

August 31, 2015

PROCUREMENT OF RESOURCES PURSUANT TO PUBLIC ACT 15-107

NOTICE OF PROCEEDINGS AND OPPORTUNITY FOR PUBLIC COMMENT

Pursuant to Public Act 15-107, *An Act Concerning Affordable and Reliable Energy*, the Department of Energy and Environmental Protection (DEEP) has initiated the above referenced proceedings to implement the provisions of Public Act 15-107, as outlined in the attached.

By way of this Notice, DEEP will be accepting public comment on the attached document until **September 30, 2015 at 4:00PM** EST or EDT, whichever is applicable. Written comments may be filed electronically on [DEEP's website](#) or submitted to [DEEP.EnergyBureau@ct.gov](mailto:DEEP.EnergyBureau@ct.gov). All materials submitted by stakeholders in this proceeding will be posted on the DEEP website. Any questions can be directed to Debra Morrell at (860) 827-2688 and/or via e-mail at [DEEP.EnergyBureau@ct.gov](mailto:DEEP.EnergyBureau@ct.gov).

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August 31, 2015

DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

# Proceedings for the Procurement of Resources to Provide Affordable and Reliable Electricity Pursuant to Public Act 15-107

## NOTICE OF PROCEEDINGS & OPPORTUNITY FOR PUBLIC COMMENT

PUBLIC ACT 13-303 SECTIONS 6 AND 7 & PUBLIC ACT 15-107 SECTION 1(C) – THREE STATE  
RENEWABLE AND HYDRO PROCUREMENT

PUBLIC ACT 15-107 SECTION 1(B) – 2-20 MW RENEWABLE, DEMAND RESPONSE & ENERGY  
STORAGE PROCUREMENT

PUBLIC ACT 15-107 SECTION 1(D) – NATURAL GAS CAPACITY, LNG & NATURAL GAS  
STORAGE PROCUREMENT

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Pursuant to Section 1 of Public Act 15-107, An Act Concerning Affordable and Reliable Energy (“the Act”), the Department of Energy and Environmental Protection (“DEEP”) is initiating these proceedings to implement the Act. This notice serves to provide stakeholders with: (1) background of the proceedings and legal authorizations and requirements of the Act; (3) a timeline for implementation; and (4) an opportunity to comment on preliminary issues related to implementation.

## I. BACKGROUND OF THE PROCEEDINGS & LEGAL AUTHORITY

Due to limitations in the design of our deregulated electricity market, gas fired power plants—which now account for more than half of the region’s electricity mix—are not contracting for the gas pipeline capacity needed to run reliably in the winter. As a result, the price of natural gas delivered into New England has increased sharply during cold winter months, and this in turn is increasing the risk of blackouts and driving up electricity generation prices and carbon emissions in Connecticut and across the region.<sup>1</sup>

In December 2013, the Governors of the six New England states committed to an energy initiative to support “more thoughtful and strategic investments” in the regional energy mix in a way that reduces energy costs, increases economic development, and improves air quality.<sup>2</sup> In April 2015, the Governors of the New England states re-committed to coordinating and implementing solutions to address the region’s energy challenges.<sup>3</sup> In March 2015, DEEP released its 2014 Integrated Resources Plan for Connecticut (“2014 IRP”), which is a biennial plan that assesses the state’s future electric needs and plans to meet those needs with both demand-side resources and supply-side resources.<sup>4</sup> The 2014 IRP recommended competitive procurement open to a broad range of resources—including gas infrastructure, clean energy generation, and measures that reduce electricity demand—to relieve the region’s natural gas infrastructure constraints, ultimately improving winter reliability and reducing generation costs.

In June 2015, the Connecticut General Assembly passed and Governor Malloy signed into law Public Act 15-107, *An Act Concerning Affordable and Reliable Energy*, which authorizes the Commissioner of DEEP, in consultation with the state’s procurement manager,<sup>5</sup> the Office of Consumer Counsel, and the Attorney General, to issue multiple solicitations—either alone or in

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<sup>1</sup> See DEEP, “2014 Integrated Resources Plan for Connecticut” 22-40, 88-109 (Mar. 17, 2015), available at [http://www.ct.gov/deep/lib/deep/energy/irp/2014\\_irp\\_final.pdf](http://www.ct.gov/deep/lib/deep/energy/irp/2014_irp_final.pdf) (discussing natural gas infrastructure constraints in the New England region and recommending solutions to address the problem) [hereinafter “2014 IRP”].

