



**REQUEST FOR PROPOSALS  
("RFP")**

**FOR**

**DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE  
OF SOLAR GENERATING FACILITIES (SGF) AT THE  
ELLINGTON, SHELTON, AND WATERBURY LANDFILLS  
(RFP Number 13-EN-001)**

**PROPOSAL DUE DATE: NOVEMBER 15, 2012**

**Connecticut Resources Recovery Authority  
100 Constitution Plaza, 6<sup>th</sup> Floor  
Hartford, Connecticut 06103-1722**

**September 17, 2012**

**REQUEST FOR PROPOSALS**  
**For**  
**DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE OF**  
**SOLAR GENERATING FACILITIES (SGF)**  
**AT THE ELLINGTON, SHELTON, AND WATERBURY LANDFILLS**

**(RFP Number FY13-EN-001)**

Connecticut Resources Recovery Authority  
100 Constitution Plaza, 6<sup>th</sup> Floor  
Hartford, Connecticut 06103-1722

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ELLINGTON, SHELTON, AND WATERBURY LANDFILLS**

**SECTION 1**

**NOTICE TO CONTRACTORS  
REQUEST FOR PROPOSALS**



# CONNECTICUT RESOURCES RECOVERY AUTHORITY

## NOTICE TO FIRMS REQUEST FOR PROPOSAL

CRRA is a quasi-public entity, a body politic and corporate, created pursuant to C.G.S. Chapter 446e, Section 22a-261, as a public instrumentality and political subdivision of the State of Connecticut (the "State"). CRRA has the responsibility for developing and implementing environmentally sound solutions and best practices for solid waste disposal and recycling on behalf of, and in the best interests of the municipalities and residents of the State of Connecticut. CRRA oversees a statewide network of three regional waste-to-energy systems, a single-stream recycling facility, five transfer stations, and five landfills.

CRRA is seeking proposals from qualified solar developers to own, design, permit, install, operate and maintain solar photovoltaic equipment under an agreement with CRRA for a minimum period of 15 years (the "Services") on any or all of three selected CRRA properties located in Ellington, Shelton and Waterbury, Connecticut (collectively "the Sites"):

- The Ellington Landfill, located at 217 Sadds Mill Road (Route 140) in Ellington, Connecticut 06029;
- The Shelton Landfill, located at 866 River Road (Route 110) in Shelton, Connecticut 06484;
- The Waterbury Bulky Waste Landfill, located at the intersection of Highland Avenue and Highview Road in Waterbury, Connecticut 06708.

Request for Proposal ("RFP") package documents may be obtained on the World Wide Web at <http://www.crra.org> under the "Business Opportunities" page beginning **Monday, September 17, 2012**. The documents will also be available Monday through Friday, from 8:30 a.m. to 5:00 p.m. at the offices of CRRA, 100 Constitution Plaza, 6<sup>th</sup> Floor, Hartford, Connecticut 06103-1722, beginning on the same date. Anyone intending to pick up the documents at CRRA's offices must contact Roger Guzowski [(860) 757-7703] at least 24 hours in advance. There is a charge of \$25.00 for anyone picking up the documents at CRRA's office. Payment should be made by check payable to "Connecticut Resources Recovery Authority."

There will be a **mandatory pre-bid site tour** for prospective bidders at each of the Landfills at the following locations and times:

- Ellington Landfill – 9am, Thursday October 11, 2012;
- Shelton Landfill – 11:00 am, Thursday October 11, 2012;
- Waterbury Landfill – 1:00 pm, Thursday October 11, 2012.

All bidders must attend the mandatory site tour for any of the Landfills for which they intend to submit a bid.

Any prospective bidder intending to participate in the pre-bid site tours must submit a Notice of Interest form (**Section 3** of the RFB Package Documents) to Roger Guzowski (via email at [rguzowski@crra.org](mailto:rguzowski@crra.org) or fax at (860) 757-7742) by 3pm, Wednesday, October 10, 2012.

**Sealed Proposals must be received at the offices of CRRA, 100 Constitution Plaza, 6<sup>th</sup> Floor, Hartford, Connecticut 06103-1722 no later than 3:00 p.m., Thursday, November 15, 2012.** Proposals received after the time and date set forth above shall be rejected. All Proposals shall remain open for one hundred twenty (120) days after the proposal due date.

Proposals will be opened at CRRA's convenience on or after the SOQ due date. Note that all information submitted by a proposer is subject to the Freedom of Information Act.

CRRA is an Equal Opportunity and Affirmative Action employer and does not discriminate in its hiring, employment, contracting, or business practices. CRRA is committed to complying with the Americans with Disability Act of 1990 (ADA) and does not discriminate on the basis of disability in admission to, access to, or operation of its programs, services, or activities.

All questions regarding this RFP must be submitted **in writing** to Roger Guzowski, Contract and Procurement Manager, by e-mail ([rguzowski@crra.org](mailto:rguzowski@crra.org)) by fax (860) 757-7742), or by correspondence (CRRA, 100 Constitution Plaza, 6<sup>th</sup> Floor, Hartford, Connecticut 06103) no later than **Thursday, November 1, 2012**. Any firm considering submitting a statement of qualifications is prohibited from having any communications about this RFP or any resulting contract with any CRRA staff member or CRRA Board member except Mr. Guzowski.

**REQUEST FOR PROPOSALS  
FOR  
DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE  
OF SOLAR GENERATING FACILITIES (SGF) AT THE  
ELLINGTON, SHELTON, AND WATERBURY LANDFILLS**

**SECTION 2**

**INSTRUCTIONS TO PROPOSERS**

# INSTRUCTIONS TO PROPOSERS

## DESIGN, INSTALLATION, OPERATION AND MAINTENANCE OF SOLAR GENERATING FACILITIES (SGF) AT THE ELLINGTON, SHELTON, AND WATERBURY LANDFILLS (RFP Number 13-EN-001)

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### 1. Introduction and Overview

CRRA is a quasi-public entity, a body politic and corporate, created pursuant to C.G.S. Chapter 446e, Section 22a-261, as a public instrumentality and political subdivision of the State of Connecticut (the "State"). CRRA has the responsibility for developing and implementing environmentally sound solutions and best practices for solid waste disposal and recycling on behalf of, and in the best interests of the municipalities and residents of the State of Connecticut.

CRRA is seeking proposals from qualified contractors for the design, installation, operation, and maintenance of a Solar Generating Facility (SGF) to be installed on three CRRA properties located in the towns of Ellington, Shelton and Waterbury. The SGF will be sized, permitted, designed, constructed, owned, operated and decommissioned by qualified solar energy developers (herein referred to as the "Proponents"). CRRA is seeking the highest annual host payment, which provides the best overall value to CRRA. The CRRA will evaluate proposals with consideration to the financial benefits received from the pro-

posed annual host payment per acre as well as the Proponent's qualifications, experience, and financial capabilities as evaluated by CRRA. The selected Proponent will be responsible for obtaining federal or state rebates, grants, tax credits or other types of incentives that may be available and will retain the ownership of such incentives.

The duration of the final Agreement is anticipated to be at least 15 years consistent with the length of the zero-emission renewable energy credit (ZRECs) contracts facilitated by the Connecticut Department of Energy and Environmental Protection (CTDEEP). The CRRA would consider longer agreement terms from Proponents, if deemed beneficial to CRRA.

It is the CRRA's expectation that this project will take advantage of any available sources of federal and state funding for renewable energy projects, including ZRECs, tax credits, or any other rebate, grant or other allowable government-sponsored incentives in order to reduce the overall cost of the SGF development projects, but the final choice to do so, and responsibility for doing so will be that of the developer.

The CRRA properties proposed for SGF development include the following and are referred to herein as the "CRRA Properties":

- The Ellington Landfill, located at 217 Sadds Mill Road (Route 140) in Ellington, Connecticut 06029;
- The Shelton Landfill, located at 866 River Road (Route 110) in Shelton, Connecticut 06484; and
- The Waterbury Bulky Waste Landfill, located at the intersection of Highland Avenue and Highview Road in Waterbury, Connecticut 06708.

A due diligence report for SGF development was completed by TRC Engineers ("TRC") for each of the CRRA Properties and is provided herein these RFP Package Documents as Section 3.2 of the Information for Proposers. This report summarizes the preliminary findings pertaining to the SGF interconnection requirements, landfill engineering design and potential permitting pathway. The preliminary due diligence report serves as a guidance document in facilitating an accurate response from the Proponents. The Proponents may utilize this information as a guide in the development of their proposal, but will be responsible for any additional due diligence necessary to submit a complete proposal to the CRRA. The selected Proponent will submit an interconnection application to United Illuminating (UI) or Connecticut Light and Power (CL&P) and deliver energy produced by the SGF to a suitable electrical grid interconnection point. The preliminary due diligence report includes suggested points of interconnection and utilization of existing infrastructure and equipment. If deemed necessary by UI or CL&P, the selected Proponent would be responsible for an interconnection study and would incur the subsequent costs associated with electrical grid interconnection, including any required upgrades. The preliminary due diligence report also provides guidance associated with SGF on landfill engineering design and the permitting pathway, for which the Proponent will also be responsible.

## 2. Request for Proposals

### 2.1 Overview of RFP Process

Generally, CRRA's solicitation process for the selection of an entity to Design, Install, and Operate Solar Generating Facilities at the Ellington, Shelton, and Waterbury Landfills is comprised of the six (6) milestones as described below. **The issuance of this RFP is Milestone 1 of the 6 milestones.** It is important to note that the entire solicitation process will not be considered complete until a definitive Agreement between CRRA and the approved Proposer has been executed, if such occurs.

- (a) Milestone 1 - Request for Proposals ("RFP"). On September 17, 2012 CRRA issued this RFP.
- (b) Milestone 2 – CRRA to Evaluate Submitted Proposals. After the November 15, 2012 receipt of proposals, applicable CRRA staff will evaluate the proposals.
- (c) Milestone 3 – CRRA follow-up interviews with Proposers. Based on CRRA's evaluation of the Proposals received, CRRA may invite one or more Proposers to discuss their proposal or respond to questions from CRRA in order to help CRRA evaluate their proposal.
- (d) Milestone 4 – Selection and Contract Negotiations. A written notice will be sent to the Preferred Proposer(s) notifying it that it has been selected for negotiation of the final details of a contract
- (e) Milestone 5 - CRRA Board of Directors Approval. Upon such time as an acceptable definitive Agreement has been reached with the preferred Proposer, CRRA management will make its selection recommendation to CRRA's Board of Directors for approval.
- (f) Milestone 6 - Notice of Award and Execution of the Agreement. Upon approval of the preferred Proposer by the Board of Directors, CRRA will issue to the approved Proposer a Notice of Award. Two execution copies of the definitive Agreement, along with other documents, will accompany the Notice of Award. Upon execution of the Agreement by the selected Proposer and CRRA, the solicitation process will be deemed complete and the solicitation process closed.

During the entire solicitation process CRRA retains the right to:

- (a) Supplement, amend, or otherwise modify or cancel the solicitation process with or without substitution of another solicitation;
- (b) Issue additional or subsequent solicitations;
- (c) Investigate the qualifications of any entity under consideration (including subcontractors and parties otherwise related to a proposing entity);

- (d) Clarify the information provided pursuant to this RFP;
- (e) Request additional evidence or documentation to support the information included in any submittal;
- (f) Appoint an evaluation committee to review submittals and use the assistance of outside professionals in submittal evaluation;
- (g) Approve or disapprove of particular subcontractors, joint venture partners, or other proposed team members;
- (h) Interview and hold discussions with any entity at any time after receipt of a submittal and before the signing of a legally binding agreement;
- (i) Enter into a final agreement with terms that vary from the terms set forth in CRRA's solicitation documents;
- (j) Visit and examine any of the facilities referenced in any submittal and others owned, operated, and/or built by a Proposer to observe and view the operations at such facilities;
- (k) Conduct contract discussions with one or more submitting entities; and
- (l) Reject any and all submittals, or parts thereof, and/or to waive any informality or informalities in any proposal, if such rejection or waiver is deemed in the best interests of CRRA.
- (m) If agreement(s) are to be awarded as a result of this RFP, CRRA reserves the right to award agreements separately for the Work herein at each of the landfill sites, or any combination thereof.

## **2.2 RFP Projected Timeline**

The following is the projected timeline for the RFP process:

<b>ITEM</b>	<b>DATE</b>
RFP Documents Available	Monday, September 17, 2012
Proponent Submittal of Notice of Interest Form	3pm, Wednesday, October 10, 2012
Mandatory Proposal Meeting and Site Visit Ellington Landfill	9am Thursday, October 11, 2012
Mandatory Proposal Meeting and Site Visit Shelton Landfill	11am Thursday, October 11, 2012
Mandatory Proposal Meeting and Site Visit Waterbury Landfill	1pm Thursday, October 11, 2012
Deadline for Written Questions	Thursday, November 1, 2012
Proposals Due	Thursday, November 15, 2012

CRRA reserves the right at its sole and absolute discretion to extend any of the actual or proposed dates in the above Projected Timeline and further reserves the right to reject any and all proposals and republish this RFP. CRRA also reserves the right at its sole and absolute discretion to terminate this RFP process at any time prior to the execution of any Agreement.

### 3. Definitions

As used in this Instructions To Proposers and in other Contract Documents (as defined herein), the following terms shall have the meanings as set forth below:

- (a) **Addenda:** Written or graphic documents issued prior to the proposal due date that clarify, correct or change any or all of the Contract Documents.
- (b) **Contract Documents:**
  - (1) Agreement for the Design, Installation, Operation, and Maintenance of Solar Generating Facility(ies) at the [NAME OF LANDFILL(S) FOR WHICH CONTRACTOR SELECTED] Landfill(s) (the “Agreement”);
  - (2) RFP Package Documents (defined in (h) below)
  - (3) Addenda;
  - (4) Contractor’s Proposal (including all documentation attached to or accompanying such Proposal, all other documentation submitted in connection with such Proposal, and all post-proposal documentation submitted prior to the Notice Of Award);
  - (5) Notice Of Award; and
  - (6) Any written amendments to the Agreement.
- (c) **Landfills:** Collectively, the Ellington Landfill, the Shelton Landfill, and the Waterbury Landfill.
- (d) **Laws And Regulations:** Any and all applicable laws, rules, regulations, ordinances, codes, orders and permits of any and all federal, state and local governmental and quasi-governmental bodies, agencies, authorities and courts having jurisdiction.
- (e) **Notice Of Award:** Written notification from CRRA to an apparent successful Proposer that states that CRRA has accepted such Proposer’s proposal and sets forth the remaining conditions that must be fulfilled by such Proposer before CRRA executes the Agreement.
- (f) **Project:** The provision by the successful Proposer(s) of design, installation, operation, and maintenance of solar generating facilities at Connecticut Resources Recovery Authority Landfills designated herein during the period specified in accordance with the Contract Documents.



(g) **Properties:** Collectively, the certain parcel of real property owned by CRRA located at 217 Sadds Mill Road (Route 140) in Ellington, Connecticut, upon which property CRRA formerly operated and now provides post-closure monitoring and maintenance services for a certain sanitary landfill known as the Ellington Landfill (the “Ellington Landfill”); the certain parcel of real property owned by CRRA located at 866 River Road (Route 110) in Shelton Connecticut, upon which property CRRA formerly operated and now provides post-closure monitoring and maintenance services for a certain sanitary landfill known as the Shelton Landfill (the “Shelton Landfill”); and the certain parcel of real property owned by CRRA located at 109 Nichols Drive (the intersection of Highland Avenue and Highview Street) in Waterbury, Connecticut, upon which property CRRA formerly operated and now provides post-closure monitoring and maintenance series for operates a certain sanitary landfill known as the Waterbury Landfill (the “Waterbury Landfill”);

(h) **RFP Package Documents:**

1. Notice To Contractors – Request For Proposals
2. Instructions To Proposers
3. Information For Proposers
  - 3.1. Property Description Information
  - 3.2. Due Dilligence Report
4. Notice of Interest Form
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  - 5.9. Subcontractor Identification Form
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  - 5.11. Affidavit Of Third Party Fees
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  - 5.13. Business Disclosure Form
  - 5.14. SEEC Form 11, Notice To Executive Branch State Contractors And Prospective State Contractors Of Campaign Contribution And Solicitation Ban
  - 5.15. Business Exception Form
6. Sample of Notices

- 6.1. Sample of Selection to Begin Contract Negotiations Notice
- 6.2. Sample of Notice of Award
- 7. Form of Agreement For Design, Installation, Operation, And Maintenance Of Solar Generating Facility At Ellington, Shelton, and Waterbury Landfills
  - Exhibit A: Definitions
  - Exhibit B: Scope of Work
  - Exhibit C: Compensation Schedule
  - Exhibit D: Decommissioning and Decommissioning Plan
  - Exhibit E: Interconnection Diagrams
  - Exhibit F: Property Description and Drawings
  - Exhibit G: CRRA’s Travel And Expense Reporting Policy And Procedure
  - Exhibit H: SEEC Form 11, Notice To Executive Branch State Contractors And Prospective State Contractors Of Campaign Contribution And Solicitation Ban
  - Exhibit I: Affidavit of Third Party Fees [as submitted in proposal]
  - Exhibit J: Affidavit Concerning Nondiscrimination [as submitted in proposal]
  - Exhibit K: Affidavit Concerning Consulting Fees [to be executed by successful Proposer]
  - Exhibit L: Contractor’s Certification Concerning Gifts [to be executed by successful Proposer]
  - Exhibit M: CRRA President’s Certification Concerning Gifts

- (i) **Sites:** Those areas of the Properties upon which any of the Work is to be performed, furnished and completed by the successful Proposer in accordance with the Contract Documents.

Terms used, but not defined, in this Instructions To Proposers shall have the same respective meanings assigned to such terms in the Agreement.

#### 4. **Communications With CRRA Staff and Board Members**

Except as otherwise authorized by this Instructions To Proposers, during the period while the RFP process is active (i.e., from the date CRRA issues the RFP until the date the successful Proposer accepts the Notice Of Award), contractors contemplating or preparing proposals are prohibited from contacting CRRA staff or CRRA Board of Director members in an ex parte manner to discuss the RFP submission process. A contractor’s RFP submission shall be rejected if any of the foregoing ex parte communications take place.

## 5. Scope Of Work

### 5.1 General

CRRA is requesting proposals from qualified Proponents to do the following work Work, which will lead to the installation of a SGF on the CRRA properties. Work is to include, but not limited to, planning, permitting, design, construction, interconnection, commissioning, operation, maintenance, SGF energy production monitoring and decommissioning. As the property owner, the CRRA will continue to perform landfill maintenance and ground-water and landfill gas monitoring. As part of SGF development, construction operation and decommissioning, the selected Proponent will preserve site features on each CRRA property, which includes landfill caps, gas extraction equipment and monitoring wells.

The SGF is to include solar arrays and all necessary associated inverters, wiring, metering and controls to successfully install and operate the SGF on each CRRA property. The Proponent will provide a SGF operation and maintenance plan, which addresses vegetation control in the vicinity of the solar arrays and maintenance of the existing vegetation as part of the existing landfill capping system. The Proponent will work in partnership with the CRRA to maintain the landfill integrity.

The SGFs are to be ground mounted and installed in such a manner as to not penetrate the landfill cap and mitigation systems. Potential SGF development areas are provided within the preliminary due diligence report, although the Proponent is encouraged to propose additional and alternative areas. The Proponent is to identify and describe the size of the systems proposed, mounting systems, identify the type of panels and inverters and list the manufacturer's warranties on that equipment.

Proposers may submit proposals to provide the requested Work at any or all of the Landfills. CRRA may select a Proposer to provide the requested Work at any or all of the Landfills for which Proposer has requested consideration in its proposal.

The Work for each of the Landfills is more particularly described in the enclosed Form of the Agreement (Section 7 of the RFP Package Documents) and **Exhibits A through Exhibits F** thereto. The final Agreement and Exhibits will be subject to the terms of section 11.1 herein this Instructions to Proposers and will further be modified to pertain only to the landfill or landfills at which a successful proposer is awarded an Agreement.

### 5.2 System Design and Permitting

As part of the Proponent response, the selected Proponent will be responsible for providing conceptual drawings showing the general placement of solar panels, inverters and access roads. The selected Proponent will provide complete engineering design for the SGF installation, including all required engineering design details and all necessary permitting to complete construction. These drawings and diagrams will be incorporated into Exhibit E of the Agreement.

### 5.3 Real Time Monitoring

The Proponent will propose a real time monitoring system to track the energy production of the SGF as detailed in Exhibit B of the Form of the Agreement (Section 7B of the RFP Package Documents). The real time monitoring system will be maintained and operated by the Proponent and will provide CRRA access to the SGF energy production data through a web-based data interface. The system will track instantaneous, daily, monthly, annual and total power and energy production of the SGF.

#### **5.4 Interconnection and Metering**

As detailed in the Form of the Agreement (Section 7 of the RFP Package Documents), the selected Proponent will be responsible for interconnection and metering. The SGF interconnection will be subject to all requirements of United Illuminating (UI) and Connecticut Light and Power (CL&P). It is the Proponent's responsibility to identify and execute necessary application, interconnection sites, contracts, etc.

### **6. Availability of RFP Package Documents**

Complete sets of the RFP Package Documents may be obtained on the World Wide Web beginning Monday, September 17, 2012 at:

<http://www.crra.org> under the “Business Opportunities” page; select the “RFP: Design, Installation, and Operation Of Solar Generating Facilities At The Ellington, Shelton, and Waterbury Landfills” link.

The RFP Package Documents are in PDF format. All of the forms included in the documents are also available for downloading in Microsoft Word format at the same place on CRRA’s web site where the PDF of the RFP is located. Prospective Proposers can fill the forms out by typing the answers on their computer’s keyboard. The forms can then be printed and submitted with the proposal. CRRA encourages firms to make use of the downloaded Word forms.

The RFP Package Documents are also available Monday through Friday, from 8:30 a.m. to 5:00 p.m. at CRRA’s offices, 100 Constitution Plaza, 6<sup>th</sup> Floor, Hartford, Connecticut 06103-1722, beginning on the same date. Anyone intending to pick up the documents at CRRA’s offices must contact Roger Guzowski [(860) 757-7703] at least 24 hours in advance.

### **7. Mandatory Pre-Proposal Conference And Site Tour**

**There will be a mandatory pre-proposal site tour at each of the Landfills as Follows:  
There will also be site tours at each of the Landfills as follows:**

- Ellington Landfill – 9am, Thursday October 11, 2012;
- Shelton Landfill – 11:00 am, Thursday October 11, 2012;

- Waterbury Landfill – 1:00 pm, Thursday October 11, 2012.

All Proposers must attend the mandatory site tour for any of the Landfills for which they intend to submit a proposal.

Any prospective Proposer intending to participate in the pre-proposal site tours must submit a Notice of Interest form (**Section 4** of the RFP Package Documents) to Roger Guzowski (via email at [rguzowski@crra.org](mailto:rguzowski@crra.org) or fax at (860) 757-7742) by 3pm, Wednesday, October 10, 2012. Except as otherwise authorized by this Instructions To Proposers, Proposers are expressly prohibited from contacting any CRRA personnel regarding this proposal solicitation.

Proposals submitted by a Proposer who did not attend the mandatory site tour for that land-fill shall be rejected. Alternate times for visiting the Landfills will not be allowed.

## 8. Addenda And Interpretations

CRRA may issue Addenda to the RFP Package Documents that shall, upon issuance, become part of this package and binding upon all potential or actual Proposers for the Work. Such Addenda may be issued in response to requests for interpretation or clarification received from potential Proposers. Any request for interpretation or clarification of any documents included in the RFP Package Documents must be **submitted in writing to Roger Guzowski, by e-mail ([rguzowski@crra.org](mailto:rguzowski@crra.org)), by fax ((860) 757-7742), or by correspondence (CRRA, 100 Constitution Plaza, 6<sup>th</sup> Floor, Hartford, Connecticut 06103-1722). To be given consideration, any such written request must be received by CRRA by 3:00 p.m., Thursday, November 1, 2012.**

Addenda, if any, issued prior to the mandatory pre-proposal conference and site tours will be mailed and/or e-mailed to all persons who picked up or requested a printed copy from CRRA of the RFP Package Documents or who otherwise notified CRRA of their interest in the RFP. Such addenda will also be posted on CRRA's website, under the "Business Opportunities" page; select the "RFP: Design, Installation, and Operation Of Solar Generating Facilities At The Ellington, Shelton, and Waterbury Landfills" link. Addenda issued after the mandatory pre-proposal conference and site tours will be mailed and/or e-mailed to all persons who attended the pre-proposal conference and site tours and will be posted on CRRA's web site (<http://www.crca.org> on the "Business Opportunities" page under the "RFP: Design, Installation, and Operation Of Solar Generating Facilities At The Ellington, Shelton, and Waterbury Landfills" heading). Such addenda will be mailed/e-mailed and posted on the web site no later than three (3) days before the submittal deadline.

Failure of any Proposer to receive any such Addenda shall not relieve such Proposer from any conditions stipulated in such Addenda. Only questions answered or issues addressed by formal written Addenda will be binding. **All oral and other written responses, statements, interpretations or clarifications shall be without legal effect and shall not be binding upon CRRA.**

## 9. Proposal Submittal Procedures

**Sealed proposals shall be submitted no later than 3:00 p.m., Eastern Time, Thursday, November 15, 2012** at the offices of CRRA, 100 Constitution Plaza, 6th Floor, Hartford, Connecticut 06103-1722, Attn: Roger Guzowski. Proposals received after the time and date set forth above shall be rejected.

Proposers may submit a proposal for any or all of the three landfill properties included in this RFP.

Each Proposer must submit one (1) original and two (2) copies of its proposal. The original proposal shall be stamped or otherwise marked as such.

Each proposal (the original and two copies) shall be enclosed in a sealed envelope that shall be clearly marked "Design, Installation, and Operation Of Solar Generating Facilities At The [INSERT THE NAME(S) OF THE LANDFILL(S) FOR WHICH THE PROPOSAL IS SUBMITTED]."

Proposals shall remain open and subject to acceptance for one hundred and twenty (120) days after the proposal due date.

