation should consider the impact it has on non-participants with shifting costs and the cost to EDCs to invest in infrastructure to support DER

Appendix C: Energy Efficiency

<u>Stakeholder(s)</u>	<u>Date Filed</u>	<u>Main Topic</u>	<u>Issue Addressed</u>
Tom McCormick	1/15/2015	Energy Efficiency	CL&P should not be allowed to increase fixed charge portion of bill
Eversource Energy	2/11/2015	Energy Efficiency	Quantify and describe the economic benefits associated with energy efficiency, including updates from the recent C&LM Plan
		Energy Efficiency	Include discussion of cross-fuel benefits that natural gas efficiency programs provide electric customers
		Energy Efficiency	Provide a more in-depth overview of energy efficiency programs and strategies available in CT
Connecticut Green Bank	2/11/2015	Energy Efficiency	Specific language changes (see comments)

Appendix D: Renewable Energy

<u>Stakeholder(s)</u>	<u>Date Filed</u>	<u>Main Topic</u>	<u>Issue Addressed</u>
Eversource Energy	2/11/2015	Cape Wind	Projected short term surplus and prolonged shortage in 2018 does not consider that Cape Wind was recently terminated
		RECs	REC costs between the states have changed since the 2013 data
RENEW Northeast	2/11/2015	Wind Capacity Factor	Clarify the description of the source for wind capacity factors by adding: "In the case of wind, the NREL's Eastern Wind Dataset, prepared for NREL in 2008 using power production levels from then-commercial wind technology, was used"

Appendix G: Energy Security, Storm Resiliency, and New Technology

<u>Stakeholder(s)</u>	<u>Date Filed</u>	<u>Main Topic</u>	<u>Issue Addressed</u>
ChargePoint	2/11/2015	Electric Vehicles	Recommends establishing a specific goal to meet ZEV MOU goals, including grants for charging stations at multi-family and work properties
		Electric Vehicles	Direct PURA to enable competitive market for EV charging equipment and services
		Electric Vehicles	Recommends supporting investment in smart charging equipment