<sup>2</sup> Governor Dannel P. Malloy, Press Releases, “New England Governors Sign Energy Statement Committing Region to Cooperation on Infrastructure” (Dec. 6, 2013), available at <http://portal.ct.gov/New-England-Governors-Sign-Energy-Statement-Committing-Region-to-Cooperation-on-Infrastructure/>.

<sup>3</sup> Governor Dannel P. Malloy, Press Releases, “New England Governors’ Statement on Regional Cooperation for Energy Infrastructure” (April 23, 2015) available at [http://portal.ct.gov/Departments\\_and\\_Agencies/Office\\_of\\_the\\_Governor/Press\\_Room/Press\\_Releases/2015/04-2015/New\\_England\\_Governors\\_Statement\\_on\\_Regional\\_Cooperation\\_for\\_Energy\\_Infastructure/](http://portal.ct.gov/Departments_and_Agencies/Office_of_the_Governor/Press_Room/Press_Releases/2015/04-2015/New_England_Governors_Statement_on_Regional_Cooperation_for_Energy_Infastructure/).

<sup>4</sup> 2014 IRP, *supra* note 1.

<sup>5</sup> The state’s procurement manager is identified in Conn. Gen. Stat. § 16-2.

coordination with other New England states—for long-term contracts from providers of resources that can provide Connecticut’s reasonable share of the investments New England needs to address the gas infrastructure challenge.

**A. CATEGORIES OF ELIGIBLE RESOURCES**

The Act establishes three categories of resources eligible to compete in solicitations issued pursuant to Sections 1(b), (c), and (d) of the Act.

In any solicitation issued under **Section 1(b)** of the Act, DEEP must solicit proposals for:

- (1) passive demand response measures capable of reducing electric demand by one megawatt or more, either alone or through aggregation; and
- (2) Class I renewable energy sources and Class III sources, as defined in section 16-1 of the general statutes, so long as any such facility has a nameplate capacity rating of more than two megawatts and less than twenty megawatts.

Additionally, Section 1(b) gives DEEP the discretion to solicit proposals for energy storage systems, as defined in section 16-1 of the general statutes, as amended by Section 2 of the Act, that are capable of storing up to twenty megawatts of energy. Proposals submitted under Section 1(b) must reduce electric demand and improve resiliency and grid reliability in Connecticut.

In any solicitation issued under **Section 1(c)** of the Act, DEEP must solicit proposals for:

- (1) Class I renewable energy sources having a nameplate capacity rating of twenty megawatts or more, and any associated transmission; and
- (2) verifiable large-scale hydropower, as defined in section 16-1 of the general statutes, and any associated transmission.

Additionally, Section 1(c) gives DEEP the discretion to solicit proposals for:

- (1) energy storage systems that are capable of storing twenty megawatts or more; and
- (2) Class I renewable energy sources paired with: (A) Class II renewable energy sources, as defined in section 16-1 of the general statutes, or (B) existing hydropower, other than those described in section 16-1 of the general statutes, so long as such pairing: (A) balances such Class I renewable energy source deliveries, and (B) improves the economic viability of the proposal.

In any solicitation issued under **Section 1(d)** of the Act, DEEP must solicit proposals for the following resources, or a combination of any such resources, provided such proposals provide incremental capacity, gas, or storage that has a firm delivery capability to transport natural gas to natural gas-fired generating facilities located in the control area of ISO New England:

- (1) interstate natural gas transportation capacity;
- (2) liquefied natural gas;
- (3) liquefied natural gas storage; and
- (4) natural gas storage.

#### B. EVALUATION CRITERIA

Under Section 1(e) of the Act, the commissioner must consider the following factors when evaluating any proposals submitted in response to a solicitation issued pursuant to the Act, in consultation with the procurement manager, the Office of Consumer Counsel, and the Attorney General:

- (1) improvements to the reliability of the electric system, including during winter peak demand;
- (2) whether the benefits of the proposal outweigh the costs to ratepayers;
- (3) fuel diversity;
- (4) the extent to which the proposal contributes to meeting the requirements to reduce greenhouse gas emissions and improve air quality in accordance with sections 16-245a, 22a-174, and 22a-200a of the general statutes;
- (5) whether the proposal is in the best interest of ratepayers; and
- (6) whether the proposal is aligned with the policy goals outlined in the Integrated Resources Plan, pursuant to section 16a-3a of the general statutes, and the Comprehensive Energy Strategy, pursuant to section 16a-3d of the general statutes, including, but not limited to, environmental impacts.