**Except as detailed in Section 11.1 and Section 5.1 herein, the terms and conditions of the Agreement (Section 7 of the RFP Package Documents), as attached, are substantially non-negotiable. Any potential Proposer that will be unable to execute the Agreement, substantially as attached, should not submit a proposal.**

Proposals may be modified or withdrawn by a letter requesting modification or withdrawal that is signed by the person who signed the cover letter for the proposal or other person authorized to commit the Proposer to contractual arrangements with CRRA. The letter must be delivered to the Roger Guzowski, Connecticut Resources Recovery Authority, 100 Constitution Plaza, 6<sup>th</sup> Floor, Hartford, Connecticut 06103 at any time prior to the proposal due date.

## 10. Selection and Contract Negotiation

As per the sample notice as contained in Section 6.1 of the RFP Package Documents, written notice from CRRA will be sent to the Preferred Proposer(s) notifying it that it has been selected for negotiation of a contract(s). Such negotiations will be governed by the terms of Section 11.1 and Section 12 of this Instructions to Proposers.

In negotiation of the contract, the Proposer(s) will have the following obligations:

- negotiate the contract(s) in good faith;
- provide in a timely manner clarifications or additional information requested by CRRA during negotiations;

- attend meetings with CRRA and its Board, as necessary, to negotiate, obtain approval for and execute the contract; and
- bear all of its costs and expenses for contract negotiations and approval.

The Proposer and Contractor recognize that CRRA has no liability to any party until a contract is approved, and only to the extent provided for in such contract.

## **11. Agreement**

The successful Proposer will be required to execute a written agreement, “Agreement For “Design, Installation, and Operation Of Solar Generating Facilities At The [INSERT THE NAME(S) OF THE LANDFILL(S) FOR WHICH THE PROPOSAL IS SUBMITTED].” (the “Agreement”). The form of this Agreement is included as **Section 7 of the enclosed RFP Package Documents.** Except as otherwise set forth in section 11.1 herein, by submitting a proposal, the Proposer substantially agrees to all the terms and conditions of this attached Agreement, other than as set forth on the Business Exception Form (Section 5.15 of the RFP Package Documents).

**The successful Proposer will be responsible, at its sole cost and expense, for undertaking the Work.**

The award of any Agreement for the Work will be made, if at all, to the Proposer whose evaluation by CRRA results in CRRA determining that such award to such Proposer is in the best interests of CRRA. However, the selection of a Proposer and the award of such Agreement, while anticipated, are not guaranteed.

CRRA is an Equal Opportunity and Affirmative Action Employer and does not discriminate in its hiring, employment, contracting or business practices. CRRA is committed to complying with the Americans with Disability Act of 1990 (ADA) and does not discriminate on the basis of disability in admission to, access to, or operation of its programs, Work or activities.

### **11.1 Negotiation of final details of the Agreement**

CRRA anticipates negotiating final details of Exhibits A – E of the Agreement with selected proposer(s), and reserves the right to modify other sections of the Form of the Agreement that may be impacted by the final details so negotiated. CRRA shall notify proposers that they have been selected to begin Agreement negotiations via a notice the form of which is included as Section 6.1 of these RFP Package Documents. In submitting this proposal, the Proposer substantially agrees to all other terms and conditions of the Form of the Agreement (Section 7 of the RFP Package Documents), except as set forth on the Business Exception Form (Section 5.15 of the RFP Package Documents).

## **11.2 Technical Drawings**

The technical drawings as submitted in the successful Proposer's Proposal shall be incorporated into the Agreement as **Exhibit E**.

## **12. Proposal Contents**

Proposals shall be submitted on forms provided by CRRA as part of the RFP Package Documents, all of which forms must be completed with the appropriate information required and all blanks on such forms filled in.

A proposal must consist of the following and must be in the following order:

- (a) A title page for the Proposer's proposal, including the title of the project, the name of the Proposer and the date the proposal is submitted;
- (b) Cover letter, signed by a person authorized to commit the Proposer to the contractual arrangements with CRRA, which includes the following:
  - (1) The name of the Proposer;
  - (2) The legal structure of the Proposer (e.g., corporation, joint venture, etc.) and the state in which the Proposer is organized;
  - (3) A clear statement indicating that the attached proposal constitutes a firm and binding offer by the Proposer to CRRA considering the terms and conditions outlined in the RFP Package Documents and noting any technical exceptions taken thereto; and
  - (4) The Proposer's promise, if any, to set aside a portion of the contract for legitimate minority business enterprises (see Section 14.2(e) of this Instructions To Proposers);
- (c) Table of Contents for the Proposer's proposal;
- (d) The Proposal Form (Section 5.1 of the RFP Package Documents), with the landfill(s) for which the proposal is submitted checked in the appropriate place (Page 1), Addenda, if any, listed in the appropriate place (Page 3), the name and address of the contact for Notices listed in the appropriate place (Page 7) and the completed agreement section (Page 7);
- (e) Responses to the issues and questions raised in the Issues and Questions Form (Section 5.2 of the RFP Package Documents)
- (f) The completed Proposal Price Form (Section 5.3 of the RFP Package Documents) for each Landfill for which the Proposer wishes to be considered;
- (g) The Completed SGF Equipment Form (Section 5.4 of the RFP Package Documents)



- (h) The completed Firm Background And Experience Form (Section 5.5 of the RFP Package Documents);
- (i) The completed Personnel Background And Experience Form (Section 5.6 of the RFP Package Documents)
- (j) The completed References Form (Section 5.7 of the RFP Package Documents);
- (k) The completed Questionnaire Concerning Affirmative Action, Small Business Contractors And Occupational Health And Safety form (Section 5.8 of the RFP Package Documents), with the Proposer's most recent EEO-1 data attached if the Proposer wishes such data to be considered in the evaluation of its Proposal;
- (l) The completed Subcontractor Identification Form (Section 5.9 of the RFP Package Documents);
- (m) The completed Affidavit Concerning Nondiscrimination (Section 5.10 of the RFP Package Documents), with the Proposer's nondiscrimination policies and procedures attached;
- (n) The completed Affidavit Concerning Third Party Fees (Section 5.11 of the RFP Package Documents);
- (o) The completed Proposer's Background Questionnaire (Section 5.12 of the RFP Package Documents);
- (p) The completed Business Disclosure Form (Section 5.13 of the RFP Package Documents);
- (q) The Completed Business Exception Form (Section 5.15 of the RFP Package Documents); and
- (r) A copy of the Proposer's up-to-date certificate of insurance showing all current insurance coverage.

Proposers should **not** include in their proposals other portions of the RFP Package Documents (e.g., this Instructions To Proposers or the Agreement).

A Proposer may include additional information as an addendum/appendix to its proposal if the Proposer thinks that it will assist CRRA in evaluating the Proposer's proposal. A Proposer should not include information that is not directly related to the subject matter of this solicitation.

### **13. Proposal Opening**

All proposals will be opened at CRRA's convenience on or after the proposal due date.

**CRRA reserves the right to reject any or all of the proposals, or any part(s) thereof, and/or to waive any informality or informalities in any proposal or the RFP process for this Project.**

## **14. Proposal Evaluation**

The award of the contract for the Work will be made, if at all, to the Proposer(s) whose evaluation by CRRA results in CRRA determining that such award to such Proposer(s) is in the best interests of CRRA. **However, the selection of a Proposer(s) and the award of such contract, while anticipated, are not guaranteed.**

CRRA is an Equal Opportunity and Affirmative Action employer and does not discriminate in its hiring, employment, contracting, or business practices. CRRA is committed to complying with the Americans with Disability Act of 1990 (ADA) and does not discriminate on the basis of disability in admission to, access to, or operation of its programs, services, or activities.

### **14.1 Evaluation Criteria**

CRRA will base its evaluation of the proposals on price, qualifications, demonstrated skill, ability and integrity of each Proposer to perform the Work required by the Contract Documents and any other factor or criterion that CRRA, in its sole discretion, deems or may deem relevant or pertinent for such evaluation.

### **14.2 Affirmative Action Evaluation Criteria**

Proposals will also be rated on the Proposer's demonstrated commitment to affirmative action. Sections 46a-68-1 to 46a-68-17 of the *Regulations of Connecticut State Agencies* require CRRA to consider the following factors when awarding a contract that is subject to contract compliance requirements:

- (a) The Proposer's success in implementing an affirmative action plan (See Question 4 of the Questionnaire Concerning Affirmative Action, Small Business Contractors And Occupational Health And Safety (Section 8 of the RFP Package Documents));
- (b) The Proposer's success in developing an apprenticeship program complying with Sections 46a-68-1 to 46a-68-17 of the *Regulations of Connecticut State Agencies*, inclusive (See Question 5 of the Questionnaire Concerning Affirmative Action, Small Business Contractors And Occupational Health And Safety (Section 8 of the RFP Package Documents));
- (c) The Proposer's promise to develop and implement a successful affirmative action plan (See Question 4B of the Questionnaire Concerning Affirmative Action, Small Business Contractors And Occupational Health And Safety (Section 8 of the RFP Package Documents));

- (d) The Proposer's submission of EEO-1 data indicating that the composition of its work force is at or near parity when compared to the racial and sexual composition of the work force in the relevant labor market area (See Section 8(j) of this Instructions To Proposers); and
- (e) The Proposer's promise to set aside a portion of the contract for legitimate minority business enterprises (See Section 8(b)(4) of this Instructions To Proposers).

## **15. Contract Award**

After CRRA has completed Agreement negotiations with Selected Proposer(s), if the contract is to be awarded, CRRA will issue to the successful Proposer(s) a Notice Of Award within one hundred and twenty (120) days after the proposal due date.

CRRA reserves the right to correct inaccurate awards resulting from CRRA's errors. This may include, in extreme circumstances, revoking a Notice Of Award already made to a Proposer and subsequently awarding the Notice of Award to another Proposer. Such action by CRRA shall not constitute a breach of this RFP by CRRA since the Notice Of Award to the initial Proposer is deemed to be void ab initio and of no effect as if no Agreement ever existed between CRRA and the initial Proposer.

## **16. Contractor's Certification Concerning Gifts**

Pursuant to *Connecticut General Statutes* Section 4-252, an apparently successful Proposer must submit a document certifying that it has not given any gifts to certain individuals between the date CRRA started planning the RFP and the date the Agreement is executed. If an apparently successful Proposer does not execute the Certification, it will be disqualified for the Agreement. The dates between which a Proposer may not give gifts and the identities of those to whom it may not give gifts are specified in the Contractor's Certification Concerning Gifts Form enclosed as Section 7L of the RFP Package Documents.

## **17. Affidavit Concerning Consulting Fees**

Pursuant to *Connecticut General Statutes* Section 4a-81, the apparently successful proposer(s) must submit an affidavit stating that, except as specified in the affidavit, it has not entered into any contract with a consultant in connection with the RFP whereby any duties of the consultant pursuant to the contract require the consultant to pursue communications concerning the business of CRRA, whether or not direct contact with CRRA was expected or made. The affidavit is enclosed as Section 7K of the RFP Package Documents.

## **18. Proposer's Qualifications**

CRRA may make any investigation deemed necessary to determine the ability of any Proposer to perform the Work required. Each Proposer shall furnish CRRA with all such information as may be required for this purpose.

## **19. Proposal Preparation And Other Costs**

Each Proposer shall be solely responsible for all costs and expenses associated with the preparation and/or submission of its proposal, or incurred in connection with any interviews and negotiations with CRRA, and CRRA shall have no responsibility or liability whatsoever for any such costs and expenses.

**REQUEST FOR PROPOSALS  
FOR  
DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE  
OF SOLAR GENERATING FACILITIES (SGF) AT THE  
ELLINGTON, SHELTON, AND WATERBURY LANDFILLS**

**SECTION 3  
INFORMATION FOR PROPOSERS**

**Includes:**

- 3.1 Property Description Report**
- 3.2 Due Diligence Report**

## INFORMATION TO PROPOSERS – CRRA PROPERTY INFORMATION

# DESIGN, INSTALLATION AND OPERATION OF SOLAR GENERATING FACILITIES (SGF) AT THE ELLINGTON, SHELTON, AND WATERBURY LANDFILLS (RFP Number 12-EN-004)

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#### 1. Overview

The following sections provide general descriptions for each CRRA property and the areas, which may be considered under a land lease with CRRA involving SGF development. The CRRA will consider additional areas proposed by the Proponent, including landfill side slopes should the Proponent develop an economically viable SGF development option.

#### 2. ELLINGTON LANDFILL

The Ellington CRRA property is located at 217 Sadds Mill Road (CT Route 140) in Ellington, Connecticut. The property includes a municipal solid waste landfill, which is currently closed, and capped. An active transfer station and landfill gas thermal oxidizer are located on the eastern portions of the property. The entire property encompasses approximately 38 acres and is surrounded by chain-link and wire fencing. The landfill topography is varied, although approximately four (4) acres is considered suitable for installation of a SGF. The areas on the landfill compatible with SGF installation are generally on the highest areas in elevation with gradually changing slope and less than ten (10) percent grade. There are several abrupt changes in elevation on the higher elevations of the landfill, where installation of the SGF should be avoided. Installation of the SGF on the level, higher landfill elevations will avoid shading by vegetation surrounding the landfill. Due to the current framework of the CTDEEP ZREC qualification requirements, the proposed SGF would need to be installed on the CRRA side of the meter to accommodate electrical load on the property and could not exceed 1 MW.

With respect to the current pattern of adjoining land uses, TRC noted in its Due Diligence report that the property is located immediately north and west of two (2) residential proper-

ties. The CRRA Ellington property is adjacent to and has significant frontage on Sadds Mill Road.

### **3. SHELTON LANDFILL**

The Shelton CRRA property is located at 866 River Rd. (Route 110) in Shelton, Connecticut. The property is also a closed and capped landfill and consists of 60 acres, of which three (3) acres is optimal for SGF development. An additional approximate three (3) acre area may be available on the south-facing slope of the landfill, although the slope may not be suitable for concrete ballasted foundation footings. Due to ash composition of the disposal materials, pile driven foundation may be considered to support the SGF, although a geotechnical engineering analysis would be necessary. The utilization of pile-driven foundations would also increase the potential disturbance to the landfill.

There are three landfill areas with SGF development potential, which have been designated as the “Municipal Solid Waste (MSW)/Ash”, the “Southeast Lined Ash” and the “North-east Lined Ash” areas. The metal hydroxide disposal area would not be incorporated into the SGF development plan. Each landfill area is equipped with a sedimentation basin at the base and five stormwater outfalls. An active transfer station and an inactive landfill gas to energy equipment building are located on the south portion of property. A landfill gas extraction system is currently installed over the MSW/Ash Area, where landfill gas is actively extracted and conveyed to a thermal oxidizer, where gases are destroyed. The system consists of 68 gas extraction wells on the MSW/Ash Area and 52 gas extraction wells on the north and west perimeter. Electrical infrastructure and equipment remains from a former landfill gas to energy facility and could be utilized for interconnection of the SGF to the electrical grid. Due to the current framework of the CTDEEP ZREC qualification requirements, the proposed SGF would need to be installed on the CRRA side of the meter to accommodate electrical load on the property and could not exceed 1 MW.

With respect to the current pattern of adjoining land uses, TRC noted in its Due Dilligence report that the property is located immediately north of a major industrial facility (Sikor-sky), adjacent to the Housatonic River which is immediately to the East of the site, and immediately north of the Farmill River. The property is adjacent to and has significant frontage on Route 110/River Road. There is a commercial/residential area located to the west of the property across River Road. There is a golf driving range to the north. There are several areas of public and private open space to the west (Pine Rock Parks) and the southwest (Far Mill River Park.).

### **4. WATERBURY LANDFILL**

The property is located west of Route 8 in Waterbury, Connecticut, east of Highland Avenue and south of Highview Street. The Waterbury property consists of closed and capped landfill and an area formerly utilized as a staging area for gravel mining operations. The proposed SGF development area is located to the east of the landfill area and consists of approximately (3) three acres.

The general topography within the proposed SGF development area on the Waterbury property is level with a substantial change in elevation between the northern and southern areas. The recommended extent of the SGF would be located outside the Connecticut Light and Power (C&LP) transmission line right of way to the north, the Railroad property to the south and quarry to the northeast. Clearing of existing vegetation on the south edge of the property would be anticipated to prevent shading of the SGF. Otherwise, a setback from the tree line of approximately 150 feet may be necessary to maximize the energy output of the SGF. A setback of this distance would further limit the SGF output. CRRA anticipates that the noted tree line is situated on Railroad property. And thus clearing of this vegetation would likely require coordination with the railroad. Due to the current framework of the CTDEEP ZREC qualification requirements, the proposed SGF would need to be installed on the CRRA side of the meter to accommodate electrical load on the property and could not exceed 1 MW. An electric meter is currently not installed on the Waterbury property and would need to be incorporated into the interconnection requirements of the SGF.



## **INFORMATION TO PROPOSERS – DUE DILLIGENCE REPORT**

### **DESIGN, INSTALLATION AND OPERATION OF SOLAR GENERATING FACILITIES (SGF) AT THE ELLINGTON, SHELTON, AND WATERBURY LANDFILLS (RFP Number 12-EN-004)**

The following 116 Pages, incorporated herein as Section 3.2 of the RFP Package Documents contain the “Solar Development Due Diligence Report Connecticut Resources Recovery Authority Ellington, Shelton, and Waterbury” that was prepared for CRRRA by TRC Engineers on July 12, 2012.



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**Solar Development Due Diligence  
Report  
Connecticut Resources Recovery  
Authority  
Ellington, Shelton and Waterbury**



**Prepared by**

**TRC Engineers**

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July 12, 2012

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**Attachment 1- Proposed Solar Generation Facility Layouts**

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**Attachment 3- Site Constraint Figures**

## INTRODUCTION

TRC Engineers (“TRC”) is pleased to provide Connecticut Resources Recovery Authority (herein referred to as CRRA) this report for three (3) proposed ground-mounted one (1) megawatt (MW) solar installations located on three CRRA properties in Ellington, Shelton and Waterbury Connecticut. The carve-out allocated to private developers is currently limited to one (1) MW “behind the meter” projects pursuant to the Connecticut Department of Energy and Environmental Protection (“CTDEEP”) Zero Emission Renewable Energy Credit (“ZREC”) program. Projects eligible for ZREC allocation will be selected by the CTDEEP as part of an annual procurement. Development of the three (3) CRRA solar projects may be dependent on the availability of virtual net-metering due to the limited on-site electricity demand on each property. The availability of virtual net-metering would be dependent on changes in the existing CT legislation. This due diligence memorandum was compiled pursuant to a Request for Services to solicit a developer for the CRRA solar projects. All three solar projects would be completed on CRRA landfill properties, Ellington and Shelton would be installed on the landfill and Waterbury off the landfill to the east. This Interconnection and Environmental Due Diligence Report is based on site layouts, desktop review, background reports, site visits and meetings. This report integrates site visit information, interconnection evaluation and review of the documents pertaining to civil engineering and permitting requirements. TRC performed the following tasks as part of this evaluation.

- Attended site visits to document the existing electrical infrastructure and site conditions for the proposed ground mounted solar generating facility (SGF);
- Reviewed existing landfill and environmental documentation associated with the environmental compliance, permitting and interconnection considerations for the site;
- Evaluated environmental compliance pertaining to environmental impacts and landfill post-closure use permitting;
- Performed a review of online information to summarize possible environmental permitting requirements, including municipal, state and federal environmental jurisdictional constraints;
- Provided an overall opinion based on available information, identifying interconnection and environmental considerations that may be encountered during the solar development process;
- Recommended any actions necessary during the development phase of the proposed SGF.

The observations and analysis provided are based on TRC review of readily-available data obtained from on-line resources and the information provided by CRRA as the basis of this study. While TRC has provided its best effort to present the likely scopes for each project based on this preliminary information, it is noted that TRC anticipates the scope(s) for the three proposed projects will likely evolve as thinking about project designs and construction approaches mature.

## PROPERTY DESCRIPTION AND ESTIMATED SOLAR GENERATION

### Ellington

The proposed SGF layouts are presented in Figure 1 within Attachment 1. The Ellington CRRA property is located at 217 Sadds Mill Road (CT Route 140) in Ellington, Connecticut. The property includes a municipal solid waste landfill, which is currently closed, and capped. An active transfer station and landfill gas thermal oxidizer are located on the eastern portions of the property. The entire property encompasses approximately 38 acres and is surrounded by chain-link and wire fencing. The landfill topography is varied, although approximately four (4) acres is considered suitable for installation of a SGF. The areas on the landfill compatible with a SGF installation are generally on the highest areas in elevation with gradually changing slope and less than ten (10) percent grade. There are several abrupt changes in elevation on the higher elevations of the landfill, where installation of the SGF should be avoided. Installation of the SGF on the level, higher landfill elevations will avoid shading of solar insolation by vegetation surrounding the landfill. Due to the current framework of the CTDEEP ZREC qualification requirements, the proposed SGF would need to be installed on the CRRA side of the meter to accommodate electrical load on the property and could not exceed 1 MW.

With respect to the current pattern of adjoining land uses, TRC notes that the property is located immediately north and west of two (2) residential properties. The CRRA Ellington property is adjacent to and has significant frontage on Sadds Mill Road.

### Shelton

The Shelton CRRA property is located at 866 River Rd. (Route 110) in Shelton, Connecticut. The property is also a closed and capped landfill and consists of 60 acres, of which three (3) acres is optimal for SGF development. An additional approximate three (3) acre area may be available on the south-facing slope of the landfill, although the slope is not suitable for concrete ballasted foundation footings. Due to ash composition of the disposal materials, pile driven foundation may be considered to support the SGF, although a geotechnical engineering analysis would be necessary. The utilization of pile-driven foundations would also increase the potential disturbance to the landfill. The proposed SGF layout for the Shelton property is provided by Figure 2 of Attachment 1.

There are three landfill areas with SGF development potential, which have been designated as the Municipal Solid Waste (MSW)/Ash, Southeast Lined Ash and the Northeast Lined Ash areas. The metal hydroxide disposal area would not be incorporated into the SGF development plan. Each landfill area is equipped with a sedimentation basin at the base and five stormwater outfalls. An active transfer station and an inactive landfill gas to energy equipment building are located on the south portion of property. A landfill gas extraction system is currently installed over the MSW/Ash Area, where landfill gas is actively extracted and conveyed to a thermal oxidizer, where gases are destroyed. The system consists of 68 gas extraction wells on the MSW/Ash Area and 52 gas extraction wells on the north and west perimeter. Electrical infrastructure and equipment remains from a former landfill gas to energy facility and could be utilized for interconnection of the SGF to the electrical grid. The total direct current (DC) solar power that

could be generated on all landfill areas is approximately 720 kilowatts (kW), with an estimated 600 kW for the MSW/Ash area, 100 kW on the southeast ash area and 20 kW on the northeast ash area. Due to the current framework of the CTDEEP ZREC qualification requirements, the proposed SGF would need to be installed on the CRRA side of the meter to accommodate electrical load on the property and could not exceed 1 MW.

With respect to the current pattern of adjoining land uses, TRC notes that the property is located immediately north of a major industrial facility (Sikorsky). The property is adjacent to and has significant frontage on Route 110/River Road. There is a commercial/residential area located to the west of the property across River Road. There is a golf driving range to the north. There are several areas of public and private open space to the west (Pine Rock Parks) and the southwest (Far Mill River Park.).

### **Waterbury**

The property is located west of Route 8 in Waterbury, Connecticut east of Highland Avenue and south of Highview Street. The Waterbury property consists of closed and capped landfill and an area formerly utilized as a staging area for gravel mining operations. The proposed subject area of SGF development is located to east of the landfill area and consists of approximately (3) three acres and is illustrated by Figure 3 of Attachment 1.

The general topography within the proposed SGF development area on the Waterbury property is level with a substantial change in elevation between the northern and southern areas. If this area were regraded, the estimated solar power that could be generated on this tract of land is approximately 500 kW. The recommended extent of the SGF would be located outside the Connecticut Light and Power (C&LP) transmission line right of way to the north, the Railroad property to the south and quarry to the northeast. Clearing of existing vegetation on the south edge of the property would be anticipated to prevent shading of the array. Otherwise, a setback from the tree line of approximately 150 feet may be necessary to maximize the energy output of the SGF. A setback of this distance would further limit the SGF output. Review of the Phase I for the property indicated that the tree line was situated on Railroad property. Clearing of this vegetation would subsequently require coordination with the railroad. Due to the current framework of the CTDEEP ZREC qualification requirements, the proposed SGF would need to be installed on the CRRA side of the meter to accommodate electrical load on the property and could not exceed 1 MW. An electric meter is currently not installed on the Waterbury property and would need to be incorporated into the interconnection requirements of the SGF.



## ENVIRONMENTAL AND LANDFILL CONDITIONS

### Ellington

The Ellington landfill is suitable for SGF development from a landfill engineering perspective. CRRA used the landfill for MSW and bulky waste disposal until 1991, when an MSW transfer station began operation adjacent to the landfill. CTDEEP issued an “Authorization for Closure” on October 20, 1994 and the final closure was completed in 1998. The closure of the landfill involved regrading of surficial materials, placement of cover soils varying between 6 to 18-inches in thickness, placement of 6-inch layer of topsoil and seeding for a vegetative cover. Permanent stormwater and erosion controls include riprap-lined swales on the north and west sides along the toe of the landfill slope, which discharge on the northwest corner of the landfill and to a retention/sediment basin at the south side and a sediment basin located behind the transfer station. A landfill gas extraction system equipped with a thermal oxidizer extracts and destroys landfill gases. There are approximately 40 perimeter extraction wells along the north and west sides of the Landfill, ten (10) on the central portion and five (5) in front of the transfer station. Landfill gas is also monitored at approximately 18 landfill gas monitoring ports on the landfill. It is anticipated the CRRA will retain the responsibility for maintenance and monitoring costs, which will be performed until 2024.

### Shelton

The Shelton Landfill has not received waste since February 1998, and was provided closure certification by CTDEEP in April 2001. The landfill was originally utilized to dispose of municipal solid waste and combustion ash. As addressed in previous sections, the Shelton landfill is subdivided into three areas. The final cover of the Southeast and Northeast Lined Ash Areas consists of a sand bedding layer, a geomembrane cap, a drainage layer, a topsoil layer and vegetation. Final closure of the Northeast Lined Ash Area was CTDEEP certified in April 2001 with 2:1 benched side slopes. CTDEEP also certified the closure of the Southeast Lined Ash Areas in April 2001. The final cover of the MSW/Ash Area consists of an 18-inch layer of low permeability soil, a 6-inch layer of topsoil and dense vegetation.