Additionally, Section 1(e) gives DEEP the discretion to consider the extent to which project proposals provide economic benefits for the state in evaluating the proposals.

Finally, Section 1(e) requires the commissioner to compare the costs and benefits of such proposals relative to the *expected* or *actual* costs and benefits of other resources eligible to respond to the other procurements authorized pursuant to Public Act 15-107.

#### C. PROPOSAL SELECTION

Section 1(g) of the Act authorizes the commissioner to select proposals only if they are in the best interest of electric ratepayers, based on the evaluation criteria in Section 1(e). The total capacity of the resources selected under any and all solicitations issued pursuant to the Act in the aggregate may not exceed 375 million cubic feet per day (cf/d) of natural gas capacity, or the equivalent

megawatts of electricity, electric demand reduction or combination thereof.<sup>6</sup> Section 1(g) of the Act further caps the aggregate amount of eligible electricity or electric demand reduction that can be procured under the Act—pursuant to Sections 1(b) and (c)—at ten per cent of the load distributed by the state's electric distribution companies. DEEP has determined that ten per cent of the load distributed by the state's electric distribution companies is 2,750 GWh per year.

Pursuant to Section 1(g) of the Act, DEEP may direct the electric distribution companies to enter into contracts for any proposals selected by DEEP. Pursuant to Section 1(h) of the Act, any proposal selected by DEEP is subject to the review and approval by the Public Utilities Regulatory Authority ("PURA"). PURA's standard of the review is to determine whether the proposal is cost effective and in the best interest of electric ratepayers.

## II. SEQUENCE OF IMPLEMENTATION

Urgent action is needed to address the state's winter reliability challenges, which are driving significant wholesale electricity costs and emissions, and could potentially lead to rolling blackouts due to lack of available generation. At the same time, the problem is greater than one state alone can solve. Therefore, DEEP is working to expedite procurements under the Act, while coordinating with other New England states where possible and appropriate to ensure that there is a proper allocation of costs and that DEEP's procurement decisions are effectively aligned with investments made elsewhere in the region. This section describes DEEP's intended steps for issuing RFPs under each of the three categories in Section 1 of the Act, including the anticipated sequence of RFP issuance.

### A. LARGE-SCALE CLEAN ENERGY REQUEST FOR PROPOSALS – SECTION 1(C)

DEEP has encouraged the use of joint procurements with other New England states as an ideal means to leverage our individual states' buying power, potentially achieving greater savings for ratepayers while attracting bids from larger, cost-competitive projects. Joint procurements also provide a natural mechanism for states to consider funding necessary transmission investments.<sup>7</sup> To that end, several months before the passage of Public Act 15-107, DEEP began coordinating with the Massachusetts Department of Energy Resources ("DOER") and the utilities from Massachusetts and Rhode Island ("Clean Energy RFP") on a joint Clean Energy RFP to seek bids for grid-scale Class I and large-scale hydropower resources and associated transmission. A draft of the Clean Energy RFP was issued for public comment on February 25, 2015.<sup>8</sup>

DEEP's initial participation in the Clean Energy RFP was to seek bids pursuant to the contracting authority in Sections 6 and 7 of Public Act 13-303, *An Act Concerning Connecticut's Clean Energy Goals*. With the enactment of Public Act 15-107, DEEP amended relevant portions of the draft

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<sup>6</sup> 2014 IRP, *supra* note 1, at 95.

<sup>7</sup> See 2014 IRP, *supra* note 1, at 107-8 (discussing the benefits of coordinating with other states).

<sup>8</sup> "Draft Request for Proposals for Clean Energy and Transmission" (Feb, 25, 2015), *available at* [https://cleanenergyrfpdotcom.files.wordpress.com/2015/02/clean-energy-draft-rfp\\_2-25-151.pdf](https://cleanenergyrfpdotcom.files.wordpress.com/2015/02/clean-energy-draft-rfp_2-25-151.pdf).