### Waterbury

The CRRA Waterbury property consists of a six (6) acre bulky waste landfill and another six (6) acre area utilized as a former rock quarry, stone and concrete staging area. The former rock quarry, stone and concrete staging area is proposed by CRRA for SGF development. Asphalt and urban soil fill, containing brick and concrete, form an earthen berm at the top of the existing embankment. Several points of surface water collection are also located on the south portion of the proposed SGF development area. Closure of the bulky waste landfill was certified by the CTDEEP in 2009 and the landfill is not currently being considered for SGF development by the CRRA.

The topography generally slopes south and southeast toward the Naugatuck River. A south-flowing stream historically traversed the property from northwest to southeast. This stream was redirected to a drainage system located along Highland Avenue in the early 1980s. A ditch with standing water is present on the south side of the abandoned railroad bed at the discharge of the stone culvert. Exterior drainage,

including storm water drainage, flows via infiltration to the ground and overland flow (runoff) downhill to the south and east toward the Naugatuck River. Storm water flow on the bulky waste landfill portion of the property is discharged to a low area located between the landfill and abandoned railroad bed to the south, where it percolates into the ground.



## LANDFILL POST-CLOSURE USE (Ellington and Shelton)

### Anticipated Landfill Permitting Requirements

Post-closure use on landfills in Connecticut is mainly governed by two sections of the Solid Waste Management Regulations of Connecticut State Agencies (RCSA) regarding disruption and post-closure, as described below. Further information on the disruption and post-closure use of landfills in Connecticut is discussed in the 2009 CTDEEP Environmental Program Guidance Document Guidance for Disruption Activities, Closure Activities and/or Post-Closure Use at Solid Waste Disposal Area, (hereafter referred to as the 2009 guidance document and provided within Attachment 2). Post-closure use is also addressed in the Landfill Assessment and Closure Guidance Manual issued by CTDEEP in November 1992 (hereafter referred to as the 1992 guidance document).

According to RSCA 221-209-7(u), disruption is considered as any disturbance (e.g., excavation, boring, re-grading, consolidation of waste, routine maintenance of environmental controls, etc.) or removal of deposited material, including the removal of cover material. Exploratory investigations (e.g., test pits, boreholes, etc.) at a solid waste disposal area to obtain additional information on the types of waste, the vertical or horizontal limits of the waste and other such information are not considered a disruption, provided that excavated materials are replaced and the immediate area restored promptly after completing the investigations. Exploratory investigations are not anticipated as part of the proposed SGF installation on the Ellington or Shelton CRRA landfills.

A disruption authorization from CTDEEP may be required as part of excavation related to the installation of concrete ballasted or pile-driven foundations, if disruption or removal of waste occurs within the deposited material at a solid waste disposal area. Disruption authorizations may not be required when the material being managed is limited to clean fill and/or soil. Depending on the thickness of landfill capping materials, the installation of concrete ballasted foundation footings could be limited to the areas of clean fill and/or soil. In the event pile driven foundations are considered as part of solar development, a disruption authorization may also be necessary given the increased depth of penetration. Pile driven foundations would likely be necessary on the south slope of the Shelton Landfill, where slope gradients range between 30 and 40 percent. As part of the SGF on landfill installation, an Authorization Application for Disruption of a Solid Waste Disposal Area form, if required, would be submitted to the CTDEEP by the SGF development team for review and written approval. The information provided with the application would include a full description of the excavation process including, but not limited to:

- Detailed site map prepared by a Connecticut Professional Engineer indicating existing site conditions and existing and proposed investigation and monitoring locations;
- Operational plans detailing the area involved;
- Depth of excavation;
- Final grades;
- Volume of material to be excavated or disrupted;
- Site where excavated material will be redeposited; and

- Construction schedule.

A detailed report describing measures to be implemented to protect the public health and the environment (i.e., a site-specific health and safety plan, a personnel health monitoring plan, dust control measures, and an erosion and sedimentation control plan) would be submitted. Disposal of all excess material from the excavation would also need to be in conformance with the RCSA. Depending on the extent of the disruption, CTDEEP authorization under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities may also be required.

The regulatory requirements under RCSA 22a-209-13(d) regarding post-closure use are not specific to SGF development. Although, SGF development would require submittal of documentation regarding post-closure use be submitted to the CTDEEP for approval and that any such approval be obtained before initiating SGF construction activities on the Ellington and Shelton landfills. The CTDEEP 2009 guidance document indicates that post-closure use is considered as any activity at a closed solid waste disposal area and post-closure use must be protective of human health and the environment. Mitigating environmental or human health through exposure to wastes, decomposition gases, leachate, and erosion of the disposal area's cap would be integrated by the SGF development team as part of the post-closure permitting process.

The CTDEEP 2009 guidance document indicates a plan for post-closure use would be submitted to the CTDEEP for review and written approval as part of a closure plan or whenever a change in an approved post-closure use is sought. SGF development on the landfills would require this change in post-closure use. The post-closure use plan would identify the controls and SGF on landfill design considerations to be used as part of minimizing exposures during redevelopment to protect human health and the environment. These controls and considerations are addressed within the next section. Regulations applicable to closure of solid waste disposal areas also apply to post-closure activities, such as grading, final cover and seeding, management of decomposition gases, etc. In addition, the 1992 CTDEEP guidance document indicates post-closure use must take into consideration the unique problems encountered in construction on old landfill sites, such as differential settlement and maintaining the effectiveness of the final cover, which is also addressed within the next section. The guidance states that the integrity of the final cover must not be impaired by the proposed use (in this case SGF development) and that design features such as additional cover material may be required to ensure protection of the low permeability layer.

### **Stewardship Permit and Potential Disturbance at Shelton Landfill**

CTDEEP determined within a January 18, 2012 letter to CRRA that disturbance of the Shelton Landfill would be necessary, although the proposed use could not increase the potential hazard. The SGF developer would need to submit an amended drawing and updated post-closure plan and CTDEEP in turn will authorize the modification of the post closure plan and disruption pursuant to both CGS 22a-208a(d)(1) as a solid waste facility and RCSA 22a-449(c) 104(a), incorporating 40 CFR 264.117 as to the hazardous waste facility at Shelton Landfill.

A Stewardship Permit for the Shelton Landfill was also issued by the CTDEEP to CRRA in September 2009 outlining the stipulations associated with post-closure care of the landfill. The permit outlines both post-closure and water quality monitoring requirements, which would continue to be performed by CRRA under a solar development scenario on the Landfill. The Shelton property also includes an area of metal

hydroxide disposal, which would not be incorporated into or disturbed by the implementation of solar development plans. The ongoing monitoring associated with the Stewardship Permit would not likely be modified with the installation of a SGF and post-closure would continue as performed under the existing conditions. A modification of the existing post-closure plan would be necessary to incorporate the installation of the SGF. Although increased monitoring and maintenance may be required by the CTDEEP should pile driven SGF foundations be considered on the south face of the Shelton Landfill and may encounter increased regulatory review. The next section provides recommendations for the development of a plan for post-closure use for SGF development in accordance with CTDEEP criteria.

## SGF ON LANDFILL DESIGN CONSIDERATIONS

The SGF on landfill design considerations would need to be integrated into the engineering and permitting documentation process for the Ellington and Shelton landfills. Based on the configuration of these landfill closures, available solar insolation and preferable level of operation and maintenance, the most viable installation would include a fixed-tilt solar panel/rack system placed at-grade founded by concrete ballast footings and off the landfill cap placement of the inverter and transformers. During final detailed design of the SGF, engineering analyses will be required to verify and document the methods by which each landfill will not be impacted by the construction and operation of the SGF. The principal modifications to existing landfill cover resulting from the installation of the SGF and supporting structures will be:

- Placement of the foundation footings (ballast blocks) to support the array racks;
- Shallow underground installation of electrical conduits;
- Grounding of the SGF;
- Partial shading of the grass cover beneath the arrays; and
- Possible upgrading and installation of the permanent access roads on the Shelton and Ellington landfills.

These principal modifications would require evaluation from a geotechnical cap stability and settlement perspective using the array configurations. In addition to the principal modifications to the landfill cap, an evaluation of the potential construction impact to the landfill cap would need to be performed. The following section summarizes the required evaluation criteria related to geotechnical settlement and stability.

### Geotechnical Settlement and Stability Analysis

#### *Settlement*

Settlement of a landfill surface results from primarily three processes:

- Primary or immediate settlement caused by weight added to the landfill surface,
- Secondary settlement caused by waste “creep” under constant load, and
- Tertiary settlement resulting from biological decomposition of the waste mass.

Unlike uniform soil, where geotechnical settlement properties can be readily determined and primary and secondary settlement calculated, the composition of solid waste in landfills is generally highly variable. Due to the composition of waste, the irregular stratification of waste mass and the change in waste properties over time due to decomposition, general estimates of settlement would be made. Although, the MSW/ash areas at Shelton Landfill may be relatively invariable due to ash composition of waste material and, as a result, less settlement would be expected.

The installation of the SGF and possible upgrading of permanent access road may cause minor primary settlement of the landfill surface in the immediate vicinity of the added load. The net increase in vertical stresses to landfill closure components and waste from the SGF should be minimized and loads distributed over large areas to limit settlement. To achieve a low increase in stress on the underlying landfill capping material, the recommended net contact stress (bearing pressure) of the ballast block foundations should be in accordance with the following criteria.

- Static loading – less than 450 pounds per square foot (psf), (approximately 3 pounds per square inch [psi]); and
- Dynamic loading – less than 1,000 psf or 7 psi.

Approximation of primary settlement assumes foundation footings are underlain by capping soils and waste equivalent to a loose to medium dense sand, which is reasonable, as the approximate waste mass surface is typically mixed with soil and an interim soil cover before capping. Assuming typical geotechnical properties for loose to medium dense sand, the settlement resulting from SGF foundation static loading should be less than 0.5 inches, which is well within the acceptance strains of the barrier layers. Impermeable barriers within the CRRA landfills also may undergo slight distortion without impacting functionality. Therefore, minimal settlement will not adversely affect the barrier layer. Secondary settlement is also anticipated to be minimal, as the additional surface loads are generally negligible.

Settlement due to waste decomposition or tertiary settlement causes the greatest amount of landfill surface distress. Tertiary settlement will be unaffected by the installation of the SGF, as it is caused by an intrinsic biological processes within the waste mass. Settlement due to decomposition is occurring on both the Ellington and Shelton landfills as evidenced by the amount of active gas extraction. Long-term, SGF racking systems on both landfills may be distorted from the initial alignment by tertiary settlement. To account for this potential distortion, flexible above-ground to below-ground conduit connections should be included in the electrical engineering design. The rack systems should be also designed to allow for periodic adjustments to correct for tertiary settlement. These periodic level and tilt adjustments may be integrated into the operation and maintenance of the SGF. The limited survey accompanying the above referenced memo indicates general site-wide settlement may have also occurred beyond the observable area of settlement. TRC would recommend a complete resurvey of each landfill prior to designing the SGF to update elevation contours to establish updated topography.

### *Stability*

TRC recommends SGF ballast foundation footings be analyzed for overturning and sliding stability using standard of practice factored loads and estimated soil properties. The recommended minimum factor of safety for stability is 1.5. Ballast footings would not be placed directly on the vegetated surface. Rather, the vegetation would be removed and the ballast foundations would be embedded a maximum of 12-inches. For sliding analysis, soil resistance at the toe of the ballast block would need to be further evaluated as part of full-scale engineering design.

## Conduit Installation

Subsurface installation of electrical conduits to protect cabling from damage during landfill operation and maintenance activities is recommended. These conduits may be installed within the capping materials and the vegetative layer without impacting impermeable membranes and low permeability capping materials. Depending on the selected conduit installation depth, concrete encasement of conduits may be required to meet electrical code. In this case, a minimum of 12-inches of soil cover overlying the concrete encased electrical conduits is recommended to promote vegetative growth. An alternative to this approach would be installation of concrete encasement up to landfill grade. Reuse of soils removed as part of shallow trenching is an advised approach.

## Electrical Grounding

Vertically driven ground rods would not be advised on landfills areas capped with an impermeable membrane due to the potential for puncture. A shallow subgrade grid or preferably a UFER copper cable grounding system embedded in the concrete ballast footing may be a consideration. The design of the grounding system would be supplemented with field testing to obtain resistivity properties of soils. The presence of the impermeable geosynthetic layer within the landfill cap creates an atypical shallow subsurface electrical grounding situation.

## Temporary and Permanent Access Roads

During construction of the SGF, highway vehicles such as large trucks and concrete mixers may need to be utilized. Temporary and permanent access roads would need to be integrated into the engineering design and construction on portions of the Shelton landfill to minimize the impact to the landfill cap and provide organized vehicular movement. Temporary access roads would need to provide an 18-inch gravel base overlying a woven geotextile.

Temporary access road locations would be determined in consultation with the construction contractor and confined to along the center ridge of the landfills or perpendicular to cap contours. The considerations prevent temporary roads from acting as water bars in the event of heavy precipitation event and subsequent stormwater runoff. The project engineer would approve all temporary road locations proposed by the construction contractor. The number and length of temporary roads would be minimized and constructed in a manner that does not affect the functionality of the existing stormwater drainage system.

## Construction Impacts

SGF construction planning will be important in limiting impacts to the landfill cap, surface water drainage system and gas and groundwater collection systems. The full-scale engineering design specifications will include elements pertinent to reducing potential impact of engineered landfill cap components. These engineering design specifications include criteria provided by the following summary table.



Construction Issue	Construction Specification or Design
Uncontrolled excavation could damage cap	Use only hand tools or mini excavator using a bucket without teeth Field engineer to monitor stripping of soil
Highway trucks will damage cap	Low ground pressure equipment and vehicles will be utilized
Heavy trucks must have access to some areas on cap	Construct temporary and permanent access roads designed for on-highway vehicles
Transporting and setting precast concrete foundation footings could damage cap	Use low-ground pressure transport equipment
Landfill gas exposure potential	The lower explosive limit (LEL) for methane and hydrogen sulfide would be monitored
Gas vents and drainage structures could be damaged by construction	Set-back distances would be specified. Gas vents will be flagged to increase visibility
Grade stakes are known to cause cap barrier layer damage	Grade stakes and flagging materials with potential to damage the cap would not be permitted
Various contractor activities could cause damage	Full-time on-site monitoring to be performed during construction Immediate repair/stabilization or mitigation of damage required
Large areas exposed during construction	Require work to be sequentially constructed to minimize impacts over large areas

## Stormwater Runoff Control Plan

The overall topography of the landfill cap should not significantly be altered by the design of the SGF to assure that storm water run-off will occur as intended by the original design of the landfill cap.

The landfill closure included design and construction of a storm water drainage system. Landfill stormwater drainage systems are typically designed for the 100-year 24-hour rainfall event with peak design flows determined using the methodology of Technical Release 55 (TR-55), Natural Resources Conservation Service – USDA. Stormwater runoff would need to be modeled with TR-55 to quantify potential variation in runoff following post-solar development. Modeling with TR-55 would comparatively analyze stormwater flow generating during pre (landfill closure) and post (SGF installation) development cases. The SGF will modify the runoff characteristics of a limited portion of the landfill cap by changing some of the landfill grass cover to impervious surfaces. These impervious surfaces would be created with the installation of the following.

- Concrete ballast footings;
- Concrete backfilled conduit trenches, Permanent gravel access roads; and
- Inverters and transformers building.

It is important to note the solar modules are not “impervious surfaces” with respect to stormwater flow, as the modules are elevated above the ground surface and do not modify vegetative cover or slope. As a

result, infiltration and subsequent stormwater runoff are also not modified with the installation of the SGF.

The impervious surfaces defined above should be kept to the minimum practical. The capacity of various elements of the landfill storm water conveyance systems (level spreaders, swales, stone-line ditches, etc.) should be reviewed and no functional impact should result from the increase in design peak flow over the original design. Previous TRC experience indicates no modifications to stormwater runoff controls should be anticipated.

## Stormwater Erosion Control Plan

An evaluation is recommended to assess the increased surface erosion potential during and after construction on both the Ellington and Shelton landfills and the Waterbury off-landfill area. During construction, setting of ballast footings to a maximum depth of 12-inches below the vegetative cover would be made on the landfills. Pile-driven foundations may be considered for the Waterbury off-landfill solar installation. Areas of vegetative cover removed during ballast footing installation would be surrounded by the existing landfill vegetative cover and exposed for a minimal period of time. Soil removal areas could be temporarily covered with plastic sheeting until the footing is placed to prevent erosion. The removed soil would be stockpiled off the landfill with appropriate sediment transport controls specified by the Stormwater Pollution Prevention Plan required as part of National Pollutant Discharge Elimination (NPDES) permitting. Pile-driven foundations at Waterbury would decrease the amount of impermeable surface installed on the proposed area for the SGF, although a stormwater evaluation would be recommended at Waterbury, as property may require grading as part of the leveling of site topography.

The vast majority of the vegetated buffers between concrete ballasts will be maintained between any soil removal areas, access roads, ditches and swales. These vegetative buffers between concrete ballasts will continue to function as a sediment trap, preventing transport. Conventional erosion and sediment control procedures would be used as required around the temporary gravel roads. Silt fences, staked hay bale silt traps and other erosion control structures with potential to puncture the impermeable membrane would need to be avoided within landfill capping areas. Another possible source of erosion is associated with disturbance of the landfill surface by low ground pressure equipment. Any rutting or exposed soil on the cap should be promptly filled, covered and/or stabilized by the installation contractor, which would be included in the full-scale engineering design specifications.

Precipitation runoff from the lower drip edge of the solar modules is also typically identified as a possible source of erosion of an engineered landfill cap. Runoff from the modules could damage the vegetative cover, causing soil to be exposed and subsequently eroded. Based on TRC experience, erosion below the modules has not been observed on existing fixed tilt solar installations throughout the northeast U.S. There are several factors that would limit the likelihood or severity of such erosion. These include:

- The tall grass cover;
- Flat landfill slopes below the modules;
- Short length of the panels, about 3 feet, that will limit water volume; and



- The grass buffer strips between sub arrays.

An option to limit erosion would be to install gravel splash strips below each module drip-edge (note there are several drip edges on a sub array). This would require many thousands of feet of hand-dug trench and gravel backed-fill splash strips. This activity would be disruptive to the cap and increase infiltration. In addition, the gravel on the landfill surface presents a potential hazard to the solar panels as maintenance equipment with moving parts tend to propel objects as projectiles.

TRC would suggest enhanced operational monitoring during the first year of SGF operation. Monthly inspection of the landfill cover beneath the SGF would be performed by experienced personnel. The objective of the inspection would be to identify any splash damage to the vegetative cover and soil layer. If runoff impacts are observed, localized areas would be stabilized using organic materials such as wood chips, mulch, coir (coconut fiber) matting or other long life organic erosion control material. During these monthly inspections, the effectiveness of the stormwater management system components would also be evaluated including swales, structures and all conveyance systems.

The vitality of vegetative cover, partially shaded by the SGF, would also need to be monitored monthly. In the event shading affects the vitality of the vegetation, alternative species would need to be considered to maintain the vegetated surface. If adverse conditions are observed, a landscape professional would be consulted and impacted areas reseeded with more shade tolerant vegetation.

## Landfill Gas Extraction Systems

The existing landfill gas extraction systems would not require modification with the installation of the SGF. The solar modules, by design, do not have an ignition source. The arrays would need to be set-back at least 10 feet from gas extraction wells and equipment to prevent physical damage. The inverters, which do contain motors and switches, should be at least 20 feet from gas extraction wells and equipment. The landfill gas monitoring program would be unchanged by the installation of the SGF. All on-site maintenance personnel would be trained to comply with the CTDEEP conditions for public health, safety, welfare and environment relating to landfill gas hazards, operations of the SGF and associated electrical hazards. TRC suggests a methane monitoring and alarm system be installed in the inverter/transformer building as a safety precaution.

## Landfill Post-Closure Monitoring and Maintenance Plan

Modifications to the existing post-closure monitoring and maintenance plans for Ellington and Shelton are not anticipated. The CRRA would continue regular maintenance and monitoring at the landfills, although CRRA might consider delegating the vegetative maintenance to the selected developer. Periodic inspections of the landfills and appurtenances would continue to be performed by CRRA without major changes. For the first year following construction of the SGF, monthly inspections should occur to check for landfill cap erosion and changes in vegetative growth.

The SGF heights, in particular the low edge height, and rack-to-rack spacing must be adequate to permit safe and efficient mowing. The ongoing operation and maintenance requirements given by the CRRA and governing agencies would be considered as part of the full-scale engineering design and permitting

process. TRC suggests a low edge panel height of a minimum of 3 feet above grade and rack-to-rack clear distance of 15 feet.

## Reflectivity of Solar Panels

Public comments include potential glare of sunlight reflecting off of solar modules. These comments are generally expressed for proposed SGF installations at airports and residential communities, neither of which is applicable at all three CRRA properties. TRC included information about panel reflectivity, as a future consideration during public comment periods.

Photovoltaic solar panels are designed to absorb sunlight in order to convert it directly into electricity. Solar panels produce more energy when more sunlight is absorbed. As an example, a solar module absorbs two-thirds of the sunlight that reaches the panel's surface. This means that at most, only one-third of the sunlight that reaches the surface of a PV panel is reflected. Additionally, panels have an anti-reflective coating that increases the amount of sunlight absorbed by a panel, further reducing reflectivity.

Most solar panels have a surface reflectivity below 30%. This compares with many natural materials that are found on project sites. This includes: dry sand at 45%, grass and grass-like vegetation at 25%, and broadleaf deciduous trees at 10%.

## INTERCONNECTION EVALUATION

### Ellington Interconnection Evaluation

Electrical service to the Ellington property is provided by Connecticut Light and Power (CL&P). The existing electrical service is used primarily for operation of the methane gas extraction and thermal oxidation system that operates continuously to remove accumulated methane gas produced by decomposition of waste material in the capped landfill. This gas is combusted at the thermal oxidizer. Operating equipment consists of a 7-1/2 HP gas extraction blower, and a 7-1/2 HP combustion air blower.

The equipment is served by a 240/120 volt, 400 Amp, single phase electrical service supplied by a utility company owned, pad mounted transformer. The transformer is connected via a single phase underground feeder to the CL&P distribution system at Pole No. 30939 located at the entrance to the facility on Route 140. The distribution level voltage is 23 kV. All three phases are available on the overhead pole line on Route 140, although only a single phase was brought into the landfill due to the limited equipment load.

The gas extraction equipment motors are three-phase. A static phase converter is installed to provide the necessary three phase power from the single phase service. Detailed electrical use data was not available, although since the equipment runs continuously, a reasonable assessment can be made:

Load	HP	kW			
Gas extraction blower	7.5	5.6			
Combustion air blower	7.5	5.6			
Controls (estimated)		1.0			
Miscellaneous (estimated)		0.5			
Total load		12.7 kW			

The existing electrical service was sized to serve the minimal load requirements for gas extraction equipment. Installation of the SGF would require net-metering of solar energy produced for export to the electrical grid. The Ellington property would then be a net energy consumer during the nighttime hours.

#### *Electrical Service Change and Interconnection Considerations*

Connection of a SGF in excess of 10 kW capacity would require a service change from single phase 240/120 volt to three-phase 480 volt. A 1 MW SGF would require a minimum 1,600 amp service at 480 volts. Connection of a PV system in excess of 10 kW and less than 5 MW, would be considered distributed generation and would fall under the “Fast Track” and Study process as explained hereinafter.

As part of the interconnection application process a screening test would be completed by the utility to determine if the addition of the proposed solar energy generation exceeds 15% of the peak load on the section of distribution line to which it is connected. If not, there should be minimal impacts arising from

the proposed generation. If the generation exceeds 15% of the peak load on the distribution system, additional line capacity studies may be required. Based on the outcome of these studies, there could be potential limitations for allowable solar generating capacity and/or additional technical requirements such as installation of transfer trip or other protective measures.

Line capacity studies would be completed as part of the interconnection application process with the utility. Following submittal of the interconnection application, it could be determined if the 23 kV distribution circuit could support the estimated solar energy generation. Based on the observations made on the site visit, a reasonable assumption would be the SGF could likely be interconnected into the existing service lines.

Generator and line protection requirements for SGF installations can be greatly simplified if the inverter equipment installed is certified under UL Standard 1741, “Inverters, Converters, Controllers and Interconnection System Equipment for use with Distributed Energy Resources.” If non-certified inverters are used, utility grade protective relaying equipment will be required, adding considerable expense and complexity to the project.

## **Shelton Interconnection Evaluation**

The property is supplied with three-phase power via an overhead pole line owned by United Illuminating Co. (UI) This line is connected to the 13.8 kV distribution circuit that runs along Route 110. The connection to the property is at SBC pole No. 975. The 13.8 kV distribution line runs along the access road ending at a riser pole at the gas extraction equipment area. This riser pole is equipped with three-single phase 25 kVA transformers, which provide 208/120 volt three-phase service for the gas extraction equipment and single phase service for the transfer station.

A facility that originally generated electrical power from burning the landfill gas remains on the Shelton property, but the generators have been removed and the facility is no longer in use. The power switchgear and generation step-up transformer (GSU) still remain. This GSU transformer is rated 2000 kVA and stepped up the power from the generators from 480 volts to 13.8 kV. The low voltage circuit breakers and protective relaying equipment also remains. Connection to the grid was completed at 13.8 kV via UI pole number 9554, which is equipped with a manually operated three phase gang operated air switch.

### ***Electrical Interconnection Considerations***

The electrical service for the gas extraction equipment consists of three (3), pole mounted, single phase 25 kVA transformers connected in a Wye configuration to give 208 volts phase to phase and 120 volts phase to ground. It would be impractical to interconnect a SGF with capacities in excess of 10 kW to this service.

The former landfill gas power generation facility has a generator step up transformer capacity of 2000 kVA and was designed to step up voltage from 480 volt three phase generators to the 13.8 kV utility distribution voltage. It is reasonable to assume that the 13.8 kV distribution system to which this facility was connected is capable of accepting power from the proposed SGF up to and including 1 MW (1000 kVa at unity power factor). The reuse of the 2,000 kVA transformer as well as all of the presently

installed 13.8 kV switches and equipment would be highly desirable as a point of interconnection for the proposed SGF.