Clean Energy RFP in June 2015 to reflect that DEEP will also be seeking bids pursuant to Section 1(c) of Public Act 15-107 through the Clean Energy RFP.<sup>9</sup>

In relevant part, the June 25, 2015 Clean Energy RFP states:

1. DEEP will be seeking bids, pursuant to Public Act 15-107, for up to 2750 GWh per year from Qualified Clean Energy for contract terms of up to 20 years for both Tier 1 Renewables and Hydropower. Qualified Clean Energy is defined in Section 1.2.1 of the Clean Energy RFP as:

“(i) energy produced by a generating resource qualified to produce Class I or New (collectively, “Tier 1”) Renewable Energy Credits (“RECs”) under the Renewable Portfolio Standard (“RPS”) statutes of at least one of the Procuring States (“Tier 1 Qualified Energy”), . . . or (iii) energy produced by a hydro resource (for CT a resource that meets the requirements Conn. Gen. Stat. § 16-1(47))...In Connecticut, up to 2750 GWh per year (quantity under P.A. 15-107) of Class I resources can be balanced by Class II resources and/or hydro resources other than hydro resources defined in 16-1(47) so long as (1) (a) the maximum combined delivery of such resources under a [power purchase agreement] PPA does not exceed the nameplate capacity of the Class I resources being balanced or (b) under a delivery commitment as set forth in Section 2.2.3.3 of this RFP the delivery of the balancing resource does not exceed the Class I resources being delivered and (2) under either a PPA or delivery commitment, the delivery of the balancing energy is to the same Delivery Point as the delivery Class I energy being balanced in the bid.”<sup>10</sup>

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<sup>9</sup> “Draft Request for Proposals for Clean Energy and Transmission” (Jun. 25, 2015), *available at* <https://cleanenergyrfpdotcom.files.wordpress.com/2015/06/clean-energy-rfp-redline-to-2-25.pdf> [hereinafter “Clean Energy RFP”]

<sup>10</sup> Clean Energy RFP, *supra* note 9, at 6. For Connecticut’s purposes under the Clean Energy RFP, a Class I renewable energy source is defined in C.G.S. § 16-1(a)(20) as:

“(A) electricity derived from (i) solar power, (ii) wind power, (iii) a fuel cell, (iv) geothermal, (v) landfill methane gas, anaerobic digestion or other biogas derived from biological sources, (vi) thermal electric direct energy conversion from a certified Class I renewable energy source, (vii) ocean thermal power, (viii) wave or tidal power, (ix) low emission advanced renewable energy conversion technologies, (x) a run-of-the-river hydropower facility that began operation after July 1, 2003, and has a generating capacity of not more than thirty megawatts, provided a facility that applies for certification under this clause after January 1, 2013, shall not be based on a new dam or a dam identified by the commissioner as a candidate for removal, and shall meet applicable state and federal requirements, including applicable site-specific standards for water quality and fish passage, or (xi) a biomass facility that uses sustainable biomass fuel and has an average emission rate of equal to or less than .075 pounds of nitrogen oxides per million BTU of heat input for the previous calendar quarter, except that energy derived from a biomass facility with a capacity of less than five hundred kilowatts that began construction before July 1, 2003, may be considered a Class I renewable energy source, or (B) any electrical generation, including distributed generation, generated from a Class I renewable energy source, provided, on and after January 1, 2014, any megawatt hours of electricity from a renewable energy source described under this subparagraph that are claimed or counted by a load-serving entity, province or state toward compliance with renewable portfolio standards or renewable energy policy goals in another

In seeking bids for Qualified Clean Energy as described above, DEEP is exercising its discretion under Section 1(c) of the Act to entertain bids for Class I resources that are balanced by Class II resources and/or hydropower resources other than hydropower resources defined in C.G.S. § 16-1(47), so long as (1) (a) the maximum combined delivery of such resources under a PPA does not exceed the nameplate capacity of the Class I resources being balanced or (b) under a delivery commitment as set forth in Section 2.2.3.3 of the Clean Energy RFP the delivery of the balancing resource does not exceed the Class I resources being delivered; and (2) under either a PPA or delivery commitment, the delivery of the balancing energy is to the same Delivery Point as the delivery Class I energy being balanced in the bid.<sup>11</sup>

DEEP is exercising its discretion under Section 1(c) of 15-107 to include energy storage systems as eligible resources in the Clean Energy RFP, so long as they are paired with Class I renewable energy sources and function to reduce, in whole or in part, the intermittency of the Class I renewable energy source with which it is paired.<sup>12</sup> DEEP proposes to add the following definition to the Clean Energy RFP:

“Paired with Class I renewable energy source” means co-located and only storing energy produced by the Class I renewable energy source and delivering such stored energy to the energy grid at a later time.

Additionally, DEEP proposes to add the following guidelines around energy storage systems to the Clean Energy RFP:

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province or state, other than the state of Connecticut, shall not be eligible for compliance with the renewable portfolio standards established pursuant to section 16-245a.”

Additionally, large-scale hydropower is defined in C.G.S. § 16-1(a)(47) as:

“any hydropower facility that (A) began operation on or after January 1, 2003, (B) is located in the New England Power Pool Generation Information System geographic eligibility area in accordance with Rule 2.3 of said system or an area abutting the northern boundary of the New England Power Pool Generation Information System geographic eligibility area that is not interconnected with any other control area that is not a part of the New England Power Pool Generation Information System geographic eligibility area, (C) delivers power into such geographic eligibility area, and (D) has a generating capacity of more than thirty megawatts.”

<sup>11</sup> Clean Energy RFP, *supra* note 9, at 6.

<sup>12</sup> Energy storage systems are defined in Conn. Gen. Stat. 16-1(48) as:

“any commercially available technology that is capable of absorbing energy, storing it for a period of time and thereafter dispatching the energy, and that is capable of either: (A) Using mechanical, chemical or thermal processes to store electricity that is generated at one time for use at a later time; (B) storing thermal energy for direct use for heating or cooling at a later time in a manner that avoids the need to use electricity at a later time; (C) using mechanical, chemical or thermal processes to store electricity generated from renewable energy sources for use at a later time; or (D) using mechanical, chemical or thermal processes to capture or harness waste electricity and to store such electricity generated from mechanical processes for delivery at a later time.”

“Ideally, the energy storage system will store energy in off-peak hours and deliver the energy in peak hours. If an energy storage system qualifies for ISO-NE markets other than the energy and REC markets (e.g. ancillary services), there are no restrictions on doing so. However, such other market services are not being purchased in the Clean Energy RFP and will not be directly evaluated as part of the quantitative evaluation process (though such services may be evaluated as part of the qualitative evaluation process).”

Incorporating Section 1(c) into the Clean Energy RFP provides DEEP with the ability to use an existing, multi-state procurement opportunity to seek bids for a significant amount of clean energy resources that can, among other things, help to alleviate the region’s winter reliability challenge. The Clean Energy RFP is now being reviewed by public utility commissions in Massachusetts and Rhode Island as required by the relevant statutes in those states. While that review is pending, DEEP—by this notice—invites stakeholders to provide comment on any issues relevant to Connecticut’s incorporation of Public Act 15-107 into the Clean Energy RFP.

#### **B. SMALL-SCALE CLEAN ENERGY REQUEST FOR PROPOSALS – SECTION 1(B)**

Connecticut is in the process of drafting RFPs for resources eligible under Section 1(b). These RFPs will be released in draft for public comment prior to being issued for bid. At this time, however, DEEP has identified some preliminary issues related to the RFP for resources under Section 1(b), detailed below:

1. To make a comparison of grid connected projects and behind the meter projects possible DEEP would propose that eligible projects may not use net energy or virtual net energy billing. All production from a project will be metered and paid the approved contract rates.
2. Passive demand resources raise a number of special issues for evaluation. Connecticut currently funds passive demand measures through utility-administered Conservation & Load Management Programs. The Section 1(b) RFP will be open to proposals for passive demand resources submitted by the electric utilities, as well as by other parties. Bids for passive demand resources may offer similar measures to those measures funded by the Conservation and Load Management (“C&LM”) plan, issued pursuant to section 16-245m of the general statutes, but threshold criteria for passive demand resources will be needed to prevent “double-dipping,” by ensuring that a bid submitted in this RFP is not also funded by the C&LM plan. Also, passive demand resources must calculate energy savings in a manner consistent with the C&LM programs. Some provision must be made in bid submissions for ensuring measurement and verification during the life of the measure, and should also provide details on how to address dissimilar measure lives or measure lives that are shorter than the contract term.
3. Implementation of passive demand resources shifts fixed electric delivery costs from ratepayers that implement demand response measures to those that do not. Additionally, many of the avoided costs from passive demand resources are realized by the customers that implement the measures as opposed to all ratepayers. This issue has not been a large concern in implementing the C&LM plan because all ratepayers, over time, have access to the measures. However, in this procurement, the measures may not be available to all

ratepayers even though all ratepayers will be supporting the procurement. To address this in the evaluation of passive demand response resources, DEEP is considering the inclusion of the avoided costs of energy generation for the participants as part of the direct benefits and include the fixed electric delivery costs (transmission, Distribution Basic Service, Public Benefits Charge, Non-Bypassable FMCC, and Decoupling Adjustment) that are shifted as a cost in the calculation of indirect benefits.