The existing 480 volt circuit breakers could also be reconfigured to interconnect the SGF to the step-up transformer. The paralleling equipment, voltage regulators, protective relaying and other components associated with the operation of multiple synchronous generators would not be needed.

As part of the Fast Track application process, a screening test would be performed by UI to determine if the proposed SGF energy generation will exceed 15% of the peak load flows on the section of distribution line. It is unlikely technical restrictions such as transfer tripping of the proposed SGF would be imposed at the Shelton landfill. In the case additional technical upgrades are required by UI, the existing generating facility is equipped with the communications equipment that would allow those functions to be implemented.

Generator and line protection requirements for the proposed SGF installations can be greatly simplified if the inverter equipment installed is certified under UL Standard 1741, “Inverters, Converters, Controllers and Interconnection System Equipment for use with Distributed Energy Resources.” If non-certified inverters are used, utility grade protective relaying equipment will be required, adding considerable expense and complexity to the project. It is recommended that inverters used for this project be UL 1741 certified.

Due to the physical configuration of the property, the SGF may be installed on the three separate landfill areas with multiple inverters. Each inverter would be connected to a 480 volt three (3) wire collection system and then connected to the existing 480 volt switchgear. This collection system could be run overhead along the side of the maintenance road to connect to each area.

## Waterbury Interconnection Evaluation

### *Electrical Interconnection Considerations*

There is presently no electrical service on the CRRA Waterbury property. The existing distribution line on Highland Street is 4.8 kV, serves residences along Highland Street and may not be of sufficient capacity to accommodate utility-scale solar generation.

A high voltage transmission line crosses the CRRA Waterbury property within a transmission easement, 175 feet in width from West to East to the North. The area within the transmission easement cannot be utilized for installation of the proposed SGF. Three phase 13.8 kV distribution power may be available for interconnection from a substation, approximately 1,600 feet east of the property. This 13.8 kV feeder follows the high voltage transmission lines toward the west and ends at CL&P pole No. F2210. This is a feeder circuit in close proximity to the substation that could absorb 500 to 1,000 kW of solar generation.

A new service would have to be constructed from this 13.8 kV line with a pad mount transformer to step down from 13.8 kV to 480 volt, for connection to the inverters. Final determination of line capacity and technical limitations for interconnection would be evaluated during the C&LP screening test upon SGF developer submittal of the interconnection application. The location of the new service would have to be determined by C&LP, once other technical requirements are known.

As part of the Fast Track interconnection application process, a screening analysis would be performed by C&LP to determine if the proposed interconnection of the SGF will exceed 15% of the peak load on the section of distribution line and nearby substation. If this threshold is exceeded, additional technical requirements such as transfer tripping of the generation may be required, adding interconnection costs.

Generator and line protection requirements for SGF installations can be greatly simplified if the inverter equipment installed is certified under UL Standard 1741, “Inverters, Converters, Controllers and Interconnection System Equipment for use with Distributed Energy Resources.” If non-certified inverters are used, Utility grade protective relaying equipment will be required, adding considerable expense and complexity to the project. It is recommended that inverters used for this project be UL 1741 certified.

## CONNECTICUT INTERCONNECTION APPLICATION PROCESS

The two major electric utilities in C&LP and UI have jointly developed a process by which small power generation projects can be interconnected to the electric transmission and distribution grid. The Ellington and Waterbury properties are located within C&LP territory and Shelton within UI territory. The interconnection application procedures are defined within the following documents.

- Guidelines for Certified Inverter Based Facilities, 10 kW and less. (Primarily for residential projects, and not applicable to commercial scale projects);
- Guidelines for Generator Interconnection Fast Track and Study Processes; and
- Exhibit B – Technical requirements.

Connection of a solar generation in excess of 10 kW and less than 5 MW would be considered distributed generation and would fall under the Fast Track and Study process as defined in the document “Guidelines for Generator Interconnection, Fast Track and Study Processes” dated May 2010, issued jointly by C&LP and UI. Solar projects which sell power directly to the energy distribution company (EDC) would not be subject to Federal Energy Regulatory Commission (FERC) jurisdiction, and the interconnect application would be submitted to the EDC. Projects selling power in the wholesale market, and/or in excess of 5 MW, would need to apply to the Independent system Operator - New England (ISO-NE). This requirement would not apply to the proposed SGF installation at the three (3) CRRA properties. The following is an outline of the Fast Track application process as may be expected to apply to the proposed SGF installations.

- Prepare an application for interconnection service. This application shall include the following:
  - Completed application form;
  - Application fee in the amount of \$500.00;
  - One line Electrical Schematic showing:
    - Proposed PV equipment;
    - Inverters, transformers, circuit breakers and disconnection equipment;
    - Metering;
    - Point of interconnection with utility system including voltage and ampacity; and
    - Symbols used must be per CL&P Standards.
  - Site Plan, illustrating:
    - Property lines;
    - Location of all site structures and utilities;
    - Location of main AC disconnect switch; and
    - Proposed location of UI Meter.
  - Proof of insurance, key elements:
    - Policy carrier;
    - Policy number;
    - Policy effective dates;
    - Applicable minimum liability;

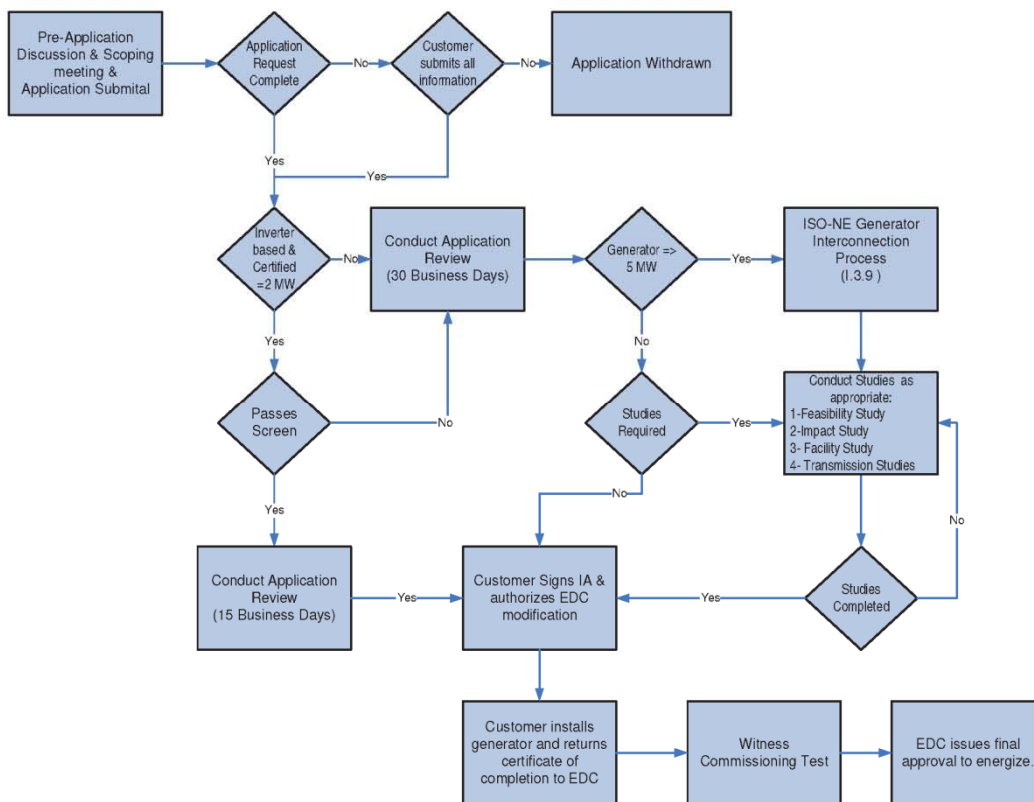


Liability Insurance	
Nameplate Rating	Minimum Liability Insurance required
Less Than 100 kW	\$300,000
Greater than 100 kW to 1 MW	\$1,000,000
Greater than 1 MW to 2 MW	\$2,000,000

- Technical specification documents for proposed equipment.

The following flow chart page illustrates the Fast Track interconnection process from Application through construction and commissioning. (Reproduced from “Guidelines for Generator Interconnection Fast Track and Study Processes”)

**Figure 1: Interconnection Process Flow Chart**





## ANTICIPATED ENVIRONMENTAL PERMITTING PROCESS

This section summarizes the due diligence level assessment of the likely environmental permitting scope(s) for development of three proposed SGFs located at three (3) CRRRA properties. Attachment 3 accompanying this memorandum identifies each property and the environmental constraints that have been identified by TRC through a review of readily available GIS data. TRC recognizes that CRRRA is a quasi-governmental agency of the state of Connecticut and thus may enjoy regulatory supremacy over municipal ordinances and bylaws in the context of resource recovery related project permitting. However, the TRC initial assumption, as noted in this memorandum, is that CRRRA might or will be subject to municipal zoning ordinances in the case of these projects since the proposed projects are not primarily driven by resource recovery matters but rather by renewable energy development goals. If this assumption is determined to be inaccurate as the projects mature, then the scope of the permitting efforts for each of the proposed sites may be reduced.

Based on the above noted limitations and assumptions, TRC observations about the likely permitting scope at each of the proposed locations are as follows.

### **Shelton Permitting Evaluation**

TRC review of GIS data obtained online describing potential environmental constraints that could impact project development confirms that the proposed SGF installation is located just north of the confluence of the Housatonic River and the Far Mill River. Portions of the property are located within jurisdictional floodplain and National Wetland Inventory (NWI) wetland associated with these waterways. The majority of the property is also located within a natural diversity area polygon as designated by the State of Connecticut. Based on the noted constraints within this memorandum and municipal/land use context, TRC anticipates that, at a minimum, the following municipal, state, and federal environmental permitting and review activities could or would be required for the subject project proposal.

#### *Shelton Zoning Review/Special Permit/Building Permit Approval*

The property is zoned IA-2 (Industrial 2) under the Shelton Zoning Ordinance. It is anticipated that the project will undergo review at the municipal level through the Shelton site plan/building permit process, which will address the compatibility of the project with the intended uses of land under the IA-2 designation. A due diligence level review of the Shelton Zoning Ordinance conducted for this effort did not show that ground mounted solar is a by right use on the property, but also did not reveal that there is a specific prohibition of ground mounted solar facilities. TRC anticipates that a Special Permit will be required as a part of the zoning review/building permit approval process within the town of Shelton for the project.

### *CTDEEP/NDDB Coordination*

A significant portion of the proposed SGF lies within a “Natural Diversity Area” as noted in the site constraints figure for the Shelton property within Attachment 3. For this reason, it is anticipated that coordination with the CTDEEP will be required as a part of project permitting efforts.

The CTDEEP Natural Diversity Data Base (NDDB) program performs hundreds of environmental reviews each year to determine the impact of proposed development projects on state listed species and to help landowners conserve State biodiversity. State agencies are required to ensure that any activity authorized, funded or performed by a state agency does not threaten the continued existence of endangered or threatened species. The NDDB Request for Review process is designed to assist in complying with the State Endangered Species Act, but is not a substitute for actual on-site surveys that may be required for environmental impact assessment.

Natural Diversity Areas identified on maps provided by CTDEEP depict approximate locations of state and federal listed species and significant natural communities. If a project falls within an identified NDDB area, as this proposed project apparently does, or is less than ½ mile upstream or downstream from a NDDB area, an applicant must submit a Request for Natural Diversity Data Base (NDDB) State Listed Species Review Form (DEP-APP-007), and all required attachments, including maps, to the NDDB for further review.

CTDEEP guidance on this matter is that when consulting the NDDB maps, a project proponent should consider the entire area impacted by a project, including any potential runoff or other associated disturbance, not just the immediate footprint of the project. If the project occurs along a wetland or watercourse, the applicant should consider areas ½ mile upstream and ½ mile downstream in the pre-screening process.

The CTDEEP guidance on these matters, as presented on its website, indicates the “local planning and zoning boards are the primary authority over private development in their towns. The CTDEEP encourages municipal agents to use the environmental review process and to consider impacts to state listed species when making land use decisions.”

### *Sikorsky/FAA Coordination and Approval*

TRC anticipates that the close presence of the Sikorsky facility to the south of the property will also create a need to perform outreach to Sikorsky, and potentially the Federal Aviation Administration (FAA), to determine whether the proposed project at this location would create any navigational hazard that would impact existing air operations (helicopters) at the Sikorsky facility.

### *Town of Shelton Inland Wetlands and Waterways Commission Permitting*

Because the project is in close proximity to the Housatonic River and the Farmill River and is partially within floodplain associated with these rivers, it is anticipated that a wetland permit filing may be required to the Shelton Inland Wetlands and Waterways Commission (IWWC) if any component of the project will alter or otherwise impact either wetland or associated buffer areas.

### *Connecticut CTDEEP/NPDES Construction General Permit NOI and SWPPP*

The project will likely “disturb” an area greater than one (1) Acre and TRC anticipates that project coverage under the CT Construction General Permit for Stormwater will need to be sought and obtained through the CTDEEP. This effort will include submission of a Notice of Intent (NOI) prior to commencement of project construction, and development and publication of a suitably robust Stormwater Pollution Prevention Plan (SWPPP) that will be maintained on-site throughout the construction period and will be the responsibility of the construction contractor.

### **Waterbury Permitting Evaluation**

The proposed SGF at the Waterbury property is located in a previously disturbed area adjacent to Route 8 and just north of the Naugatuck town line (see Attachment 3). The property is up-gradient of, but separated from, the Naugatuck River by Route 8 and zoned Industrial Park (IP) under the Waterbury Zoning Ordinance. Based on the noted constraints and permitting context, TRC anticipates that the following municipal and state environmental permitting and review activities could or would be required for the subject project proposal.

#### *City of Waterbury Zoning Review/Special Permit/Building Permit*

The TRC review of zoning information available from the Waterbury website indicates that the property is located in an Industrial Park (IP) zone. A due diligence level review of the Waterbury zoning ordinance indicates that commercial solar facilities are not specifically contemplated as a by-right use within the IP zone. It does appear, however, that “Commercial Energy Generation and Storage Facilities” is an allowable use with issuance of a Special Permit that would be obtained through the City Zoning Review. It is thus anticipated that a Special Permit from the City of Waterbury would be required for the proposed project.

### *CTDEEP/NPDES Construction General Permit NOI and SWPPP*

Because the project will likely “disturb” an area greater than one (1) acre (site preparation/earthwork to achieve appropriate grades is assumed to be needed), it is anticipated that project coverage under the Connecticut Construction General Permit for Stormwater impacts during construction will need to be sought and obtained from CTDEEP. This effort will include submission of a NOI prior to commencement of project construction and development and publication of a suitably robust SWPPP that will be maintained onsite throughout the construction period and will be the responsibility of the construction contractor.

### **Ellington Permitting Evaluation**

According to GIS data obtained by TRC for this study, there are several surface water resource areas in close proximity to the site, including Creamery Brook and associated bordering wetland/riparian areas, which pass close by the Ellington property to the immediate east and south of the site, and other areas of wetland to the east, south and west of the site. Another perennial stream, Thompson Brook, is located

approximately 1,000 feet to the north and west of the proposed site, and a larger perennial stream is located approximately 1,000 feet to the west across the town line in East Windsor. As noted above, Route 140 (Saddle Mill Road) passes immediately to the west of the property. According to the Ellington zoning map, which was obtained for this study, the property is zoned “I” Industrial.

The proposed SGF also lies approximately 1,000 feet away, but upstream (association is via Creamery Brook) from, a “Natural Diversity Area” as noted within Attachment 3. Based on these constraints and permitting context, TRC anticipates that the following municipal and state environmental permitting and review activities could or would be required for the subject project proposal.

#### *Ellington Zoning Review/Site Plan Review/Special Permit/Building Permit*

As noted, the property is zoned “Industrial” in Ellington. TRC due diligence level review of the Ellington Zoning Ordinance has shown that ground-mounted SGFs are not specifically contemplated in the ordinance. A determination of the feasibility and level of effort required to obtain zoning approval for the proposed facility is not possible without outreach to local officials, which is outside of this current study. At a minimum, however, it is assumed that municipal authorization for the proposed project (probably a Special Permit) would be required.

#### *CTDEEP/NDDB Coordination*

As noted above, the proposed SGF lies upstream and within ½ mile of a “Natural Diversity Area” as shown in Figure 3. For this reason, it is anticipated that coordination with the CTDEEP will be required as a part of project permitting efforts. The consultation requirements will be fulfilled during the local permitting process noted above, and the consultation scope and process will be similar to that presented earlier in this memorandum in the Shelton discussion on this matter.

#### *Inland Wetlands and Waterways Commission Permitting*

Due to the close proximity of the SGF development to several surface water/perennial streams as noted in the preceding paragraphs, it is anticipated that a wetland permit filing will likely be required to the Ellington Inland Wetlands and Waterways Commission (IWWC) if the project will “alter any of these resource areas or associated buffers. It is noted that GIS data obtained and reviewed by TRC actually shows an area of NWI wetlands within the vicinity of the proposed SGF on top of the Ellington landfill cap. While this may be an artifact in the Connecticut GIS database, it is anticipated that this will need to be evaluated in the field during the project permitting process.

#### *CTDEEP/NPDES Construction General Permit NOI and SWPPP*

The proposed SGF on the Ellington property would also likely “disturb” an area greater than one (1) acre. TRC anticipates that project coverage under the Connecticut Construction General Permit (CGP) for Stormwater impacts During Construction will need to be sought and obtained from CTDEEP. Similar to the scope for this matter discussed for the other sites under evaluation in this memorandum, this effort will include submission of a NOI prior to commencement of project construction, and development and

publication of a suitably robust SWPPP that will be maintained onsite throughout the construction period and will be the responsibility of the construction contractor.

## RECOMMENDATIONS AND CONCLUSIONS

Based on the information obtained as part the due diligence report for SGF development of the three (3) CRRA properties, installation of a SGF is a viable option for development, which would provide economic and environmental benefits to CRRA and participating communities, both immediately and long-term, through lower energy costs and reduction in carbon emissions. The interconnection points designated for the installation of the SGF are viable and could be readily installed within the Site infrastructure. Based on the previous meetings, CRRA is currently working with the CTDEEP to coordinate permitting efforts in concert with the proposed SGF installation. The environmental jurisdictional constraints also would not preclude the Site from SGF development. The following sections summarize the interconnection and permitting conclusions for each property.

### Ellington Conclusions

The proposed SGF is technically feasible to construct and interconnect on the Ellington property, although capacity above 500 kW would need to be confirmed through the screening study that is part of the interconnect application process and would be considered distributed generation per Connecticut utility regulations and not be subject to FERC nor ISO-NE application processes. The interconnection application process for the Ellington property would fall under the Fast Track process and may require installation of a new larger electrical service. The availability of virtual-net metering would improve the probability of SGF development financing due to the minimal on-site electrical demand. Virtual net-metering under UI and C&LP would also need to be expanded beyond municipalities and include third-party ownership to increase the economic viability of the project and gain the interest of solar developers. There are no environmental permitting “fatal flaws” that have been identified through this exercise, including those associated with landfill post-closure use. TRC anticipates that a ground mounted SGF at the proposed Ellington property may experience a heightened level of permitting and regulatory scrutiny due to the rural setting where multiple environmental constraints are present.

### Shelton Conclusions

The proposed SGF is technically feasible to construct and interconnect on the Shelton property, although capacity above 500 kW would need to be confirmed through the screening study that is part of the interconnect application process and would be considered distributed generation per Connecticut utility regulations and not be subject to FERC nor ISO-NE application processes. The interconnection application process for the Shelton property would fall under the Fast Track process. The presence of existing 13.8 kV utility distribution lines and the former use for interconnection of a power generation facility supports a conclusion that interconnection of a SGF is feasible at the Shelton property. The availability of virtual-net metering would improve the probability of SGF development financing due to the minimal on-site electrical demand. Virtual net-metering under UI and C&LP would also need to be expanded beyond municipalities and include third-party ownership to increase the economic viability of the project and gain the interest of solar developers. TRC has not identified any environmental permitting “fatal flaws” that would render the proposed SGF infeasible, including those associated with landfill post-closure use. The proximity of the noted rivers and the location of the subject site within the Natural



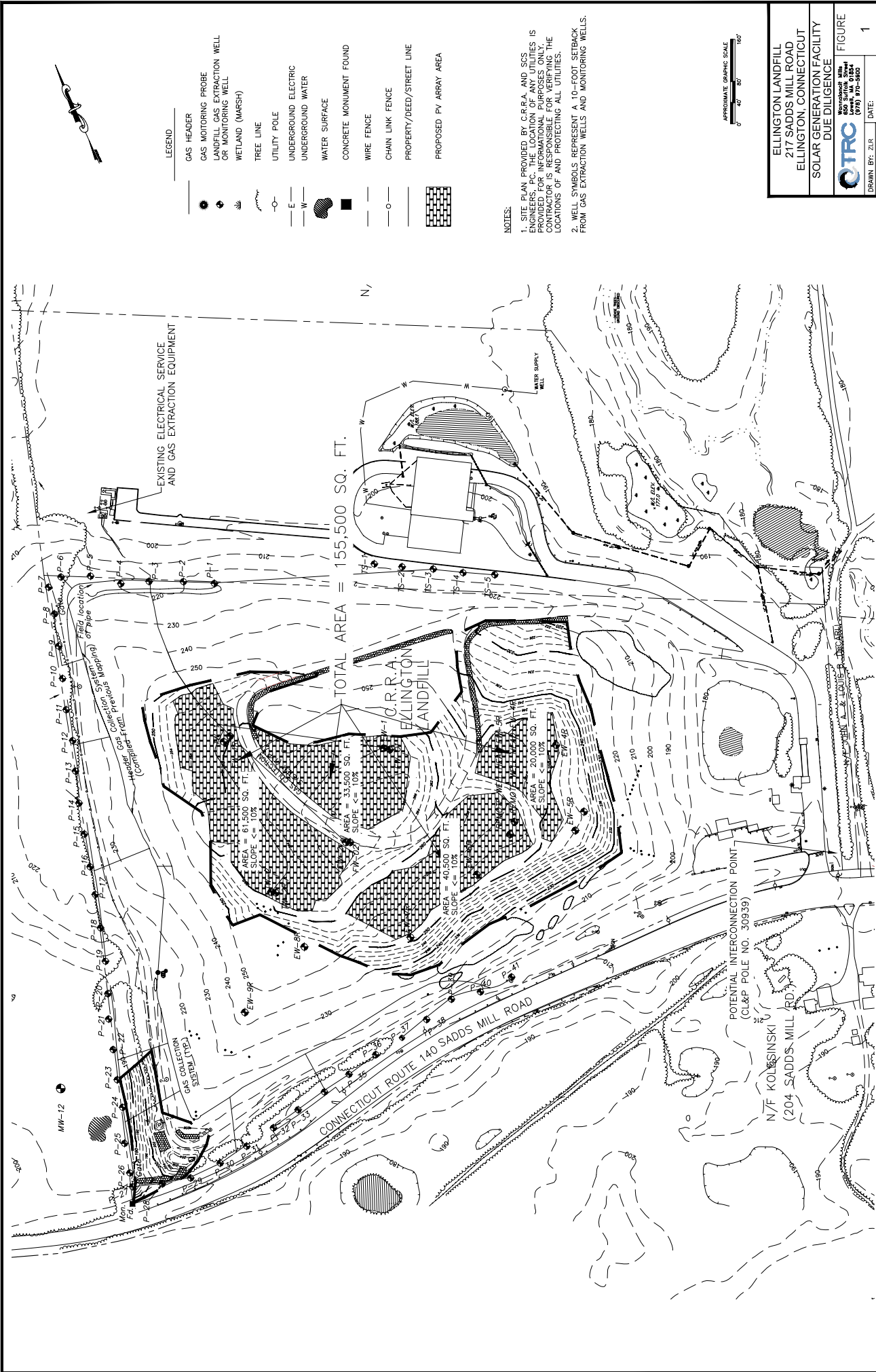
Diversity Area noted by the due diligence memorandum would contribute some complexity to the permitting effort for this project. It should also be noted that any alterations to stormwater systems or other site modifications that would “impact” the Housatonic River or the Far Mill River or associated bordering wetlands, while TRC assumes these would not be required, would potentially trigger additional permitting requirements under the Clean Water Act and should thus be avoided.

### **Waterbury Conclusions**

The proposed SGF is technically feasible to construct and interconnect on the Waterbury property, although capacity above 500 kW would need to be confirmed through the screening study that is part of the interconnect application process and would be considered distributed generation per Connecticut utility regulations and not be subject to FERC nor ISO-NE application processes. The interconnection application process for the Waterbury property would fall under the Fast Track process and may require installation of an electrical service, although three-phase power is located in close proximity. The availability of virtual-net metering would improve the probability of SGF development financing due to the minimal on-site electrical demand. Virtual net-metering under UI and C&LP would also need to be expanded beyond municipalities and include third-party ownership to increase the economic viability of the project and gain the interest of solar developers. TRC due diligence level permitting review of the proposed SGF at the subject location in Waterbury indicates that there are limited environmental constraints present that would trigger environmental permitting obligations beyond the municipal zoning approval/building permit and NPDES permitting noted above. The Waterbury site is thus considered an attractive location for the proposed project purpose.

**Attachment 1**  
**Proposed Solar Generation Facility Layouts**





- LEGEND**
- GAS HEADER
  - GAS MOTORING PROBE
  - LANDFILL GAS EXTRACTION WELL OR MONITORING WELL
  - WETLAND (MARSH)
  - TREE LINE
  - UTILITY POLE
  - UNDERGROUND ELECTRIC
  - UNDERGROUND WATER
  - WATER SURFACE
  - CONCRETE MONUMENT FOUND
  - WIRE FENCE
  - CHAIN LINK FENCE
  - PROPERTY/DEED/STREET LINE
  - PROPOSED PV ARRAY AREA

**NOTES:**

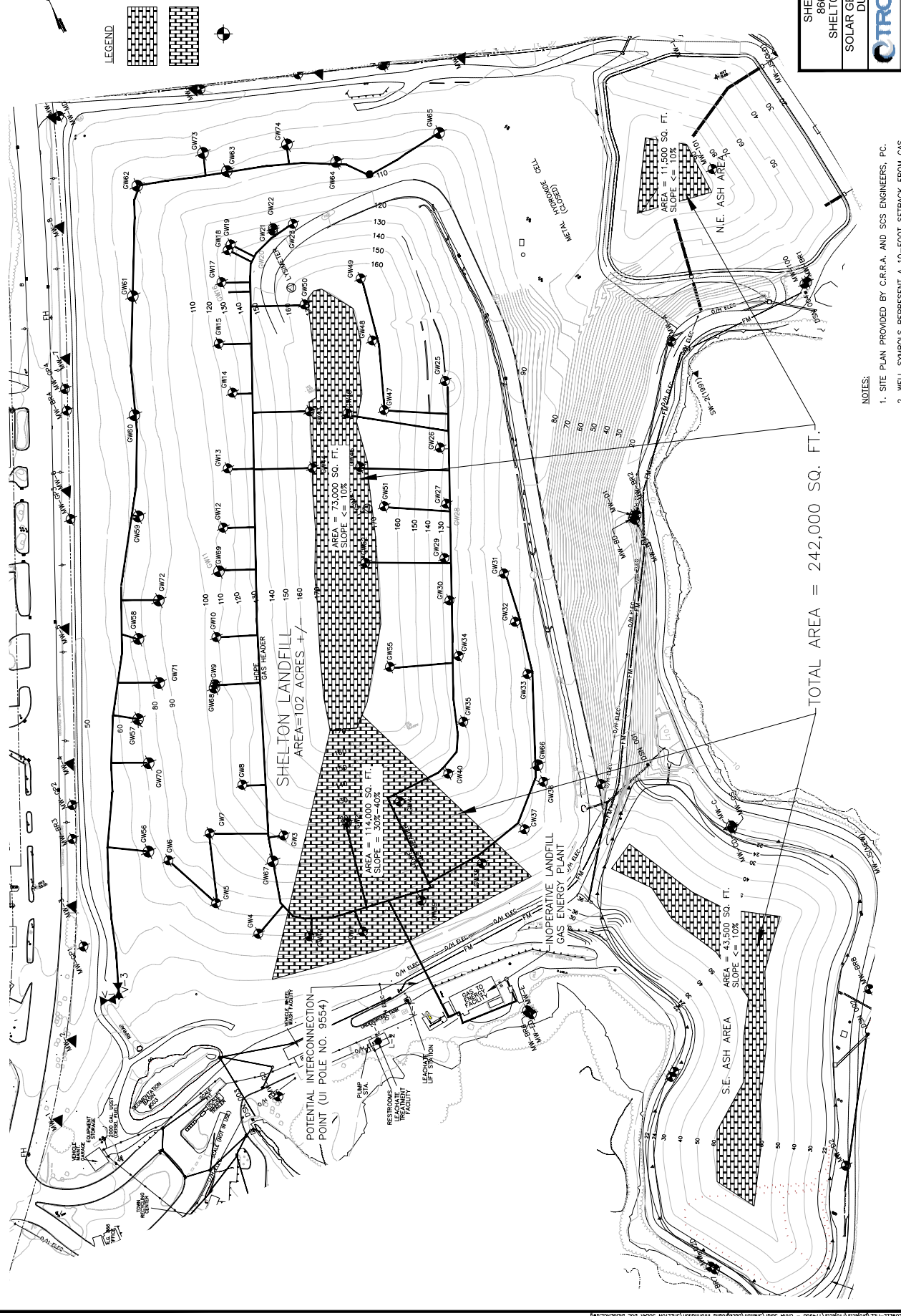
1. SITE PLAN PROVIDED BY C.R.R.A. AND SCS ENGINEERS. THE LOCATION OF UTILITIES IS BASED ON INFORMATION PROVIDED BY THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATIONS OF AND PROTECTING ALL UTILITIES.
2. WELL SYMBOLS REPRESENT A 10-FOOT SETBACK FROM GAS EXTRACTION WELLS AND MONITORING WELLS.

**ELLINGTON LANDFILL**  
**217 SADD'S MILL ROAD**  
**ELLINGTON, CONNECTICUT**  
**SOLAR GENERATION FACILITY**  
**DUE DILIGENCE**




**CTRC**  
 Connecticut  
 Tolland, CT 06084  
 (860) 970-8800

**FIGURE**  
 1

DRAWN BY: ZJR      DATE: MAY 2012  
 CHECKED BY: RJ



**LEGEND**

-  PROPOSED PRIMARY PV ARRAY AREA
-  PROPOSED SUPPLEMENTAL PV ARRAY AREA FOR CONSIDERATION
-  GAS EXTRACTION WELL OR MONITORING WELL

APPROXIMATE GRAPHIC SCALE  
 0' 40' 80' 160'

TOTAL AREA = 242,000 SQ. FT.

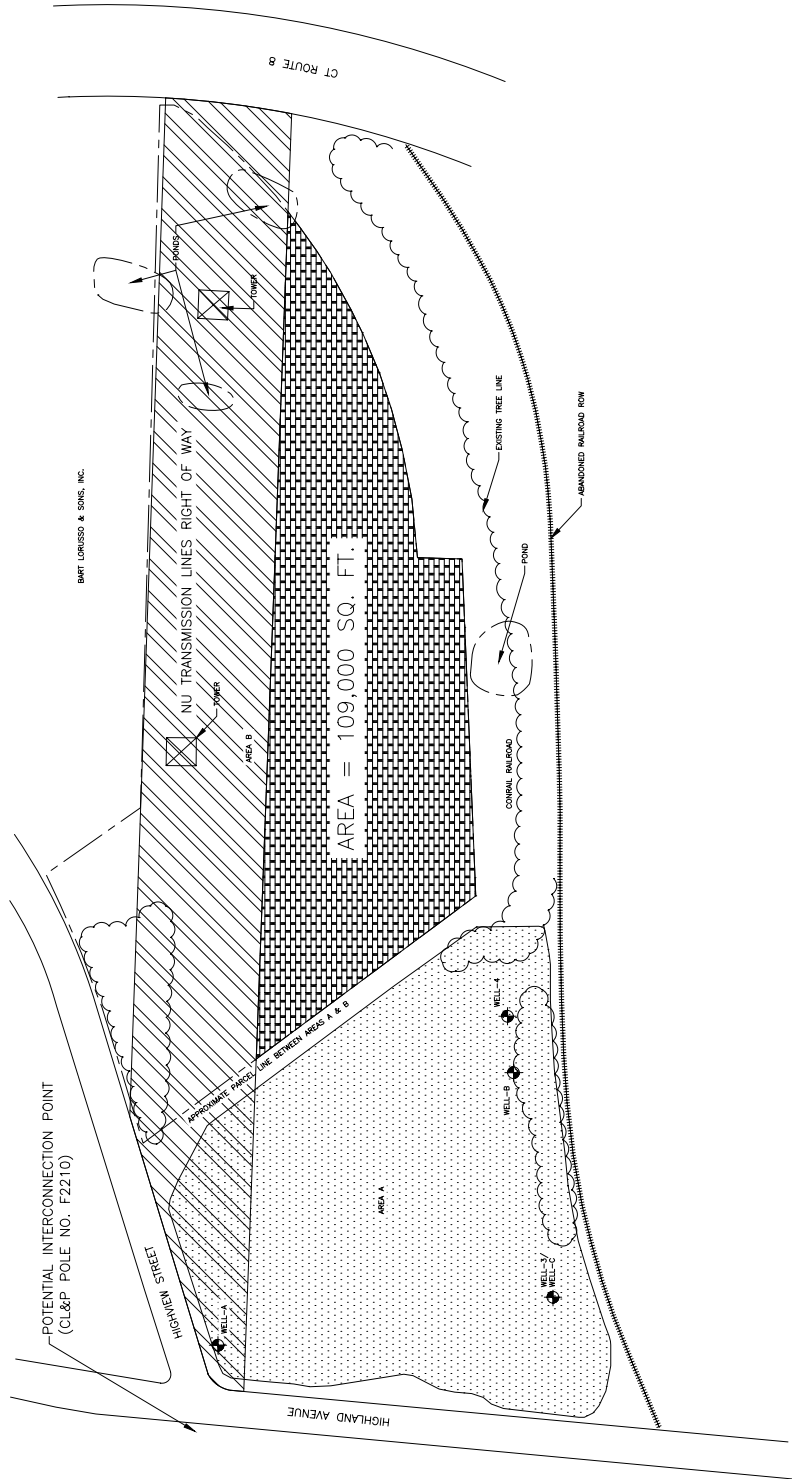
**SHELTON LANDFILL**  
 866 RIVER ROAD  
 SHELTON, CONNECTICUT  
 SOLAR GENERATION FACILITY  
 DUE DILIGENCE

**OTRC**  
 Worthingtonville  
 Shelton, MA 01884  
 (978) 970-3800

DRAWN BY: ZJR DATE: MAY 2012  
 CHECKED BY: RJR

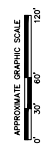
- NOTES:**
1. SITE PLAN PROVIDED BY C.R.A. AND SCS ENGINEERS, PC.
  2. WELL SYMBOLS REPRESENT A 10-FOOT SETBACK FROM GAS EXTRACTION WELLS AND MONITORING WELLS.

FIGURE  
 2



- LEGEND**
- PARCEL BOUNDARY
  - ..... APPROXIMATE LIMITS OF PERMITTED LANDFILL AREA
  - ▨ NU TRANSMISSION LINES
  - ▩ PROPOSED PV ARRAY AREA
  - ⊙ MONITORING WELL

**NOTES:**  
 1. SITE PLAN PROVIDED BY C.R.R.A. AND TRP ASSOCIATES, INC.



WATERBURY LANDFILL HIGHLAND AVE AND HIGHVIEW ST WATERBURY, CONNECTICUT	
SOLAR GENERATION FACILITY DUE DILIGENCE	
Connecticut Turnpike Construction & Consulting Engineers 1000 Main Street Waterbury, CT 06705 (860) 970-5800	
DRAWN BY: ZJR CHECKED BY: RJ	DATE: MAY 2012
<b>FIGURE 3</b>	

**Attachment 2**  
**Interconnection and Permitting Guidance Documents**



STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Bureau of Materials Management and Compliance Assurance  
Engineering & Enforcement Division  
79 Elm Street, Hartford CT 06106-5127  
TEL. 860-424-3023 TOLL-FREE: 1-888-424-4193  
www.ct.gov/dep

## *Environmental Program Guidance Document*

# **Guidance for Disruption Activities, Closure Activities, and/or Post-Closure Use at Solid Waste Disposal Areas**

### **Purpose**

This guidance document is designed to answer general questions and provide basic information for use when the Commissioner determines that a disruption authorization is required, or a closure/post-closure-use plan must be submitted. The information provided below addresses the requirements applicable to activities associated with the excavation, disruption, or removal of deposited material (including cover material) at an active, inactive, or closed solid waste disposal area. It is the responsibility of the individual or individuals engaged in these activities to comply with all applicable laws and regulations and obtain all applicable approvals, including any necessary permits or permit modifications.

### **What is a solid waste disposal area?**

Pursuant to Section 22a-207 of the Connecticut General Statutes (CGS), "solid waste disposal area" is defined as "any location, including a landfill or other land disposal site, used for the disposal of **more than ten cubic yards of solid waste**. For the purposes of this subdivision, 'disposal' means placement of material at a location with the intent to leave it at such location indefinitely, or to fail to remove material from a location within forty-five days." Disposal does not necessarily mean that the solid waste has been buried on site; it also includes surficial dumping of solid waste. This definition is **not** limited to facilities that have received solid waste permits pursuant to CGS Section 22a-208a but applies to **any** area that meets the above referenced definition, even if it pre-dates the existence of the Department's permit program (i.e., no grandfather clause).

**DISRUPTION:** refer to Section 22a-209-7(u) of the Regulations of Connecticut State Agencies (RCSA)

### **What constitutes disruption of a solid waste disposal area?**

Disruption is considered as any disturbance (e.g., excavation, boring, re-grading, consolidation of waste, routine maintenance of environmental controls, etc.) or removal of deposited material, including the removal of cover material at an active, inactive or closed solid waste disposal area. Consolidation of waste(s) (i.e., any activity that combines waste types of similar nature for on-site disposal) is a form of disruption. Exploratory investigations (e.g., test pits, bore holes, etc.) that are being conducted at a solid waste disposal area to obtain additional information on the types of waste, the vertical or horizontal limits of the waste and other such information are **not** considered a disruption.

## **What is a disruption authorization?**

A disruption authorization is written approval from the Commissioner that allows the excavation, disruption or removal of deposited material at a solid waste disposal area. As stated above, this is not limited to sites permitted by the Department to receive solid waste but can include many different situations, such as historical landfills that pre-date the Department's solid waste management regulations, farm dumps, areas at industrial sites used for the disposal of manufacturing wastes, areas used for the disposal of landclearing debris (i.e., brush, stumps, etc.), areas used for the disposal of construction and demolition wastes, etc.

## **What is the process for obtaining a disruption authorization?**

RCSA Section 22a-209-7(u) outlines the requirements for the excavation, disruption, or removal of deposited material at an active, inactive or closed solid waste disposal area. An *Authorization Application for Disruption of a Solid Waste Disposal Area* form describing the proposed activities must be submitted to the Department for review and written approval. The information provided with the application must include a full description of the excavation process including, but not limited to: operational plans detailing the area involved; depth of excavation; final grades; volume of material to be excavated or disrupted; where material will be placed or disposed; construction schedule; as well as measures taken to protect the public health and the environment (i.e., a site-specific health and safety plan, a personnel health monitoring plan, dust control measures, and an erosion and sedimentation control plan).

## **When is a disruption authorization not required?**

As stated previously, an exploratory investigation being conducted to obtain information on a disposal area is not considered a disruption, therefore a disruption authorization is not required. This is contingent on the requirement that any materials excavated during the investigation are replaced and the immediate area restored promptly after completing such activities. Typically, a disruption authorization would not be required at a permitted solid waste disposal area undergoing routine maintenance activities (e.g., installation of additional gas recovery system components, restoring eroded cover materials and vegetation, etc.) unless warranted by the magnitude of the situation, which is assessed on a case-by-case basis. Disruption authorizations are not required when the material being managed is limited to clean fill and/or soil.

**CLOSURE:** refer to RCSA Section 22a-209-13

## **What constitutes closure of a solid waste disposal area?**

Closure is considered as the establishment of final grades (top and sideslopes) and installation of final cover material, including vegetative cover, on a solid waste disposal area. RCSA Section 22a-209-13 outlines the requirements for closing solid waste disposal areas. The Department requires that the facility owner or permittee submit a closure plan for the Commissioner's review and written approval. At some historic sites (pre-dating solid waste management regulations), the Department has not required any additional grading or cover material especially if the site is well stabilized and there are no erosion problems. These projects are reviewed on a case-by-case basis and, at a minimum, would require the submittal of an as-built drawing (certified by a Professional Engineer licensed to practice in Connecticut) and the recording of a detailed description of the solid waste disposal area on the local municipal land records.



## **What information is included in a closure plan?**

A closure plan should include, but is not limited to the following: detailed engineering drawings depicting final contours; technical specifications on final cover materials; erosion and sedimentation controls; decomposition gas controls (as necessary); post-closure water quality monitoring and maintenance; site specific health and safety plan; proposed use of the site after closure; etc. There is also a fee assessed for closure plan review and approval. A fee is assessed for the review and approval of a closure plan for an active site that has been permitted pursuant to CGS Section 22a-208a. After the closure is completed, a complete set of as-built drawings must be submitted to the Commissioner. Additionally, a detailed description of the disposal area is required to be filed on the local municipal land records and a copy of that information must be submitted to the Commissioner.

## **When would a closure plan and a disruption authorization both be required?**

When extensive relocation of waste is necessary to complete closure of the solid waste disposal area prior to capping, both an authorization for the disruption activity and a closure plan for capping are necessary.

**POST-CLOSURE USE:** refer to RCSA Section 22a-209-13(d)

## **What is post-closure use?**



Post-closure use is considered as any activity at a closed solid waste disposal area. Post-closure use requires approval of the Commissioner prior to the redevelopment or re-use to ensure that the use is protective of human health and the environment. Unless properly managed, post-closure uses have the potential to create environmental or human health concerns through exposure to wastes, decomposition gases, leachate, and erosion of the disposal area's cap. For the purposes of this section, closed does not necessarily mean that the Department has issued a closure approval; it could be a site that is historic (i.e., that pre-dates the Department's solid waste management regulations) and has been inactive.

## **What is the process for obtaining post-closure use approval?**

Department regulations require that a plan for post-closure use be submitted to the Commissioner for review and written approval as part of a closure plan or whenever a change in an approved post-closure use is sought. The plan must identify the proposed redevelopment or post-closure uses and what controls will be used to minimize exposures during redevelopment to protect human health and the environment. Regulations applicable to closure of solid waste disposal areas also apply to post-closure activities, such as grading, disruption, final cover and seeding, management of decomposition gases, etc.

This document is designed to answer general questions and provide basic information. You should refer to the appropriate statutes and regulations for the specific language. It is your responsibility to comply with all applicable laws. The information contained in this guidance document is intended only to acquaint you with certain aspects of the solid waste program. For further information, please contact the Waste Engineering and Enforcement Division at 860-424-3366

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# THE CONNECTICUT LIGHT AND POWER COMPANY



# THE UNITED ILLUMINATING COMPANY



## Guidelines for Generator Interconnection

### Fast Track and Study Processes

May 12, 2010

**Excluding Inverter Based Projects 10 kW and Less**

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# SECTION 1

## 1.0 Introduction and Executive Summary

### 1.1 Introduction

**W**elcome! These Guidelines have been prepared by the Electric Distribution Companies, The Connecticut Light & Power Company (“CL&P”) and The United Illuminating Company (“UI”) (collectively, the “EDCs”), to assist power-generating customers wishing to interconnect with the Electric Power System (the “EPS”).

Capitalized terms used herein shall have the meanings specified in Attachment XI or the body of these Guidelines.

The EDCs are responsible for the distribution of electric power throughout most of the State of Connecticut. In order to carry out their responsibilities to all customers, each EDC must assure that all Interconnections are made according to certain protocols and procedures, which are described in more detail in these Guidelines.

These revised Guidelines have been simplified as follows: (i) the application process has been streamlined; and (ii) these Guidelines are harmonized with ISO-NE, Schedule 23, requirements based on FERC’s Small Generator Order-2006.

These Guidelines do not apply to inverter-based Generating Facilities of 10 kW and less. Separate guidelines, entitled “Guidelines for Certified Inverter Based Generating Facilities, 10 kW and Less,” were created for such Generating Facilities.

These Guidelines contemplate that a Generator and an EDC will work together toward the common goal of a successful Interconnection, and the EDCs may consider case specific exemptions to the Guidelines (*e.g.*, advances in technology). In the unlikely event that a Generator and an EDC cannot reach agreement on a specific Interconnection matter, such dispute will be resolved via formal dispute resolution procedures set forth in these Guidelines.

Generators intending to make an Interconnection are advised to (i) refer to the Technical Requirements, attached hereto as Exhibit B, for guidance in the design of the Generating Facility and the Interconnection Facility; (ii) consult with the appropriate EDC prior to purchase of equipment in connection with the proposed Interconnection; and (iii) contact the appropriate EDC Facilitator to determine where and how to apply.

The Connecticut Light & Power Company and The United Illuminating Company look forward to working with Generators to facilitate a safe, reliable and successful Interconnection in accordance with these Guidelines.

# SECTION 1

## 1.2 Executive Summary

### **Interconnection Process for Generators smaller than 20 MW:**

These Interconnection Guidelines provide general guidance for interconnections of Generating Facilities that are smaller than 20 MW. Generating Facilities interconnections vary significantly in complexity depending on the generator size, location, and customer requirements; consequently, it is not practical to expect that these Guidelines should be rigidly observed for all interconnections and at all times. The Electric Distribution Company's (EDC's) Facilitator will work closely with the Generator to help achieve a successful interconnection.

This Executive Summary and the flow chart shown in Figure 1 provide a quick overview of the Interconnection process and are not meant to replace the more detailed description of requirements contained in the remainder of these Interconnection Guidelines.

The first step of the Interconnection process is to identify under which jurisdiction an Interconnection falls; the Federal Energy Regulatory Commission (FERC) or State of Connecticut (DPUC). Generators that intend to interconnect to the EPS and sell power or ancillary services to a third party or in the wholesale market may under certain circumstances fall under FERC jurisdiction. Generators that commit to sell their entire excess power to the EDC under NET Metering rules or to the EDC under the DPUC-approved tariff will be subject to state rules and such Generators can file an application directly with the EDC. State (DPUC) jurisdictional interconnection projects are administered by the EDC, while FERC jurisdictional projects are administered by the Independent System Operator – New England, Inc. (ISO-NE).

### **FERC Jurisdictional Interconnections:**

Generators seeking to Interconnect to the EPS whose Interconnections fall under FERC's jurisdiction must submit their application to ISO-NE in accordance with the procedures in the ISO-NE Transmission, Markets and Services Tariff (ISO-NE Tariff), Schedule 22 (for Generators larger than 20 MW) or Schedule 23 (for Generating Facilities up to and including 20 MW). ISO-NE will administer the interconnection process. However, prior to submitting an application to ISO-NE, Generators must contact the EDC's Facilitator. In addition, prior to or at the same time that the Generator submits the application to ISO-NE, the Generator should provide a copy of the Interconnection application to the EDC. The EDC will establish the Generator's queue position upon the EDC's receipt of notification from the ISO-NE.

### **State Jurisdictional Interconnections:**

The state-jurisdictional Interconnection process begins when a Generator submits an application to the EDC. The EDC will review the application and submittals and work

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with the customer to resolve any discrepancy and obtain any missing information. The EDC will then conclude the application review within fifteen (15) Business Days and submit the results to the Generator.

Upon completion of the application review, if an Interconnection Study (Feasibility, Impact and/or Facility) is required, the EDC will provide a Study Agreement and an estimate of the costs to complete the Study. The EDC will request that the Generator execute the Agreement within fifteen (15) Business Days and pay the estimated cost of the Study. Some or all of the Studies may be required and the EDC will work with the Generator to identify the required Studies. Each Study will require its own Study Agreement. Distribution Studies usually require approximately thirty (30) Business Days for completion of each Study and may include a Feasibility Study, an Impact Study and a Facility Study.

Transmission studies may be required for some Interconnections even if the Generator Interconnection falls under state rules. Transmission studies are more complex and must be conducted in accordance with applicable ISO-NE rules and procedures. These Guidelines do not address the transmission studies process required by ISO-NE. The Generator may obtain guidance from the ISO-NE Tariff, Schedule 22 and 23 and Section I.3.9. However, during the Interconnection process, the EDC will provide guidance including information concerning the scope, duration and cost of the transmission studies.

At the conclusion of the studies, the EDC will submit an Interconnection Agreement (IA) to the Generator. The Generator will be required to sign the IA and submit full payment for the estimated costs for upgrades required to interconnect the Generating Facility. At the conclusion of the project, the EDC will reconcile actual vs. estimated cost and reimburse or bill the Generator accordingly.

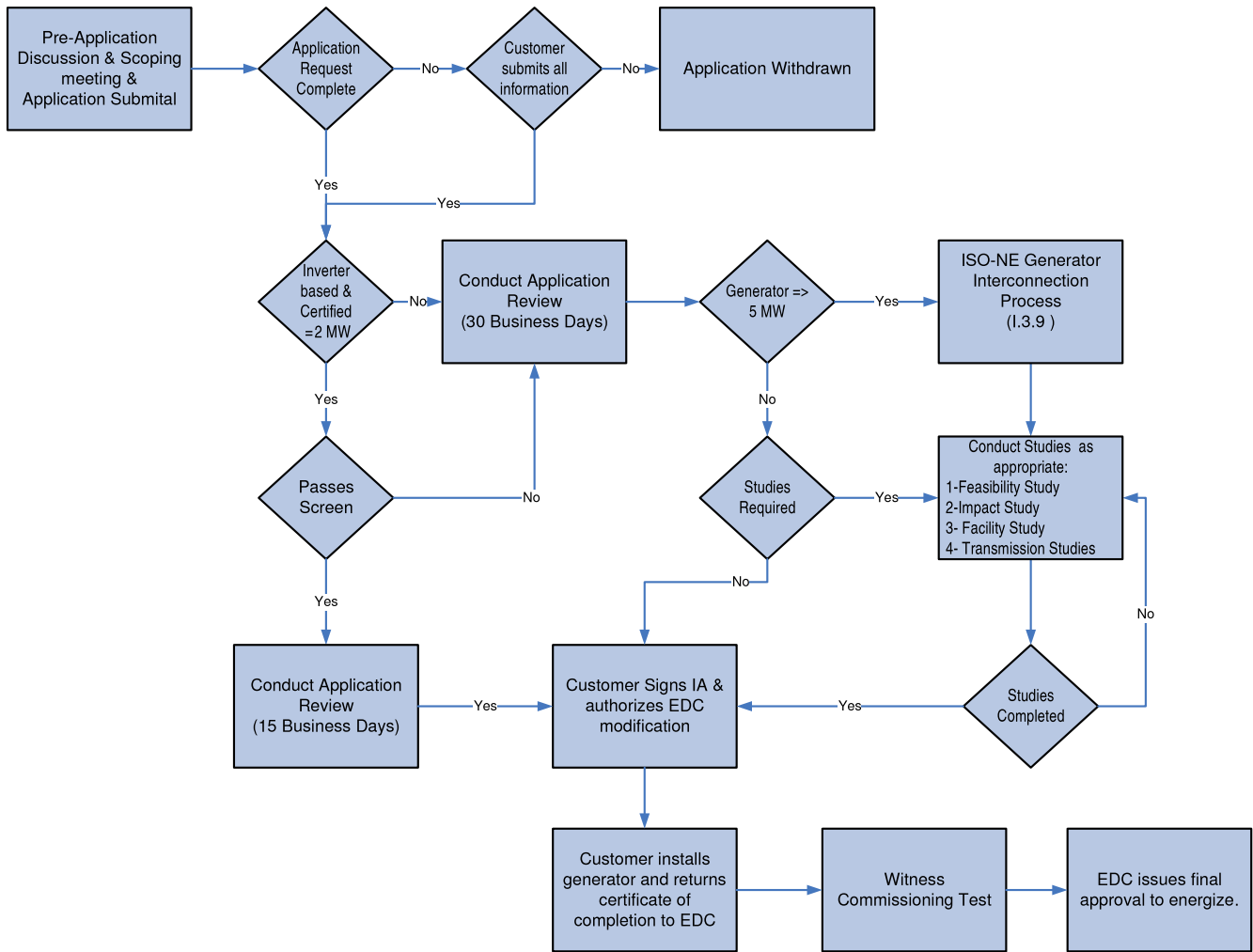
Once the upgrades are implemented, the following steps will be required to allow the Generator to interconnect to the EDC.