4. Energy storage presents unique issues in the cross-technology comparison requirement of the Act. Because storage has to buy power on off-peak times and sell power at peak times, the \$/kWh compensation mechanism used for the other technologies may be difficult to apply for storage.
5. Energy storage raises additional issues depending on how it interconnects with the energy grid. Storage connected to the transmission system (operated by ISO-NE) presents a different set of issues than storage connected to the distribution system (operated by the state distribution companies). Preliminarily, DEEP proposes to include only storage connected to the transmission system in a procurement under Section 1(b). However, DEEP welcomes comments on issues that would need to be considered in determining whether DEEP should exercise its discretion to include storage systems connected to the distribution system or located behind customer meters in an RFP under Section 1(b). Such issues include whether and how storage systems funded through a Section 1(b) procurement could be operated by the distribution companies, the establishment of functional and technical requirements for distribution-connected storage systems; and approaches to strategically locating storage systems that maximize the benefit to the system in the context of a competitive selection process.
6. DEEP intends to require proposals to provide third party verification of passive demand resource savings and provide any costs for such verification to be included in any proposal.

DEEP welcomes comment on these and other issues that stakeholders may want to identify related to Section 1(b) procurement.

### C. NATURAL GAS RESOURCES REQUEST FOR PROPOSALS - SECTION 1(D)

DEEP is working on issues related to procurement for natural gas resources, and is evaluating options for coordinating the solicitation of natural gas resources with other states who have legal authority and interest in doing so, consistent with the strategic approach set forth by the New England Governors. DEEP expects to provide an opportunity for public comment on a request for proposal for natural gas resources this fall, with more details and questions to consider.

## III. EVALUATION & COMPARISON

One of the most important issues, which will affect all of the procurements conducted pursuant to the Act, is how the CT Evaluation Team (including DEEP, the Attorney General's Office, the Office of Consumer Counsel the Procurement manager and any consultants retained by DEEP) will compare the costs and benefits of proposals eligible under one category of the Act against proposals eligible under other categories of the Act. As noted above, Section 1(e) the Connecticut

Evaluation Team requires DEEP to compare the costs and benefits of proposals received relative to the *expected* or *actual* costs and benefits of other resources eligible to respond to the other procurements authorized pursuant to Sections 1(b) and 1(d) of the Act. Significantly, DEEP intends to apply consistent evaluation criteria to all proposals submitted in response to any solicitation issued pursuant to the Act, including proposals that may be submitted in response to the portion of the Clean Energy RFP solicitation.

Note that because the evaluation criteria under Public Act 15-107 is prescribed by statute and Public Act 13-303 gives DEEP discretion with evaluation criteria, DEEP intends to apply consistent evaluation criteria to proposals in the Clean Energy RFP considered for contracts under either Section 1(c) of Public Act 15-107 or Section 6 and 7 of Public Act 13-303.<sup>13</sup>

DEEP proposes to evaluate all bids submitted to RFPs pursuant to Public Act 15-107 as detailed below. Note that these evaluation criteria also appear in Section 2.3 of the Clean Energy RFP draft dated June 25, 2015. After considering any public comment received, DEEP will incorporate the text of subsections A and B, below, into an Appendix to the Clean Energy RFP, as detailed on page 26 of the June 25, 2015 draft. The evaluation process described in subsections A and B, below, will be applied to all procurements issued under the Act, as well as to bids evaluated pursuant to sections 6 & 7 of Public Act 13-303 through the Clean Energy RFP.

#### A. PROPOSED EVALUATION CRITERIA

Proposals submitted in response to RFPs issued pursuant to 15-107 will be evaluated based on a two-stage process. The first stage of evaluation consists of a review of whether the proposals satisfy specified eligibility, threshold and other minimum requirements. Those specific requirements will be defined in the individual RFPs.

Proposals that meet the requirements of the Stage One review will be subject to a quantitative and qualitative evaluation in Stage Two. The results of the quantitative and qualitative analysis will be a relative ranking and scoring of all proposals.