- Provide Proof of Municipal approval for the Generating Facility.
- Request the EDC to witness the commissioning test. Within ten (10) Business Days of the receipt of the Municipal approval, the EDC will witness the commissioning test and following successful completion of that test, the EDC will send a final approval authorizing the interconnection to the Generator.

# SECTION 1

The following Interconnection Process Flow Chart provides an overview of the steps necessary for a successful interconnection:

**Figure 1: Interconnection Process Flow Chart**



**Additional Process Steps for Generators greater than 5 MW:**

Regardless of the Interconnection jurisdiction, each Generator wishing to interconnect a Generating Facility larger than 5 MW must comply with the ISO-NE Planning Procedure 5 (PP5), which is the procedure for a Proposed Plan Application (PPA) under Section I.3.9 of the ISO-NE Tariff. This process must be completed before the Generator may Interconnect such Generating Facility. It is important to note that the PPA process is an ISO-NE requirement, even if the Interconnection of such facility falls under state jurisdiction.

## SECTION 1

While the Generator is ultimately responsible for the PPA application and the associated data to be submitted to ISO-NE, the EDC will provide support to the Generator if the Generator is not a “Governance Participant” (as such term is defined in the Participants Agreement; among ISO-NE and the New England Power Pool) at the time the PPA is submitted to the EDC. Typically, the EDC will file the PPA on behalf of such non-Governance Participant Generator.

Additionally, the EDC will represent such Generator in ISO-NE proceedings in accordance with the current ISO-NE rules; provided, however, that such Generator shall remain solely responsible for, among other things:

- (a) the completion of the PPA and the accuracy of the information contained therein,
- (b) the advance payment based on a non-binding good faith estimate of all costs in connection with any required Transmission System Impact Study, and
- (c) the payment of all costs associated with transmission upgrades identified through the ISO-NE approval process.

Each non-Governance Participant Generator wishing to Interconnect a Generating Facility larger than 5 MW must read and be familiar with PP5, Section I.3.9 of the ISO-NE Tariff and other relevant ISO-NE guidance on the PPA process. Further, such non-Governance Participant Generator can communicate directly with ISO-NE to seek assistance concerning the applicable PPA requirements and associated issues.

For non-Governance Participant Generators the EDC notifies ISO-NE of receipt of the Interconnection Application, under current ISO-NE practice. Further, the EDC submits a complete copy of the PPA application to ISO-NE in order to secure an ISO-NE queue position. An ISO-NE queue position will not be established by ISO-NE until all the data required by ISO-NE is complete.

Governance Participants are responsible for filing their own PPA with the ISO-NE and representing themselves in connection with all ISO-NE proceedings.

### **Interconnection Process for Generators greater than 20 MW:**

The time frames and processes described in these guidelines are applicable to Generating Facilities smaller than 20 MW and represent the majority of Distribution interconnections. Generating Facilities larger than 20 MW are only rarely interconnect to the EPS. However, from time to time the EDC will receive requests for Interconnecting Generating Facilities greater than 20 MW seeking an interconnection to the EPS. When this situation occurs and provided that an interconnection to the EPS is feasible and appropriate, the EDC will use these Guidelines; however, the time frames to conduct the Application Review and Studies will be adjusted in accordance with the ISO-NE Tariff, Schedule 22.

## SECTION 2

### 2.0 Pre Application

- 2.1. After presenting a proposed Interconnection project for a specific site, the Generator may request information regarding the application process from an EDC Facilitator. The most current contact information for EDC Facilitators is available on each EDC's website listed below.
- 2.2 The EDC Facilitator will serve as the primary point of contact for all Interconnections. Copies of these Guidelines, information and forms can be obtained from the EDC Facilitator .
- 2.3 The EDC Facilitator for CL&P can be contacted:

*by phone:* 1-866-324-2437; or

*by mail or courier:*

The Connecticut Light & Power Company  
Distributed Resources Group  
P.O. Box 1409  
Hartford, CT 06143-1409

Updated information regarding EDC Facilitator contact information can be found at <http://www.cl-p.com/companyinfo/interconnection/interconnections.asp>.

- 2.4 The EDC Facilitator for UI can be contacted:

*via email:* [generator.connection@uinet.com](mailto:generator.connection@uinet.com)

*by phone:* 1-800-557-6602; or

*by mail or courier:*

The United Illuminating Company  
Customer Operations  
Generator Interconnection  
801 Bridgeport Ave.  
Shelton, CT 06484

Updated information regarding EDC Facilitator contact information can be found at [http:// www.uinet.com](http://www.uinet.com)

## SECTION 3

### 3.0 Application

#### 3.1 Applicability

- 3.1.1 These Guidelines are applicable to Interconnection Requests for Generating Facilities which fall under DPUC jurisdiction. Generators unsure as to whether the proposed Interconnection is subject to these Guidelines should contact the appropriate EDC Facilitator.
- 3.1.2 Requests for Interconnection received by an EDC shall be processed as follows:
- 3.1.2.1 A request to interconnect a certified inverter-based Generating Facility no larger than 10 kW shall be evaluated under the “Guidelines for Certified Inverter Based Generating Facilities, 10 kW and Less.”
- 3.1.2.2 A request to interconnect a Generating Facility no larger than 2 MW shall be evaluated under either the Fast Track Process (Section 4) or the Study Process (Section 5). A description of certification criteria is set forth in Attachment I.
- 3.1.2.3 A request to interconnect a Generating Facility larger than 2 MW or a Generating Facility that does not meet the criteria for the Fast Track Process shall be evaluated under the Study Process (Section 5).

#### 3.2 Interconnection Request

- 3.2.1 Prior to making an Interconnection Request, Generators should contact the EDC Facilitator to determine where to apply. If an Interconnection Request is sent to an EDC in error (*e.g.*, ISO-NE jurisdiction or wrong EDC) the EDC will return such Interconnection Request to the Generator.
- 3.2.2 An Interconnection Request must be in the form of Attachment I, and addressed to the appropriate EDC Facilitator. A processing fee is required with each Interconnection Request. The applicable fee is as follows:

Process	Generator Applicability	Application Fee	Each Study Fee
Fast Track	0-2 MW, unless Generating Facility does not qualify for the Fast Track process	\$500	Actual Cost Based



## SECTION 3

Study	(1) is larger than 2 MW but no larger than 20 MW, (2) is 2 MW or less and is not certified, or (3) is 2 MW or less and is certified but did not pass the Fast Track Process or the 10 kW Inverter Process.	\$1000	Actual Cost Based
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- 3.2.3 The Interconnecting EDC shall date- and time-stamp the Interconnection Request upon receipt. Such date- and time-stamp shall used for the purposes of the timetables set forth in these Guidelines.
- 3.2.4 Within three (3) Business Days of the receipt of the Interconnection Request, the Interconnecting EDC shall confirm receipt of such Interconnection Request using the form attached hereto as Attachment II.
- 3.2.5 Within ten (10) Business Days of the receipt of the Interconnection Request, the Interconnecting EDC shall notify the Generator if such Interconnection Request is incomplete using the form attached hereto as Attachment III. The Generator will have fifteen (15) Business Days from the date of such notice to submit the listed information or to request an extension of time to provide such information. If the Generator does not provide the listed information or a request for an extension of time within such fifteen (15) day period, then the Interconnection Request will be deemed withdrawn, and such deemed withdrawal shall be subject to Section 3.8. An Interconnection Request will be deemed complete upon receipt of the listed information by the Interconnecting EDC.

### 3.3 Insurance Requirements

Generators interconnecting a Generating Facility to the EPS of an EDC shall maintain general liability insurance in the amounts set forth in the following table, per Interconnection at all times during the Interconnection.

<b>Liability Insurance</b>	
<b>Nameplate Rating*</b>	<b>Minimum Liability Insurance Required</b>
Less than 100 kW	\$300,000
Greater than 100 kW to 1 MW	\$1,000,000
Greater than 1 MW to 5 MW	\$2,000,000
Greater than 5 MW	\$5,000,000

\*All Nameplate Ratings are based on aggregate generation at the site.

## SECTION 3

### 3.3.1 General Liability:

In connection with Generator's performance of its duties and obligations under the Interconnection Agreement, Generator shall maintain, at all times during the Interconnection, general liability insurance with a combined single limit of not less than:

Three hundred thousand dollars (\$300,000) per occurrence and in the aggregate for bodily injury and/or property damage claims where the Gross Nameplate Rating of the Generators Facility is less than or equal to 100 kW.

One million dollars (\$1,000,000) per occurrence and in the aggregate for bodily injury and/or property damage claims where the gross nameplate rating of the Generators Facility is greater than 100 kW and less than or equal to 1 MW.

Two million dollars (\$2,000,000) per occurrence and in the aggregate for bodily injury and/or property damage claims where the gross nameplate rating of the Generators Facility is greater than 1 MW and less than or equal to 5 MW.

Five million dollars (\$5,000,000) per occurrence and in the aggregate for bodily injury and/or property damage claims where the gross nameplate rating of the Generators Facility is greater than 5 MW and less than or equal to 20 MW.

### 3.3.2 Insurer Requirements and Endorsements

All required insurance shall be carried by reputable insurers qualified to underwrite insurance in Connecticut. In addition, all insurance shall: (a) include the EDC as an additional insured for all Generating facilities greater than 1 MW; (b) contain a severability of interest clause or cross-liability clause; (c) provide that the EDC shall not incur liability to the insurance carrier for payment of premium for such insurance; and (c) provide for thirty (30) Calendar Days' written notice to the EDC prior to cancellation, termination, or material change of such insurance.

### 3.3.3 Evidence of Insurance

Evidence of the insurance required shall state that coverage provided is primary, and is not in excess of or contributing with any insurance or self-insurance maintained by the EDC.

The Generator is responsible for providing the EDC with evidence of insurance in compliance with this Guideline on an annual basis.

Prior to the EDC commencing work on system modifications, the Generator shall have its insurer furnish to the EDC certificates of insurance evidencing the insurance coverage required above. The Generator shall notify and send to the EDC a certificate of insurance for any policy written on a "claims-made" basis. The EDC may at its discretion require the Generator to maintain tail coverage for three years on all policies written on a "claims-made" basis.

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All insurance certificates, statements of self insurance, endorsements, cancellations, terminations, alterations, and material changes of such insurance shall be issued and submitted to the appropriate EDC Facilitator.

### 3.4 Infrastructure Security

The security of the electric system infrastructure is essential. FERC requires the EDCs, market participants, and Generating Facilities interconnected with an EDC's EPS to comply with the recommendations offered by the National Infrastructure Advisory Council and best practice recommendations from NERC. All public utilities must meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices where required. Interconnection Requests will be reviewed in light of infrastructure security concerns.

### 3.5 Modification

Any modification to machine data, equipment configuration or the Interconnection site not agreed to in writing by the Interconnecting EDC may be deemed a withdrawal of the Interconnection Request. In the event of a deemed withdrawal, the provisions of Section 3.8 shall apply.

### 3.6 Site Control

Documentation evidencing site control must be submitted with the Interconnection Request. Site control may be demonstrated through:

- 3.6.1 Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Facility;
- 3.6.2 An irrevocable option to acquire any of the property rights set forth in Section 3.6.1; or
- 3.6.3 An exclusivity or other business relationship between the Generator and an entity having the right to sell, lease, or grant the Generator the right to possess or occupy a site for such purpose; or
- 3.6.4 Filed applications for required permits with respect to a site on Federal or State property.

### 3.7 Queue Position

3.7.1 The Interconnecting EDC shall assign to each Interconnection Request a queue position based upon date of the date-stamp described in Section 3.2.3. The queue position of each Interconnection Request will be used to determine the cost responsibility for any upgrades necessary to accommodate the Interconnection. The EDC shall maintain a single Distribution queue.

### 3.8 Withdrawal

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- 3.8.1 The Generator may withdraw its Interconnection Request at any time by written notice of such withdrawal to the Interconnecting EDC.
- 3.8.2 In addition, if the Generator fails to adhere to all requirements of these Guidelines, subject to Section 3.8.3, the Interconnecting EDC shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Generator of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal.
- 3.8.3 Upon receipt of such written notice, if the Generator wishes to dispute the withdrawal notice, the Generator shall have fifteen (15) Business Days in which to either respond with information or actions that cure the deficiency or to notify the Interconnecting EDC of its intent to pursue dispute resolution in accordance with Section 6.2.
- 3.8.4 Withdrawal of an Interconnection Request shall result in the loss of queue position assigned to such Interconnection Request.
- 3.8.5 If a Generator disputes such withdrawal and loss of queue position, then the Generator's Interconnection Request shall be removed from the queue until such time that the outcome of the dispute restores its queue position.
- 3.8.6 Within thirty (30) days following a withdrawal, a Generator that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to the Interconnecting EDC and any Affected Parties all costs prudently incurred with respect to such Interconnection Request prior to the receipt of notices described Section 3.8.1 or 3.8.2, as the case may be.
- 3.8.7 A Generator who fails to pay all monies due pursuant to Section 3.8.6 shall not be eligible to obtain any Interconnection Study reports or submit subsequent Interconnection Requests.

## SECTION 4

### 4.0 Fast Track Process

#### 4.1 Applicability

The Fast Track Process is available to any Generator proposing to interconnect its Generating Facility with the Distribution System if (a) the proposed Generating Facility is no larger than 2 MW and (b) the proposed Generating Facility (i) meets the Codes and Standards and other certification requirements of these Guidelines or (ii) is determined to be safe to operate by the Interconnecting EDC, in its sole discretion.

#### 4.2 Initial Review

Within fifteen (15) Business Days after the Interconnecting EDC notifies the Generator it has received a complete Interconnection Request, the Interconnecting EDC shall perform an initial review using the screens set forth below, shall notify the Generator of the results, and include with the notification copies of the analysis and data underlying the determinations under the screens.

4.2.1 The EDC will use the following criteria for performing screening evaluations:

4.2.1.1 For Interconnection of a proposed Generating Facility to a radial distribution circuit, the aggregated generation, including the proposed Generating Facility, on the circuit shall not exceed fifteen percent (15%) of the Line Section annual peak load as most recently measured at the substation. A line section is that portion of an Interconnecting EDC's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line.

4.2.1.2 For Interconnection of a proposed Generating Facility to the load side of Spot Network protectors, the proposed Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the lesser of five percent (5%) of a Spot Network's maximum load or 50 kW.

4.2.1.3 For Interconnection of a proposed Generating Facility to the load side of an area network, the following screen will be conducted:

- a) The unit is a Certified Inverter-based generator or inverter based using a utility grade relay package exclusively in its design.

## SECTION 4

- b) The network primary feeders supplying the network to which the generation is attached are from the same electrical bus or normally tied buses.
- c) The maximum DG size will be limited to 50 kW at any location. A location is defined as any manhole or service box where the DG is connected to the network secondary system. This will ensure that no more than 50 kW of DG is located between the same set(s) of cable limiters.
- d) Total aggregate DG interconnected to an area network will be limited to 3% of the maximum network transformer connected kVA with the feeder supplying the largest number of network units out of service, or a maximum of 500 kW, whichever is less.

4.2.1.4 The proposed Generating Facility, in aggregation with other generation on the distribution circuit, shall not contribute more than ten percent (10%) to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.

4.2.1.5 The proposed Generating Facility, in aggregation with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, load-break elbows, and line reclosers), or Generating Facility equipment on the EPS to exceed eighty-seven and one-half percent (87.5%) of the short circuit interrupting capability; nor shall the Interconnection be permitted for a circuit that already exceeds eighty-seven and one-half percent (87.5%) of the short circuit interrupting capability.

4.2.1.6 The table below sets forth the type of Interconnection applicable to each type of primary distribution line. This screen criterion includes a review of the type of electrical service provided to the Generator, including line configuration and the transformer connection to limit the potential for creating over-voltages on the Interconnecting EDC's EPS due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result/Criteria
Three-phase, three wire	3-phase or single phase, phase-to-phase	Pass screen
Three-phase, four wire	Effectively-grounded 3 phase or Single-phase, line-to-neutral	Pass screen

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- 4.2.1.7 If the proposed Generating Facility is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed Generating Facility, shall not exceed 20 kW.
- 4.2.1.8 If the proposed Generating Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than twenty percent (20%) of the nameplate rating of the affected service transformer.
- 4.2.1.9 The Generating Facility (in aggregation with other generation interconnected to the side of a substation transformer feeding the circuit where the Generating Facility is proposed to be interconnected) shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (*e.g.*, three or four busses from the Point of Interconnection).
- 4.2.1.10 No construction of facilities by the Interconnecting EDC on its EPS shall be required to accommodate the Generating Facility.
- 4.2.2 If the Interconnecting EDC determines that the proposed Interconnection passes the screen criteria set forth in Section 4.2.1, the Interconnection Request shall be approved and the Interconnecting EDC will provide the Generator an executable Interconnection Agreement within five (5) Business Days after such determination.
- 4.2.3 If the proposed Interconnection fails the screens, but the Interconnecting EDC determines that the Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the Interconnecting EDC shall provide the Generator an executable Interconnection Agreement within five (5) Business Days after such determination.
- 4.2.4 If the proposed Interconnection fails the screens, but the Interconnecting EDC is unable to determine from the initial review that the Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards (unless the Generator is willing to consider minor modifications or further study), the Interconnecting EDC shall provide the Generator with the opportunity to attend a customer options meeting described in Section 4.3.

### 4.3 Customer Options Meeting

If the Interconnecting EDC determines that the Interconnection Request cannot be approved without (a) minor modifications at minimal cost, (b) a supplemental study or other additional studies or actions, or (c) modifications at significant cost to address safety,

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reliability, or power quality problems, then the EDC shall notify the Generator and provide copies of all analyses underlying its conclusion within the five (5) Business Day period after such determination.

Within ten (10) Business Days of such determination, the Interconnecting EDC shall offer to convene a customer options meeting with the Generator to review possible Generating Facility modifications or the screen analysis and related results in order to determine what further steps are needed to permit the Generating Facility to be connected safely and reliably.

At the time of notification of the determination, or at the customer options meeting:

- 4.3.1 The Interconnecting EDC shall offer to perform, at the Generator's expense, modifications to the EDC's Interconnection Facilities or minor modifications to the Interconnecting EDC's EPS (*e.g.*, changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Interconnecting EDC's EPS;
- 4.3.2 The Interconnecting EDC shall offer to perform, at the Generator's expense, a supplemental review in accordance with Section 4.4 if the EDC concludes in its sole discretion that the supplemental review might reasonably determine that the Generating Facility could continue to qualify for Interconnection pursuant to the Fast Track Process, and provide a non-binding good faith estimate of the costs of such supplemental review; or
- 4.3.3 The Interconnecting EDC and the Generator shall agree to continue evaluating the Interconnection Request under Section 5 (Study Process).

### 4.4 Supplemental Review

In order to accept the Interconnecting EDC's offer to conduct a supplemental review, the Generator must accept such offer in writing within fifteen (15) Business Days of such offer, and submit a payment to the Interconnecting EDC for the estimated costs set forth in such offer. The Generator shall be responsible for the Interconnecting EDC's actual costs of conducting the supplemental review. The Generator must pay any review costs that exceed the estimated cost payment within twenty (20) Business Days of the later of (a) receipt of an invoice from the Interconnecting EDC or (b) resolution of any dispute concerning such invoice. If the estimated cost payment exceeds the actual costs, the Interconnecting EDC will refund such excess without interest within twenty (20) Business Days of the calculation of the actual costs.

- 4.4.1 Within ten (10) Business Days following receipt of the payment for a supplemental review, the Interconnecting EDC shall conduct a supplemental review to determine whether the Generating Facility can be interconnected safely and reliably.



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- 4.4.1.1 If so, and no modifications to the Generating Facility are required by the Interconnecting EDC, the Interconnecting EDC shall forward an Interconnection Agreement to the Generator for execution within five (5) Business Days of such determination.
- 4.4.1.2 If so, and modifications to the Generating Facility are required by the Interconnecting EDC, the Interconnecting EDC will provide a written summary of estimated costs of such modifications, and the Generator shall provide written notice to the Interconnecting EDC of whether the Generator agrees to make the required Generating Facility modifications at the Generator's cost within thirty (30) Business Days of receiving such written summary from the Interconnecting EDC. Within five (5) Business Days after confirmation that the Generator has agreed in writing to make the required changes at the Generator's cost, the Interconnecting EDC shall forward an Interconnection Agreement (Exhibit A) to the Generator for execution.
- 4.4.1.3 If so, and minor modifications to the Interconnecting EDC's EPS are required by the Interconnecting EDC, the Generator shall pay the costs of such EPS modifications prior to Interconnection. The Interconnecting EDC shall forward an executable Interconnection Agreement to the Generator within ten (10) Business Days of such a determination.
- 4.4.1.4 If not, the Interconnection Request shall be evaluated under Section 5 (Study Process). Technical Requirements for certified inverter-based Generating Facilities are provided in the Exhibit B.

## SECTION 5

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### 5.0 Study Process

#### 5.1 Applicability

The Study Process shall be used by a Generator proposing to interconnect its Generating Facility with the Distribution System if the Generating Facility (a) is larger than 2 MW, (b) is 2 MW or less and is not certified, or (c) is 2 MW or less and is certified but did not pass the Fast Track Process or the 10 kW Inverter Process.

#### 5.2 Scoping Meeting

- 5.2.1 Unless the Parties mutually agree to forgo the Scoping Meeting pursuant to Section 5.2.3, a Scoping Meeting shall be held within ten (10) Business Days after the Interconnection Request is deemed complete, or as otherwise mutually agreed to by the Parties. The Interconnecting EDC, the Generator and the Affected Party(ies) will bring to the meeting personnel, including system engineers, and other resources as may be reasonably necessary in order to accomplish the purpose of the meeting.
- 5.2.2 The purpose of the Scoping Meeting is to discuss the Interconnection Request, review the appropriate jurisdiction for application submittal, and review whether the proposed project will require a corresponding ISO-NE System Impact Study to be performed and also to review existing studies relevant to the Interconnection Request. At the Scoping Meeting, the Parties shall further discuss whether the Interconnecting EDC should perform a Feasibility Study or proceed directly to either or both of the System Impact Studies, a Facility Study, or an Interconnection Agreement. If the Parties agree that a Feasibility Study should be performed, the Interconnecting EDC shall provide the Generator, as soon as practicable, but not later than five (5) Business Days after the Scoping Meeting, a Feasibility Study Agreement in the form of Attachment IV, including an outline of the scope of the Feasibility Study and a non-binding good faith estimate of the cost to perform the Feasibility Study.
- 5.2.3 The Parties may mutually agree to forgo the Scoping Meeting if (a) the Generator requests a Feasibility Study or (b) the Interconnecting EDC determines that a Feasibility Study is not required and the Parties agree to proceed to either or both of the System Impact Studies.
- 5.2.3.1 A Generator who has requested a Feasibility Study must return the executed Feasibility Study Agreement within fifteen (15) Business Days after the Generator's Interconnection Request is deemed complete.

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5.2.3.2 If the Interconnecting EDC determines that a Feasibility Study is not required and the Parties agree to proceed to either or both System Impact Studies, then the Interconnecting EDC shall provide the Generator, no later than five (5) Business Days after the scoping meeting, the appropriate System Impact Study agreement(s) including an outline of the scope of such System Impact Study and a non-binding good faith estimate of the cost to perform such System Impact Study. The form of Distribution System Impact Study Agreement is attached hereto as Attachment V. Transmission System Impact Study process and documents can be found on the ISO-NE website. ([www.iso-newengland.com](http://www.iso-newengland.com)).

### 5.3 Feasibility Study

- 5.3.1 The Feasibility Study shall identify any potential adverse system impacts that would result from the Interconnection of the Generating Facility.
- 5.3.2 The Generator must pay the good faith cost estimate set forth in the Feasibility Study Agreement prior to the Interconnecting EDC's initiation of the Feasibility Study. The scope of and cost responsibilities for the Feasibility Study are more fully described in the Feasibility Study Agreement (Attachment V).
- 5.3.3 If the Feasibility Study shows no potential for adverse system impacts, the EDC shall send the Generator a Facility Study Agreement in the form of Attachment VI, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study. If the Feasibility Study shows that no additional facilities are necessary, an Interconnection Agreement shall be tendered to the Generator for execution within five (5) Business Days after the completion of the Feasibility Study.
- 5.3.4 If the Feasibility Study shows the potential for adverse system impacts, the review process shall proceed to the System Impact Study(ies).
- 5.3.5 In the case where either the Feasibility Study or the System Impact Study(ies) are determined to be unnecessary, the Interconnecting EDC shall notify the Generator within five (5) Business Days that such study(ies) are not required.

### 5.4 System Impact Studies

- 5.4.1 The System Impact Studies shall (a) identify and detail the EPS impacts that would result if the proposed Generating Facility were interconnected without project modifications or electric system modifications, focusing on the adverse system impacts identified in the Feasibility Study, and/or (b) study potential impacts, including but not limited to those identified in the Scoping Meeting.