Stage Two will be based on a 100-point scale. Proposals will be scored with up to 75 points for quantitative factors. The remaining 25 points will be scored for qualitative factors. The first step of Stage Two will be a screening process to determine whether one or more bids are not economically competitive when compared to other bids. If the consensus view of the Connecticut Evaluation Team is that one or more bids are not economically competitive enough based upon an objective benchmark<sup>14</sup> to be selected irrespective of qualitative evaluation results or indirect benefits, then such bids will not proceed to the quantitative evaluation. Bids that proceed to the

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<sup>13</sup> The cross-resource comparison required pursuant to Public Act 15-107(e) will not impact the quantity of resources procured under Section 6 and 7 of Public Act 13-303.

<sup>14</sup> Given the diversity of potential bids, it is not possible to pre-define an objective benchmark that can be used in determining which bids will proceed to the quantitative evaluation process.

quantitative evaluation will be evaluated based on a combination of their indirect economic benefits and direct contract price benefits, where applicable.

- **INDIRECT ECONOMIC BENEFITS.** The quantitative evaluation process will include an evaluation of the indirect economic benefits to customers using the outputs from an electric market simulation model (e.g. Ventyx PROMOD). The indirect economic benefits will be measured by comparing the model outputs with the proposed project, against a reference case. Benefits to be considered are based on a combination of the change in locational marginal price (LMP) and the change in production cost, including consideration of net imports and exports, and the impact of those changes to customers in Connecticut. To test the robustness of the results, indirect benefits may also include the economic impact based upon changes in LMPs under alternative scenarios reflecting stressed electric and gas system conditions. Alternative scenarios may also be developed in which a proposed project is compared against a reference case that includes one or more of the other proposed projects. For example, the indirect benefits of a Project A could be computed as the incremental benefits ascribable to Project A, when it is assumed that Project B is in the reference case. The reference case will be based on the 2015 ISO New England Capacity, Energy, Load and Transmission (“CELT”) report; however, DEEP reserves the right to incorporate modifications to the reference case in one or more alternative scenarios to quantify the economic impact of one or more proposed projects. At DEEP’s option, the evaluation may use representative projects to estimate the indirect benefits of projects that are bid that are similar in technology type, size and delivery location.
- **DIRECT CONTRACT BENEFITS.** Direct contract price benefits will be evaluated using a mark-to-market comparison of the purchase price of any Incremental Qualified Clean Energy and/or RECs under a PPA (including any associated transmission costs under a Rate Schedule or Tariff and Service Agreement) to their projected market prices at the delivery point with the project in-service. For gas projects, any revenues recovered from the release or sale of gas capacity, LNG, and/or gas storage will be included as a direct contract benefit, including any revenue credits available from a pipeline’s sale of interruptible transportation.
- **QUANTITATIVE EVALUATION METRICS** The quantitative evaluation will use a multi-year net present value analysis to preliminarily rank all projects that pass the initial screening. For purposes of computing the net present value, a discount factor of 7% will be used. The metric used for ranking bids will be the benefit to cost ratios of projects, based on the combination of direct and indirect benefits divided by the payments required by the project.

The Qualifying Clean Energy production profile provided by the Eligible Bidder will be evaluated for reasonableness. The Connecticut Evaluation Team will also evaluate the reasonableness of transmission cost estimates associated with any proposal involving cost-of-service ratemaking or

modified cost-of-service ratemaking. It is the bidder's responsibility to support the basis for all estimates and underlying assumptions. The Evaluation Team reserves the right to modify any bidder production profile or estimated cost (i.e., use a different profile or estimated cost from that provided by the bidder) or any other estimate in order to produce a reasonable and appropriate evaluation.

The qualitative evaluation will consist of the factors mandated by the Act as well as factors deemed important by DEEP. The qualitative factors that will be assessed are summarized as follows:

- (1) Project viability,
- (2) Reductions in greenhouse gas emissions
- (3) Consistency with the policy goals outlined in the Connecticut Comprehensive Energy Strategy, including:
  - a. Base load capacity
  - b. Peak load shaving
  - c. Promotion of wind, solar and other renewable and low carbon energy technologies
- (4) Economic development benefits in Connecticut
- (5) Installed Capacity and Local sourcing requirements
- (6) Improvements to reliability in general and improvements to winter reliability specifically
- (7) Consistency with the policy goals outlines in the Connecticut Integrated Resource Plan
- (8) Contributing to fuel diversity
- (9) Benefits to the Forward Capacity Market
- (10) Price Risk

In addition to the evaluation criteria listed above, please note that DEEP reserves the right to include additional evaluation criteria that are specific to the eligibility, threshold, and other requirements of resources solicited in any RFP at the time of the RFP's issuance.

## **B. PROPOSAL COMPARISON & PROXY VALUE DEVELOPMENT**

Ideally, RFPs for all technologies will be drafted and issued in a manner so all proposals can be evaluated and compared simultaneously in advance of selection.<sup>15</sup> However, DEEP intends to

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<sup>15</sup> The extended timeline built into the Clean Energy RFP to allow the Evaluation Consultant to develop the production cost model provides some time to possibly allow Connecticut to develop RFPs for Sections 1(b) and 1(d) of the Act and be able to evaluate the proposals simultaneously.

proceed with the Clean Energy RFP regardless of whether or not RFPs for all eligible resources under the Act have been issued, taking advantage of the opportunity to participate in an existing multi-state clean energy RFP, while utilizing the flexibility provided in Section 1(e) of the Act provides to compare proposals to the *expected* costs and benefits of resources eligible under Sections 1(b) and 1(d) of the Act. In the event that proposals received pursuant to Section 1(c) of the Act have to be compared to the expected costs and benefits of resources eligible under Sections 1(b) and 1(d) of the Act, the Connecticut Selection Team will develop proxy values for other eligible technologies. The proxy value will be scored on both quantitative and qualitative measures.

Proxy values for natural gas resources will be determined that reflect the change in the reliability and cost of electric energy attributable to the anticipated change in the availability and price of delivered natural gas for power generation in New England. The impact will be measured through the use of an electric market simulation model which will be run with base case natural gas pricing and availability, and one or more cases that include the expansion of pipeline capacity, and/or LNG, as well as other potential gas storage services.

To develop a proxy value for resources eligible under Section 1(b), DEEP will run proxy values of various sized projects to determine a representative \$/kWh cost and quantitative and qualitative benefits provided.

#### IV. REQUEST FOR COMMENT

DEEP is seeking public comment on implementation of the Act, and particularly on the questions and topics described above and outlined, for convenience, below.

1. Comment on DEEP's approach to incorporating Public Act 15-107 into the Clean Energy RFP detailed in section II.A, above.
2. Comment on the proposed evaluation criteria outlined in section III.A, above, including what factors should be included within each of the listed criteria.
3. Comment on the proposed approach to development of proxy values in section III.B, above.
4. Comment on DEEP's approach to addressing the cost-shifting issues discussed in section IV.A.1, above, that are raised by procuring passive demand resources.
5. How should electric storage be compensated so as to ensure that power is delivered to the electric grid during peak summer and winter periods when prices are highest, the grid is stressed, and there is the highest potential for emission avoidance?
6. How should gas storage be compensated so as to ensure that natural gas is deliverable to gas-fired generators in Connecticut and elsewhere in New England during the peak heating season, December through February, a time when the pipeline and storage network in New England is stressed?
7. How should electric storage systems connected to the distribution system be managed? Should electric storage systems be operated by the distribution companies? What

functional and technical operating characteristics should DEEP be seeking for distributed electric storage systems, and why? How should the RFP process strategically locate electric storage systems so as to maximize the benefit to New England's electric grid in the context of a competitive selection process?

Comments may be filed electronically on [DEEP's website](#) or submitted to [DEEP.EnergyBureau@ct.gov](mailto:DEEP.EnergyBureau@ct.gov) on or before **September 30, 2015** by 4:00 p.m. EST or EDT, whichever is applicable. All materials submitted by stakeholders in this proceeding will be posted on the DEEP website. Any questions can be directed to Debra Morrell at (860) 827-2688 and/or via e-mail at [DEEP.EnergyBureau@ct.gov](mailto:DEEP.EnergyBureau@ct.gov).

DEEP will provide additional opportunities for public comment when draft RFPs are issued under Sections 1(b) and 1(d) of the Act.

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action and Equal Opportunity Employer that is committed to complying with the Americans with Disabilities Act. To request an accommodation contact us at (860) 418-5910 or [deep.accommodations@ct.gov](mailto:deep.accommodations@ct.gov).