## SECTION 5

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- 5.4.2 If potential adverse distribution system impacts are identified at the Scoping Meeting or in the Feasibility Study, then a Distribution System Impact Study shall be required. If a Distribution System Impact Study is required, then the Interconnecting EDC shall send the Generator a Distribution System Impact Study Agreement within fifteen (15) Business Days of (a) transmittal of the results of the Feasibility Study (if performed) or (b) the Scoping Meeting (if no Feasibility Study is performed), including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.
- 5.4.3 If potential adverse transmission system impacts are identified, the Interconnecting EDC shall send the Generator a Transmission System Impact Study Agreement within five (5) Business Days following transmittal of the Study results of the Feasibility Study or the Distribution System Impact Study, as the case may be, including an outline of the scope of the Transmission System Impact Study and a non-binding good faith estimate of the cost to perform the Transmission System Impact Study.
- 5.4.4 If a Transmission System Impact Study is not required, but EPS adverse system impacts are shown by the Feasibility Study to be possible and no Distribution System Impact Study has been conducted, the EDC shall send the Generator a Distribution System Impact Study Agreement.
- 5.4.5 If the System Impact Study(ies) shows no potential for adverse impacts to the transmission system or the distribution system, then the EDC shall send to the Generator for execution either (a) a Facility Study Agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, or (b) an Interconnection Agreement, as applicable.
- 5.4.6 In order to remain under consideration for Interconnection and in the Interconnecting EDC's Interconnection queue, the Generator must return executed System Impact Study Agreements, if applicable, within thirty (30) Business Days of receipt of same from the Interconnecting EDC.
- 5.4.7 A payment of the good faith estimated System Impact Study costs shall be required in full from the Generator prior to initiation of the System Impact Studies.
- 5.4.8 The scope of and cost responsibilities for a System Impact Studies are set forth in the applicable System Impact Study agreement.
- 5.4.9 Any Affected Parties shall be invited to participate in the System Impact Studies and provide information necessary or helpful to complete the System Impact Studies.

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### 5.5 Facility Study

- 5.5.1 Once the required System Impact Studies, if any, are completed, the Interconnecting EDC shall prepare a System Impact Studies report and provide a copy of such report to the Generator along with a Facility Study Agreement within five (5) Business Days of completion of the System Impact Studies, including an outline of the scope of the Facility Study and a non-binding good faith estimate of the cost to perform the Facility Study.
- 5.5.2 Within five (5) Business Days following receipt of the report described in Section 5.5.1, the Generator shall notify the Interconnecting EDC in writing as to whether it will either pursue the Facility Study or waive the Facility Study and elect an expedited Interconnection.
- 5.5.2.1 If the Generator waives the Facility Study, it shall commit to the following milestones in the Interconnection Agreement: (a) siting approval by the appropriate regulatory authorities for the Generating Facility and Interconnection Facilities; (b) engineering of Interconnection Facilities shall be subject to prior approval by the Interconnecting EDC; (c) the ordering of long lead time material by the EDC for Interconnection Facilities and system upgrades; (iv) an In-Service Date; and (v) Commercial Operation Date.
- 5.5.2.2 If the Generator does not waive the Facility Study, in order to remain under consideration for Interconnection and in the EDC's Interconnection queue, then the Generator must return the executed Facility Study Agreement or a request for an extension of time within thirty (30) Business Days following receipt of the Facility Study from the Interconnecting EDC. Any such extension shall not exceed sixty (60) Business Days.
- 5.5.3 The Facility Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the System Impact Studies.
- 5.5.4 Design for any required Interconnection Facilities and/or Generating Facility upgrades shall be provided for under the Facility Study Agreement. The Interconnecting EDC may contract with outside consultants to provide such design(s). The Generator, the Interconnecting EDC and any Affected Party(ies), may agree to allow the Generator to separately arrange for such design(s). In such cases, facilities design shall be subject to review and prior by the Interconnecting EDC, in accordance with the Facility Study Agreement. If the Parties agree to separately arrange for design and construction, and provided security and confidentiality requirements can be met, the Interconnecting EDC shall make sufficient information available to the Generator in accordance with confidentiality

## SECTION 5

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and critical infrastructure requirements to permit the Generator to obtain an independent design and cost estimate for any necessary facilities.

- 5.5.5 A payment of the good faith estimated Facility Study costs shall be required in full from the Generator prior to execution of the Facility Study.
- 5.5.6 The scope of and cost responsibilities for the Facility Study are described in the attached Facility Study Agreement.
- 5.5.7 Within thirty (30) Business Days of receipt of the Facility Study results, the Generator shall provide written notice whether it agrees to pay for the Interconnection Facilities and upgrades identified in the Facility Study. An executable Interconnection Agreement shall be tendered by the Interconnecting EDC to the Generator within five (5) Business Days of receipt of such written notice.

## SECTION 6

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### **6.0 Provisions That Apply to All Interconnections and Associated Applications**

#### **6.1 Reasonable Efforts**

The Interconnecting EDC shall make reasonable efforts to meet all time frames provided in these Guidelines; provided, however, that the Interconnecting EDC and the Generator may agree to different time frames. If the Interconnecting EDC fails to meet a deadline provided herein, it shall (a) notify the Generator, (b) explain the reason for the failure to meet the deadline, and (c) provide an estimated date by which it will complete the applicable Interconnection procedure in the process.

#### **6.2 Dispute Resolution**

6.2.1 Each Party shall attempt to informally resolve all disputes arising in connection with these Guidelines promptly, equitably and in good faith. If the Parties are unable to informally resolve their dispute, the following formal three step dispute resolution process must be followed:

##### 6.2.1.1 Negotiation:

Upon receipt of written request for formal dispute resolution, the Parties shall negotiate in good faith for up to eight (8) Business Days in an attempt to resolve such dispute. Such negotiation will take place between each Party's vice-president or other member of senior management with sufficient authority to resolve such dispute.

##### 6.2.1.2 Mediation:

If the Parties are unable to resolve such dispute through the negotiation process set forth in Section 6.2.1.1, the Parties shall attempt to resolve such dispute through non-binding mediation. Each Party shall select a mediator within five (5) Business Days and the two selected mediators will attempt to, within five (5) Business Days, select a third, mutually agreeable, mediator. After the mediators are selected, the Parties shall engage in mediation in good faith for a period of not less than thirty (30) days following commencement of such mediation. The Parties shall share the cost of mediation equally; provided, however, that each Party shall be responsible for its own legal fees incurred in connection with such mediation.

##### 6.2.1.3 DPUC Dispute Resolution:

If the Parties cannot resolve their dispute through the mediation process set

## SECTION 6

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forth in Section 6.2.1.2, then either Party may commence an action at the DPUC seeking resolution of such dispute.

6.2.2 The dispute resolution processes and time frames set forth in Section 6.2.1 may be modified by mutual written agreement of the Parties.

### 6.3 Interconnection Metering

Any metering necessitated by the use of the Generating Facility shall be installed at the Generator's expense in accordance with Applicable Reliability Standards then in effect.

### 6.4 Commissioning

Commissioning tests of the Generator's installed equipment shall be performed pursuant to applicable Codes and Standards, and equipment manufacturers' recommendations. The Generator shall provide a certified commissioning test procedure to the Interconnecting EDC for approval.

The list below is a list of tests commonly required by IEEE 1547 and is not intended to be a list of additional testing requirements:

- Current Transformer (CT) and CT circuit polarity, ratio, insulation, excitation, continuity and burden tests,
- Voltage Transformer (VT) and VT circuit polarity, ratio, insulation and continuity tests,
- Relay pick-up and time delay tests,
- Functional breaker trip tests from protective relays,
- Relay in-service test to check for proper phase rotation and magnitudes of applied currents and voltages,
- Breaker closing interlock tests, and
- Paralleling and disconnection operation.
- Anti-islanding function, if applicable.
- Non-export function, if applicable.
- Synchronizing Controls, if applicable.
- Proof of inability to energize dead lines.

6.4.2 The Interconnecting EDC must be given at least ten (10) Business Days written notice, or as otherwise mutually agreed to by the Parties, of the tests and may be present to witness the commissioning tests. The Interconnecting EDC will not assist in performance of, or provide equipment for the commissioning test.

6.4.3 The Interconnecting EDC will provide a Contingent Approval to the Generator, akin to the form in Attachment VII, when all EDC application review elements have



## SECTION 6

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been satisfied. When the Commissioning Test has been successfully completed the Interconnecting EDC will provide an “Approval to Energize Form” to the Generator, substantially in the form of Attachment VIII.

### 6.5 Periodic Interconnection Tests

At the time of scheduling of a commissioning test, the Generator shall provide a written periodic Interconnection test procedure to the Interconnecting EDC. (Such procedures are typically provided by the equipment manufacturer.) The procedure shall describe a test process that will verify all Interconnection-related protective functions and associated batteries are functional, but need not replicate the commissioning test procedures. The interval between periodic tests shall be specified by the manufacturer, system integrator, or the authority having jurisdiction over the Interconnection. Written test reports or a log for inspection shall be maintained by the Generator.

The Interconnecting EDC may audit the Generator’s written test reports, logs and other materials regarding the Interconnection or the Generating Facility at its discretion. If the functional software or firmware of the Interconnection system has been modified or if any hardware component of the Interconnection system has been modified, replaced or repaired with parts different from the tested configuration, and if such hardware, software or firmware have not been previously approved, then the applicable commissioning tests shall be performed by an independent testing facility. If such hardware, software or firmware has been previously approved or if settings have been changed, then only the commissioning tests applicable to the changes made shall be conducted. This requirement is in accordance with IEEE 1547.2.

### 6.6 Confidentiality

The Interconnecting EDC shall maintain confidentiality of all information of by the Generator clearly designated as “Confidential” except as otherwise required by system operators, applicable laws and regulations. In the event that the Interconnecting EDC is requested to produce such confidential information, the Interconnecting EDC shall provide advance notice to Generator, if possible, to give Generator an opportunity to seek protective treatment of such information. If such information is requested or required by the DPUC, the Interconnecting EDC will seek protective treatment of such confidential information. Confidential information does not include information that is: (a) in or becomes part of the public domain; (b) known to the Interconnecting EDC previously; (c) independently developed by the Interconnecting EDC; (d) rightfully obtained by the Interconnecting EDC from third parties without a duty of confidentiality; or (e) required to be publicly disclosed by law, statute or regulation.

### 6.7 Record Retention

## SECTION 6

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The Interconnecting EDC shall, at a minimum, maintain for three (3) years, subject to audit, records of all Interconnection Requests received under these procedures, the times required to complete Interconnection Request approvals and disapprovals, and justification for the actions taken on the Interconnection Requests.

### **6.8 Interconnection Agreement**

The Generator and the Interconnecting EDC shall be Parties to the Interconnection Agreement. The Interconnecting EDC shall provide an Interconnection Agreement to the Generator in accordance with these Guidelines. After the Interconnecting EDC provides an Interconnection Agreement to the Generator for execution, the Generator shall have thirty (30) Business Days or another mutually agreeable timeframe to sign and return the Interconnection Agreement. After the Interconnection Agreement is fully executed, the Interconnection of the Generating Facility shall proceed under the provisions of the Interconnection Agreement and these Guidelines.

### **6.9 Performance Assurance**

Performance Assurance will only be required in rare cases where abnormally high ongoing maintenance cost are anticipated to support the Interconnection or in unusual cases where there is a potential for wide variation between the actual and estimated costs for the Interconnection.

If performance assurance is required for an Interconnection, the EDC will provide a written explanation of the reasons therefor to the Generator.

### **6.10 Coordination with Affected Systems**

If the Interconnecting EDC determines that any Interconnection Request may have an impact on other Affected Systems, the Interconnecting EDC will include representatives of such Affected Systems in all meetings and proceedings pertinent to such impact.

### **6.11 Generating Facility Capacity**

The Generating Facility Capacity, for the purpose of analysis, shall be determined as follows:

6.11.1 If the Interconnection Request is for an increase in capacity for an existing Generating Facility, the Interconnection Request shall be evaluated on the basis of the new total capacity of the Generating Facility.

6.11.2 If the Interconnection Request is for a Generating Facility that includes multiple energy production devices at a site for which the Generator seeks a single Point of Interconnection, the Interconnection Request shall be evaluated on the basis of the aggregate capacity of such multiple devices.

## SECTION 6

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6.11.3 The Interconnection Request shall be evaluated using the maximum rated capacity of the Generating Facility.

# ATTACHMENT I INTERCONNECTION REQUEST

EDC: \_\_\_\_\_

Designated Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Fax: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

An Interconnection Request is considered complete when it provides all applicable and correct information required below. Documentation of site control must be submitted with the Interconnection Request.

## Preamble and Instructions

A Generator which requests Interconnection must submit this Interconnection Request by hand delivery, mail, e-mail, or fax to the EDC.

Processing Fee or Payment:

Table 1 Fees			
Process	Generator Applicability*	Application Fee	Each Study Fee
Fast Track	0-2MW	\$500	Actual Cost Based
Study	(1) is larger than 2 MW but no larger than 20 MW, (2) is 2 MW or less and is not certified, or (3) is 2 MW or less and is certified but did not pass the Fast Track Process or the 10 kW Inverter Process.	\$1000	Actual Cost Based

# ATTACHMENT I INTERCONNECTION REQUEST

Each Generating Facility will have a One Line Diagram submitted and secured as an Attachment to the Interconnection Request (Attachment I). A one line electrical schematic is a diagram, drawing, or sketch that details the elements of a generating system, such as the elements of an electrical or electronic circuit or the elements of a logic diagram for a generator.

## Generating Facility Information

Legal Name of the Generator (or, if an individual, individual's name)

Name: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Facility Location (if different from above): \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Alternative Contact Information (if different from the Generator)

**Contact Name:** \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

## APPLICATION IS FOR:

New Generating Facility? Yes \_\_\_ No \_\_\_

Capacity addition to or Material Modification of an existing Generating Facility:

Yes \_\_\_ No \_\_\_

Commencement of participation in the wholesale markets by an existing Generating Facility:

Yes \_\_\_ No \_\_\_

# ATTACHMENT I

## INTERCONNECTION REQUEST

If capacity addition to or Material Modification of an existing facility, please describe: \_\_\_\_\_

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Will the Generating Facility be used for any of the following?

To Net Meter? Yes \_\_\_ No \_\_\_

To Supply Power to the Generating Facility? Yes \_\_\_ No \_\_\_

To Supply Power to Others? Yes \_\_\_ No \_\_\_

Is the Interconnection Request for::

A retail customer interconnecting a new Generating Facility that will produce electric energy to be consumed only on the retail customer's site? Yes \_\_\_ No \_\_\_

If onsite use of power, describe the mode of operation: (Please Check all that Apply)

- Peak Shaving
- Demand Management
- Primary Power/Base Load
- Combined Heat and Power or Cogeneration
- Stand By/Emergency/Back-up

Paralleling:

Will the Generating Facility operate in parallel with the EDC for any amount of time?

Yes \_\_\_ No \_\_\_

If No: Then Generator is operating as Open Transition

If Yes: Will the Generating Facility operate in parallel with EDC for longer than 100 milliseconds

Yes \_\_\_ No \_\_\_

If No: Then Generator is operating as Closed Transition

If Yes: Then Generator is operating as Parallel Operation

Will it vary by season? (please describe) \_\_\_\_\_

A Qualifying Facility where 100% of the output will be sold to its host utility?

Yes \_\_\_ No \_\_\_

A Generator interconnecting a new Generating Facility that plans to participate in the wholesale markets? Yes \_\_\_ No \_\_\_

An existing Generating Facility commencing participation in the wholesale markets?

Yes \_\_\_ No \_\_\_

# **ATTACHMENT I INTERCONNECTION REQUEST**

For installations at locations with existing electric service to which the proposed Generating Facility will interconnect, provide:

(Local Electric Service Provider) \_\_\_\_\_

(Existing Account Number) \_\_\_\_\_

Contact Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Requested Point of Interconnection: \_\_\_\_\_

Generating Facility's Requested In-Service Date: \_\_\_\_\_

EDC Account # \_\_\_\_\_

EDC Meter # \_\_\_\_\_

Will there be a new service request / or new construction associated with this generation project?

Generating Facility Information (For each Generator if there are than one )

Data apply only to the Generating Facility, not the Interconnection Facilities.

Energy Source: \_\_\_ Solar \_\_\_ Wind \_\_\_ Hydro \_\_\_ Hydro Type (e.g. Run-of-River): \_\_\_\_\_ Diesel \_\_\_ Natural Gas \_\_\_ Fuel Oil \_\_\_  
Other (state type) \_\_\_\_\_

Prime Mover: \_\_\_ Fuel Cell \_\_\_ Reciprocating Engine \_\_\_ Gas Turbine  
Steam Turbine \_\_\_ Micro-turbine \_\_\_ PV \_\_\_ Other

Type of Generator: \_\_\_ Synchronous \_\_\_ Induction \_\_\_ Inverter \_\_\_\_\_

Generator Nameplate Rating: \_\_\_\_\_ kW (Typical)

# ATTACHMENT I INTERCONNECTION REQUEST

Generator Nameplate kVAR: \_\_\_\_\_

Generator Nameplate BIL Rating: \_\_\_\_\_ kV

Generating Facility or Customer-Site Load: \_\_\_\_\_ kW (if none, so state)

Typical Reactive Load (if known): \_\_\_\_\_

Maximum Physical Export Capability Requested: \_\_\_\_\_ kW

List components of the Generating Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Is the prime mover compatible with the certified protective relay package?  
 Yes       No

Generator \_\_\_\_\_

Manufacturer, Model Name & Number: \_\_\_\_\_

Version Number: \_\_\_\_\_

Nameplate Output Power Rating in kW:  
(Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Nameplate Output Power Rating in kVA:  
(Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Individual Generator Power Factor  
Rated Power Factor: Leading: \_\_\_\_\_ Lagging: \_\_\_\_\_

Total Number of Generators in wind farm to be interconnected pursuant to this  
Interconnection Request: \_\_\_\_\_ Elevation: \_\_\_\_\_  Single phase     Three phase

Inverter Manufacturer, Model Name & Number (if used):  
\_\_\_\_\_  
\_\_\_\_\_



# ATTACHMENT I

## INTERCONNECTION REQUEST

List of adjustable set points for the protective equipment or software:

\_\_\_\_\_  
\_\_\_\_\_

Note: A completed Power Systems Load Flow data sheet must be supplied with the Interconnection Request.

### Generating Facility Characteristic Data (for inverter-based machines)

Max design fault contribution current: \_\_\_\_\_ Instantaneous \_\_\_\_ or RMS? \_\_\_\_

Harmonics Characteristics: \_\_\_\_\_

Start-up requirements: \_\_\_\_\_

Available fault current: \_\_\_\_\_

### Generating Facility Characteristic Data (for rotating machines)

RPM Frequency: \_\_\_\_\_

Neutral Grounding Resistor (If Applicable): \_\_\_\_\_

#### Synchronous Generators:

Direct Axis Synchronous Reactance,  $X_d$ : \_\_\_\_\_ Per Unit

Direct Axis Transient Reactance,  $X_d'$ : \_\_\_\_\_ Per Unit

Direct Axis Sub transient Reactance,  $X_d''$ : \_\_\_\_\_ Per Unit

Negative Sequence Reactance,  $X_2$ : \_\_\_\_\_ Per Unit

Zero Sequence Reactance,  $X_0$ : \_\_\_\_\_ Per Unit

KVA Base: \_\_\_\_\_

Field Volts: \_\_\_\_\_

Field Amperes: \_\_\_\_\_

#### Induction Generators:

Motoring Power (kW): \_\_\_\_\_

$I_2^2t$  or K (Heating Time Constant): \_\_\_\_\_

Rotor Resistance,  $R_r$ : \_\_\_\_\_ Per Unit

Stator Resistance,  $R_s$ : \_\_\_\_\_ Per Unit

Stator Reactance,  $X_s$ : \_\_\_\_\_ Per Unit

Rotor Reactance,  $X_r$ : \_\_\_\_\_ Per Unit

Magnetizing Reactance,  $X_m$ : \_\_\_\_\_ Per Unit

# ATTACHMENT I INTERCONNECTION REQUEST

Short Circuit Reactance,  $X_d''$ : \_\_\_\_\_ Per Unit  
Exciting Current: \_\_\_\_\_ Amps  
Temperature Rise: \_\_\_\_\_  
Frame Size: \_\_\_\_\_  
Design Letter: \_\_\_\_\_  
Reactive Power Required In Vars (No Load): \_\_\_\_\_  
Reactive Power Required In Vars (Full Load): \_\_\_\_\_  
Total Rotating Inertia, H: \_\_\_\_\_ Per Unit on kVA Base

### Excitation and Governor System Data for Synchronous Generators Only.

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

### Interconnection Facilities Information

An Interconnection transformer is required unless waived by the Interconnecting EDC.

### Transformer Data (If Applicable, for Generating Facility-Owned Transformer):

Is the transformer: \_\_\_ single phase \_\_\_ three phase? Size: \_\_\_\_\_ kVA  
Transformer Impedance: \_\_\_\_\_ % on \_\_\_\_\_ kVA Base  
Transformer Positive-Sequence Short Circuit Impedances (pu):  $Z_{ps}$ = \_\_\_\_\_,  $Z_{pt}$ = \_\_\_\_\_,  $Z_{st}$ = \_\_\_\_\_  
Transformer Zero-Sequence Impedances (pu):  $Z_{pm0}$ = \_\_\_\_\_,  $Z_{sm0}$ = \_\_\_\_\_,  $Z_{mg0}$ = \_\_\_\_\_  
Transformer Neutral Grounding Reactor/Resistor Impedance (Ohms):  
Transformer BIL Rating \_\_\_\_\_ kV  
If Three Phase:  
Transformer Primary: \_\_\_\_\_ Volts \_\_\_ Delta \_\_\_ Wye \_\_\_ Wye Grounded  
Transformer Secondary: \_\_\_\_\_ Volts \_\_\_ Delta \_\_\_ Wye \_\_\_ Wye Grounded  
Transformer Tertiary: \_\_\_\_\_ Volts \_\_\_ Delta \_\_\_ Wye \_\_\_ Wye Grounded

### Transformer Fuse Data (If Applicable, for Generating Facility-Owned Fuse):

(Attach copy of fuse manufacturer's Minimum Melt and Total Clearing Time-Current Curves)

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Size: \_\_\_\_\_ Speed:  
\_\_\_\_\_  
\_\_\_\_\_

# ATTACHMENT I INTERCONNECTION REQUEST

Interconnecting Circuit Breaker (if applicable):

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_  
Load Rating (Amps): \_\_\_\_\_ Interrupting Rating (Amps): \_\_\_\_\_ Trip Speed (Cycles):  
\_\_\_\_\_

Interconnection Protective Relays (If Applicable):

If Microprocessor-Controlled:

List of Functions and Adjustable Set points for the protective equipment or software:

Set point Function	Minimum	Maximum
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____

If Discrete Components:

(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting: \_\_\_\_\_

Current Transformer Data (If Applicable):

\_\_\_\_\_

# **ATTACHMENT I**

## **INTERCONNECTION REQUEST**

(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer: \_\_\_\_\_  
Type: \_\_\_\_\_ Accuracy Class: \_\_\_ Proposed Ratio Connection: \_\_\_\_\_

Manufacturer: \_\_\_\_\_  
Type: \_\_\_\_\_ Accuracy Class: \_\_\_ Proposed Ratio Connection: \_\_\_\_\_

### Potential Transformer Data (If Applicable):

Manufacturer: \_\_\_\_\_  
Type: \_\_\_\_\_ Accuracy Class: \_\_\_ Proposed Ratio Connection: \_\_\_\_\_

Manufacturer: \_\_\_\_\_  
Type: \_\_\_\_\_ Accuracy Class: \_\_\_ Proposed Ratio Connection: \_\_\_\_\_

### General Information

Enclose two D-sized (24" x 36") copies of site electrical one-line diagram showing the configuration of all Generating Facility equipment (unless waived by the EDC), current and potential circuits, and protection and control schemes. This D-sized one-line diagram must be signed and stamped by a licensed Professional Engineer if the Generating Facility is larger than 50 kW. Are two copies of One-Line Diagram Enclosed? \_\_\_ Yes \_\_\_ No

Enclose copy of any site documentation that indicates the precise physical location of the proposed Generating Facility (e.g., USGS topographic map or other diagram or documentation).

Proposed location of protective interface equipment on property (include address if different from the Generating Facility's address) \_\_\_\_\_

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes.

Is Available Documentation Enclosed? \_\_\_ Yes \_\_\_ No

Enclose copies of schematic drawings for all protection and control circuits, relay current circuits including CT's wiring connection and their ratios, relay potential circuits including Potential Transformer's (PT's) wiring connection and their ratios, any alarm/monitoring circuits (if applicable).

Are Schematic Drawings Enclosed? \_\_\_ Yes \_\_\_ No

**ATTACHMENT I**  
**INTERCONNECTION REQUEST**

Applicant Signature

I have read the Guidelines for Generator Interconnection – Fast Track and Study Processes and agree to abide by all terms and conditions as provided for in these Guidelines. I understand that my Interconnection Request may be rejected by the Interconnecting EDC or there may be a delay in processing my Interconnection Request if the Interconnecting EDC determines that I have not complied with these Guidelines.

I hereby certify that, to the best of my knowledge, all the information provided in this Interconnection Request is true and correct.

For Generator: \_\_\_\_\_ Date: \_\_\_\_\_

**ATTACHMENT II  
APPLICATION ACKNOWLEDGEMENT  
RECEIPT-SAMPLE FORM**

Receipt of Interconnection Application

*(CL&P/UI Use Only)*

---

Generator Name: \_\_\_\_\_

Date Interconnection Request Received: \_\_\_\_\_

Received By: \_\_\_\_\_

Application Number \_\_\_\_\_

**ATTACHMENT III  
INFORMATION REQUEST- SAMPLE FORM**

Missing Application Information  
*(CL&P/UI Use Only)*

Interconnection Application #: \_\_\_\_\_

Generator Name: \_\_\_\_\_

Missing Elements:

- |   |                   |
|---|-------------------|
| <input type="checkbox"/> Payment Deficient  | Date Cured: _____ |
| <input type="checkbox"/> Signed Application | Date Cured: _____ |
| <input type="checkbox"/> One Line Schematic | Date Cured: _____ |
| <input type="checkbox"/> Site Plan          | Date Cured: _____ |
| <input type="checkbox"/> Technical Data     | Date Cured: _____ |
| <input type="checkbox"/> Insurance          | Date Cured: _____ |

Date Deemed Valid Interconnection Request: \_\_\_\_\_

Deemed Valid By: \_\_\_\_\_

# ATTACHMENT IV FEASIBILITY STUDY AGREEMENT

## Feasibility Study Agreement

This Feasibility Study Agreement (this “*Agreement*”), dated as of \_\_\_\_\_ (the “*Effective Date*”), is entered into by and between [Connecticut Light and Power, a Connecticut corporation with a principal place of business at 107 Selden St, Berlin, CT, 06037] [*or*] [The United Illuminating Company, a specially chartered Connecticut corporation with a principal place of business at 157 Church Street, New Haven, CT 06510] (the “*EDC*”), and \_\_\_\_\_, a \_\_\_\_\_ with a principal place of business at \_\_\_\_\_ (“*Generator*”). (EDC and Generator are collectively referred to as the “*Parties*” and individually as a “*Party*”).

### RECITALS

**WHEREAS**, Generator is proposing to develop a Generating Facility or increase the generating capacity of an existing Generating Facility consistent with the Interconnection Request completed by Generator on \_\_\_\_\_;

**WHEREAS**, Generator desires to interconnect the Generating Facility with the Distribution System; and

**WHEREAS**, Generator has requested the EDC to perform a Feasibility Study to assess the feasibility of interconnecting the proposed Generating Facility with the facilities that are part of the EDC’s Distribution System, and of any Affected Systems (the “*Feasibility Study*”).

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 Capitalized terms used herein but not defined herein shall have the meanings ascribed to such terms in the EDC’s Guidelines for Generator Interconnection (the “*Guidelines*”).
- 2.0 The EDC shall conduct a Feasibility Study in accordance with the Guidelines.
- 3.0 The scope of the Feasibility Study shall be subject to the assumptions set forth in Exhibit A to this Agreement.
- 4.0 The Feasibility Study shall be based on the technical information provided by the Generator in its Interconnection Request, as may be modified as the result of the Scoping Meeting. At the reasonable request of the EDC, the Generator shall promptly provide additional technical information to the EDC.
- 5.0 In performing the Feasibility Study, the EDC may rely, to the extent reasonably practicable, on other existing studies in the EDC’s possession.



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- 6.0 At the request of the Generator and at the Generator's sole cost and expense, the Feasibility Study shall include the feasibility of any Interconnection at a proposed project site where there could be multiple potential Points of Interconnection.
- 7.0 In conjunction with the execution of this Agreement, the EDC shall provide to the Generator a written good faith estimate of the cost of the Feasibility Study (the "**Cost Estimate**"). Prior to commencement of the Feasibility Study, the Generator shall pay the Cost Estimate to the EDC.
- 8.0 Following the conclusion of the Feasibility Study, the EDC shall prepare a Feasibility Study report (the "**Report**"), which shall provide the following analyses for the purpose of identifying any potential adverse system impacts that would result from the Interconnection of the Generating Facility as proposed:
- 8.1 Initial identification of any circuit breaker or other facility short circuit capability limits exceeded as a result of the Interconnection;
  - 8.2 Initial identification of any thermal overload or voltage limit violations resulting from the Interconnection;
  - 8.3 Initial review of grounding requirements and electric system protection; and
  - 8.4 A non-binding estimate of the cost (including a description thereof) of facilities required to interconnect the proposed Generating Facility.
- 9.0 The EDC shall use commercially reasonable efforts to provide the Report to the Generator within thirty (30) days of the later of (a) execution of this Agreement and (b) payment of the Cost Estimate by the Generator.
- 10.0 Within thirty (30) days of the completion of the Feasibility Study, the EDC shall calculate the actual costs of the Feasibility Study (the "**Actual Cost**"), and the EDC shall provide an invoice to the Generator which shall include the Actual Cost and the basis for the calculation of the Actual cost.
- 11.0 In the event the Actual Cost exceeds the Cost Estimate, the Generator shall pay the difference to the EDC within thirty (30) Calendar Days of the invoice date (without interest). In the event the Cost Estimate exceeds the Actual Cost, the EDC shall pay the excess to the Generator within thirty (30) Calendar Days of the invoice date (without interest).
- 12.0 Miscellaneous.
- 12.1 Accuracy of Information. The Generator represents and warrants that, to the best of its knowledge, the information it provides to the EDC in connection with this Agreement and the Feasibility Study shall be accurate and complete as of the date such information is provided. The Generator

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### **FEASIBILITY STUDY AGREEMENT**

shall promptly provide the EDC with any additional information needed to update information previously provided.

12.2 Disclaimer of Warranty. In performing the Feasibility Study, the EDC may rely on information provided by the Generator and third parties, and may not have control over the accuracy of such information. ACCORDINGLY, THE EDC HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Generator acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

12.3 Force Majeure, Liability and Indemnification.

12.3.1 Force Majeure. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party shall specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the affected Party is taking to mitigate the effects of the event on its performance. The affected Party may suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement, but only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of commercially reasonable efforts. The affected Party shall use commercially reasonable efforts to resume its performance as soon as possible. Without limiting this section, the Generator shall immediately notify the EDC verbally if the failure to fulfill the Generator's obligations under this Agreement may impact the safety or reliability of the EDC EPS. For purposes of this Agreement, "***Force Majeure Event***" means any event or circumstance that (a) is beyond the reasonable control of the affected Party and (b) the affected Party is unable to prevent or provide against by exercising commercially reasonable efforts. Force Majeure Events include the following events or circumstances, but only to the extent they satisfy the foregoing requirements: (i) acts of war or terrorism, public disorder, insurrection, or rebellion; (ii) floods, hurricanes, earthquakes, lighting, storms, and other natural calamities; (iii) explosions or fire; (iv) strikes, work stoppages, or labor disputes; (v)

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embargoes; and (vi) sabotage. In no event shall the lack of funds or the inability to obtain funds constitute a Force Majeure Event.

- 12.3.2 Liability. Except with respect to a Party's fraud or willful misconduct, and except with respect to damages sought by a third party in connection with a third party claim: (a) neither Party shall be liable to the other Party, for any damages other than direct damages; and (b) each Party agrees that it is not entitled to recover and agrees to waive any claim with respect to, and will not seek, consequential, punitive or any other special damages as to any matter under, relating to, arising from or connected to this Agreement.. Notwithstanding the foregoing, nothing in this Section 13.3.2 shall be deemed to limit Generator's obligations under Section 13.3.3.
- 12.3.3 Indemnification. The Generator shall indemnify, defend and hold harmless the EDC and its trustees, directors, officers, employees and agents (including affiliates, contractors and their employees) from and against any liability, damage, loss, claim, demand, complaint, suit, proceeding, action, audit, investigation, obligation, cost, judgment, adjudication, arbitration decision, penalty (including fees and fines), or expense (including court costs and attorneys' fees) relating to, arising from or connected to this Agreement.
- 12.4 Term and Termination. This Agreement shall be effective from the Effective Date until the earlier of (a) one year from the Effective Date and (b) the withdrawal of the Generator's Interconnection Request, unless extended by written agreement of the Parties. Notwithstanding the foregoing, the EDC may terminate this Agreement fifteen (15) days after providing written notice to the Generator that it has breached any of its obligations hereunder, if such breach has not been cured within such fifteen (15) day period.
- 12.5 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Connecticut applicable to contracts made and performed in such State and without regard to conflicts of law doctrines.
- 12.6 Severability. If any provision of this Agreement is held to be unenforceable for any reason, such provision shall be adjusted rather than voided, if possible, to achieve the intent of the Parties. If no such adjustment is possible, such provision shall be fully severable and severed, and all other provisions of this Agreement will be deemed valid and enforceable to the extent possible.
- 12.7 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, and all counterparts so executed shall constitute one agreement binding on all of the Parties hereto,

## **ATTACHMENT IV FEASIBILITY STUDY AGREEMENT**

notwithstanding that all of the Parties are not signatories to the same counterpart. Facsimile counterparts may be delivered by any Party, with the intention that they shall have the same effect as an original counterpart hereof.

- 12.8 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 12.9 Survival. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of termination.
- 12.10 Independent Contractor. EDC shall at all times be deemed to be an independent contractor of the Generator, and none of the EDC's employees, contractors or the employees of its contractors shall be deemed to be employees of the Generator as a result of this Agreement.
- 12.11 No Implied Waivers. No failure on the part of any Party to exercise or delay in exercising any right hereunder shall be deemed a waiver thereof, nor shall any single or partial exercise of any right hereunder preclude any further or other exercise of such or any other right..
- 12.12 Successors and Assigns. Neither Party may assign this Agreement, by operation of law or otherwise, without the prior written consent of the other Party, which consent shall not be unreasonably withheld. In the event of an assignment authorized hereunder, each and every term and condition hereof shall be binding upon and inure to the benefit of the Parties and their respective successors and assigns.
- 12.13 Due Authorization. Each Party represents and warrants to the other that (a) it has full power and authority to enter into this Agreement and to perform its obligations hereunder, (b) execution of this Agreement will not violate any other agreement with a third party, and (c) the individual signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

*[Signature page follows.]*

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FEASIBILITY STUDY AGREEMENT**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**[Insert name of the Generator]**

\_\_\_\_\_

Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_

Title \_\_\_\_\_

**[Insert name of the EDC]**

\_\_\_\_\_

Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_

Title \_\_\_\_\_

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FEASIBILITY STUDY AGREEMENT**

EXHIBIT A

**ASSUMPTIONS**

The Feasibility Study will be based upon the information set forth in the Interconnection Request and agreed upon in the Scoping Meeting held on

\_\_\_\_\_:

Designation of Point of Interconnection and configuration to be studied (to be completed by the Generator).

Other assumptions (listed below) are to be provided by the Generator and the Interconnecting EDC.

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**System Impact Study Agreement**

This System Impact Study Agreement (this “*Agreement*”), dated as of \_\_\_\_\_ (the “*Effective Date*”) is entered into by and between [Connecticut Light and Power, a Connecticut corporation with a principal place of business at 107 Selden St, Berlin, CT, 06037] [*or*] [The United Illuminating Company, a specially chartered Connecticut corporation with a principal place of business at 157 Church Street, New Haven, CT 06510] (the “*EDC*”), and \_\_\_\_\_, a \_\_\_\_\_ with a principal place of business at \_\_\_\_\_ (“*Generator*”). (The EDC and Generator are collectively referred to as the “*Parties*” and individually as a “*Party*”).

**RECITALS**

**WHEREAS**, Generator is proposing to develop a Generating Facility or increase the generating capacity of an existing Generating Facility consistent with the Interconnection Request completed by Generator on \_\_\_\_\_;

**WHEREAS**, Generator desires to interconnect the Generating Facility with the Distribution System;

[**WHEREAS**, the EDC has completed a Feasibility Study with respect to the proposed Interconnection of the Generating Facility and has provided the results of such study to Generator;] and [*This recital to be omitted if the Parties have agreed to forego the Feasibility Study in accordance with the Guidelines.*]

**WHEREAS**, Generator has requested the EDC to perform a Distribution System Impact Study to assess the impact of the proposed Interconnection the Generating Facility.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 Capitalized terms used herein but not defined herein shall have the meanings ascribed to such terms in the EDC’s Guidelines for Generator Interconnection (the “*Guidelines*”).
- 2.0 The EDC shall conduct or cause to be conducted a Distribution System Impact Study in accordance with the Guidelines (the “*DSI Study*”).
- 3.0 The DSI Study shall be based upon the results of the Feasibility Study, if conducted, the technical information provided by Generator in the Interconnection Request, and the assumptions set forth in Exhibit A to this Agreement (the “*Assumptions*”). At the reasonable request of the EDC, the Generator shall promptly provide additional technical information to the EDC.

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**DISTRIBUTION SYSTEM IMPACT STUDY**  
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- 4.0 The DSI Study shall incorporate any combination of the following: (a) short circuit analyses; (b) stability analyses; (c) power flow analyses; (d) distribution load flow studies; (e) analyses of equipment interrupting ratings; (f) voltage drop and flicker studies; (g) protection coordination studies; (h) protection and set point coordination studies; and (i) grounding reviews.
- 5.0 Any Affected System may participate in the DSI Study at its own cost.
- 6.0 In connection with the DSI Study, the EDC shall consider the impact of the proposed Interconnection of the Generating Facility in light of other generating facilities that, on the date the Study is commenced:
- 6.1 are currently interconnected with the Distribution System or an Affected System;
- 6.2 are expected to be interconnected with the Distribution System or an Affected System; and
- 6.3 have an earlier queue position (as assigned by the EDC pursuant to Section 3.7 of the Guidelines) than the Generating Facility.
- 7.0 In conjunction with the execution of this Agreement, the EDC shall provide to the Generator a written good faith estimate of the cost of the DSI Study (the “*Cost Estimate*”). Prior to commencement of the DSI Study, the Generator shall pay the Cost Estimate to the EDC.
- 8.0 Following the conclusion of the DSI Study, the EDC shall prepare a DSI Study report (the “*Report*”). The Report shall (a) state the assumptions upon which the DSI Study was based, (b) set forth the results of the various analyses and reviews, (c) provide the requirement or potential impediments to providing the requested Interconnection service, (d) provide an initial estimate of the cost and time necessary to correct any problems, if any, identified in the Report; and (e) provide a list of facilities that are required to implement the Interconnection of the Generating Facility, along with and a non-binding good faith estimate of cost responsibility and time to construct such facilities.
- 9.0 Any Affected System that may be adversely impacted by the proposed Interconnection shall be afforded an opportunity to review and comment on the Report.
- 10.0 The EDC shall use commercially reasonable efforts to provide the Report to the Generator within thirty (30) days of the later of (a) execution of this Agreement and (b) payment of the Cost Estimate by the Generator; provided, however, that such time frame will be extended by up to an additional twenty (20) Business Days in the event review and comment is required by an Affected System pursuant to Section 9.0 of this Agreement.



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## **DISTRIBUTION SYSTEM IMPACT STUDY**

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- 11.0 Within thirty (30) days of the completion of the DSI Study, the EDC shall calculate the actual costs of the DSI Study (the “*Actual Cost*”), and the EDC shall provide an invoice to the Generator which shall include the Actual Cost and the basis for the calculation thereof.
- 12.0 In the event the Actual Cost exceeds the Cost Estimate, the Generator shall pay the difference to the EDC within thirty (30) Calendar Days of the invoice date (without interest). In the event the Cost Estimate exceeds the Actual Cost, the EDC shall pay the excess to the Generator within thirty (30) Calendar Days of the invoice date (without interest).
- 13.0 Miscellaneous.
- 13.1 Accuracy of Information. The Generator represents and warrants that, to the best of its knowledge, the information it provides to the EDC in connection with this Agreement and the DSI Study shall be accurate and complete as of the date such information is provided. The Generator shall promptly provide the EDC with any additional information needed to update information previously provided.
- 13.2 Disclaimer of Warranty. In performing the DSI Study, the EDC may rely on information provided by the Generator and third parties, and may not have control over the accuracy of such information. ACCORDINGLY, THE EDC HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Generator acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.
- 13.3 Force Majeure, Liability and Indemnification.
- 13.3.1 Force Majeure. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party shall specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the affected Party is taking to mitigate the effects of the event on its performance. The affected Party may suspend or modify its performance of obligations under

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## **DISTRIBUTION SYSTEM IMPACT STUDY**

### **AGREEMENT**

this Agreement, other than the obligation to make payments then due or becoming due under this Agreement, but only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of commercially reasonable efforts. The affected Party shall use commercially reasonable efforts to resume its performance as soon as possible. Without limiting this section, the Generator shall immediately notify the EDC verbally if the failure to fulfill the Generator's obligations under this Agreement may impact the safety or reliability of the EDC EPS. For purposes of this Agreement, "***Force Majeure Event***" means any event or circumstance that (a) is beyond the reasonable control of the affected Party and (b) the affected Party is unable to prevent or provide against by exercising commercially reasonable efforts. Force Majeure Events include the following events or circumstances, but only to the extent they satisfy the foregoing requirements: (i) acts of war or terrorism, public disorder, insurrection, or rebellion; (ii) floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; (iii) explosions or fire; (iv) strikes, work stoppages, or labor disputes; (v) embargoes; and (vi) sabotage. In no event shall the lack of funds or the inability to obtain funds constitute a Force Majeure Event.

- 13.3.2 Liability. Except with respect to a Party's fraud or willful misconduct, and except with respect to damages sought by a third party in connection with a third party claim: (a) neither Party shall be liable to the other Party, for any damages other than direct damages; and (b) each Party agrees that it is not entitled to recover and agrees to waive any claim with respect to, and will not seek, consequential, punitive or any other special damages as to any matter under, relating to, arising from or connected to this Agreement.. Notwithstanding the foregoing, nothing in this Section 13.3.2 shall be deemed to limit Generator's obligations under Section 13.3.3.
- 13.3.3 Indemnification. The Generator shall indemnify, defend and hold harmless the EDC and its trustees, directors, officers, employees and agents (including affiliates, contractors and their employees) from and against any liability, damage, loss, claim, demand, complaint, suit, proceeding, action, audit, investigation, obligation, cost, judgment, adjudication, arbitration decision, penalty (including fees and fines), or expense (including court costs and attorneys' fees) relating to, arising from or connected to this Agreement.
- 13.4 Term and Termination. This Agreement shall be effective from the Effective Date until the earlier of (a) one year from the Effective Date and (b) the withdrawal of the Generator's Interconnection Request, unless extended in writing by the Parties. Notwithstanding the foregoing, the EDC may terminate this Agreement fifteen (15) days after providing written notice

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**DISTRIBUTION SYSTEM IMPACT STUDY**  
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to the Generator that it has breached any of its obligations hereunder, if such breach has not been cured within such fifteen (15) day period.

- 13.5 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Connecticut applicable to contracts made and performed in such State and without regard to conflicts of law doctrines.
- 13.6 Severability. If any provision of this Agreement is held to be unenforceable for any reason, such provision shall be adjusted rather than voided, if possible, to achieve the intent of the Parties. If no such adjustment is possible, such provision shall be fully severable and severed, and all other provisions of this Agreement will be deemed valid and enforceable to the extent possible.
- 13.7 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, and all counterparts so executed shall constitute one agreement binding on all of the Parties hereto, notwithstanding that all of the Parties are not signatories to the same counterpart. Facsimile counterparts may be delivered by any Party, with the intention that they shall have the same effect as an original counterpart hereof.
- 13.8 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 13.9 Survival. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of termination.
- 13.10 Independent Contractor. EDC shall at all times be deemed to be an independent contractor of the Generator, and none of the EDC's employees, contractors or the employees of its contractors shall be deemed to be employees of the Generator as a result of this Agreement.
- 13.11 No Implied Waivers. No failure on the part of any Party to exercise or delay in exercising any right hereunder shall be deemed a waiver thereof, nor shall any single or partial exercise of any right hereunder preclude any further or other exercise of such or any other right.
- 13.12 Successors and Assigns. Neither Party may assign this Agreement, by operation of law or otherwise, without the prior written consent of the other Party, which consent shall not be unreasonably withheld. In the event of an assignment authorized hereunder, each and every term and condition hereof shall be binding upon and inure to the benefit of the Parties and their respective successors and assigns.

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- 13.13 Due Authorization. Each Party represents and warrants to the other that (a) it has full power and authority to enter into this Agreement and to perform its obligations hereunder, (b) execution of this Agreement will not violate any other agreement with a third party, and (c) the individual signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

*[Signature page follows.]*

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DISTRIBUTION SYSTEM IMPACT STUDY  
AGREEMENT**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**[Insert name of the Generator]**

\_\_\_\_\_

Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_

Title \_\_\_\_\_

**[Insert name of the EDC]**

\_\_\_\_\_

Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_

Title \_\_\_\_\_

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**DISTRIBUTION SYSTEM IMPACT STUDY**  
**AGREEMENT**  
EXHIBIT A

**ASSUMPTIONS**

The DSI Study shall be based upon the results of the Feasibility Study, subject to any modifications in accordance with the standard Guidelines for Generator Interconnection, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied (to be completed by the Generator).

Other assumptions (listed below) are to be provided by the Generator and the Interconnecting EDC.

# ATTACHMENT VI FACILITY STUDY AGREEMENT

## Facility Study Agreement

This Facility Study Agreement (this “*Agreement*”), dated as of \_\_\_\_\_ (the “*Effective Date*”) is entered into by and between [Connecticut Light and Power, a Connecticut corporation with a principal place of business at 107 Selden St, Berlin, CT, 06037] [*or*] [The United Illuminating Company, a specially chartered Connecticut corporation with a principal place of business at 157 Church Street, New Haven, CT 06510] (the “*EDC*”), and \_\_\_\_\_, a \_\_\_\_\_ with a principal place of business at \_\_\_\_\_ (“*Generator*”). (The EDC and Generator are collectively referred to as the “*Parties*” and individually as a “*Party*”).

### RECITALS

**WHEREAS**, Generator is proposing to develop a Generating Facility or increase the generating capacity of an existing Generating Facility consistent with the Interconnection Request completed by Generator on \_\_\_\_\_;

**WHEREAS**, Generator desires to interconnect the Generating Facility with the Distribution System;

**WHEREAS**, the EDC has completed a [Distribution/Transmission] System Impact Study with respect to the proposed Interconnection of the Generating Facility and provided the results of such study to Generator on \_\_\_\_\_ (the “*System Impact Study*”); and [*If both System Impact Studies are conducted, then this will be appropriately modified and the defined term “System Impact Studies” will be used.*]

**WHEREAS**, Generator has requested the EDC to perform a Facility Study to specify and estimate the cost of the equipment, engineering, procurement and construction work required pursuant to the conclusions of the System Impact Study.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 Capitalized terms used herein but not defined herein shall have the meanings ascribed to such terms in the EDC’s Guidelines for Generator Interconnection (the “*Guidelines*”).
- 2.0 The EDC shall conduct or cause to be conducted a Facility Study in accordance with the Guidelines (the “*Facility Study*”).
- 3.0 The scope of the Facility Study shall be based on the conclusions of the System Impact Study and the data provided by Generator in Exhibit A to this Agreement (the “*Data*”). At the reasonable request of the EDC, the Generator shall promptly provide additional data to the EDC.

## **ATTACHMENT VI**

### **FACILITY STUDY AGREEMENT**

- 4.0 In order to minimize Generator's facilities costs, the EDC may recommend that Generator and other third parties wishing to make an Interconnection "group" and share the costs of facilities; provided, however, that Generator may, in its sole discretion, require the installation of its own facilities for the Generating Facility if it is willing to pay the entire costs thereof.
- 5.0 In conjunction with the execution of this Agreement, the EDC shall provide to the Generator a written good faith estimate of the cost of the Facility Study (the "**Cost Estimate**"). Prior to commencement of the Facility Study, the Generator shall pay the Cost Estimate to the EDC.
- 6.0 Following the conclusion of the Facility Study, the EDC shall prepare a report setting forth the results of the Facility Study (the "**Report**"). The Report may include, but is not limited to: (a) specification and estimation of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the System Impact Study; (b) identification of the electrical switching configuration of the equipment (including, without limitation, transformer, switchgear, meters, and other station equipment); and (c) estimation of the nature and estimated cost of the EDC's Interconnection Facilities and upgrades necessary to accomplish the Interconnection (including, without limitation, an estimation of the time required to complete the construction and installation of such facilities).
- 7.0 The EDC shall use commercially reasonable efforts to provide the Report to the Generator within thirty (30) days of the later of (a) execution of this Agreement and (b) payment of the Cost Estimate by the Generator; provided, however, that such time frame will be extended by an additional fifteen (15) Business Days in the event upgrades are required.
- 8.0 Within thirty (30) days of the completion of the Facility Study, the EDC shall calculate the actual costs of the Facility Study (the "**Actual Cost**"), and the EDC shall provide an invoice to the Generator which shall include the Actual Cost and the basis for the calculation thereof.
- 9.0 In the event the Actual Cost exceeds the Cost Estimate, the Generator shall pay the difference to the EDC within thirty (30) Calendar Days of the invoice date (without interest). In the event the Cost Estimate exceeds the Actual Cost, the EDC shall pay the excess to the Generator within thirty (30) Calendar Days of the invoice date (without interest).
- 10.0 Miscellaneous.
- 10.1 Accuracy of Information. The Generator represents and warrants that, to the best of its knowledge, the information it provides to the EDC in connection with this Agreement and the Facility Study (including without limitation the Data and all information provided on Generator's Interconnection Request) shall be accurate and complete as of the date such



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### **FACILITY STUDY AGREEMENT**

information is provided. The Generator shall promptly provide the EDC with any additional information needed to update information previously provided.

10.2 Disclaimer of Warranty. In performing the Facility Study, the EDC may rely on information provided by the Generator and third parties, and may not have control over the accuracy of such information. ACCORDINGLY, THE EDC HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Generator acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

10.3 Force Majeure, Liability and Indemnification.

10.3.1 Force Majeure. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party shall specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the affected Party is taking to mitigate the effects of the event on its performance. The affected Party may suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement, but only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of commercially reasonable efforts. The affected Party shall use commercially reasonable efforts to resume its performance as soon as possible. Without limiting this section, the Generator shall immediately notify the EDC verbally if the failure to fulfill the Generator's obligations under this Agreement may impact the safety or reliability of the EDC EPS. For purposes of this Agreement, "***Force Majeure Event***" means any event or circumstance that (a) is beyond the reasonable control of the affected Party and (b) the affected Party is unable to prevent or provide against by exercising commercially reasonable efforts. Force Majeure Events include the following events or circumstances, but only to the extent they satisfy the foregoing requirements: (i) acts of war or terrorism, public disorder, insurrection, or rebellion; (ii) floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; (iii) explosions or fire; (iv) strikes, work stoppages, or labor disputes; (v)

## **ATTACHMENT VI**

### **FACILITY STUDY AGREEMENT**

embargoes; and (vi) sabotage. In no event shall the lack of funds or the inability to obtain funds constitute a Force Majeure Event.

- 10.3.2 Liability. Except with respect to a Party's fraud or willful misconduct, and except with respect to damages sought by a third party in connection with a third party claim: (a) neither Party shall be liable to the other Party, for any damages other than direct damages; and (b) each Party agrees that it is not entitled to recover and agrees to waive any claim with respect to, and will not seek, consequential, punitive or any other special damages as to any matter under, relating to, arising from or connected to this Agreement.. Notwithstanding the foregoing, nothing in this Section 10.3.2 shall be deemed to limit Generator's obligations under Section 10.3.3.
- 10.3.3 Indemnification. The Generator shall indemnify, defend and hold harmless the EDC and its trustees, directors, officers, employees and agents (including affiliates, contractors and their employees) from and against any liability, damage, loss, claim, demand, complaint, suit, proceeding, action, audit, investigation, obligation, cost, judgment, adjudication, arbitration decision, penalty (including fees and fines), or expense (including court costs and attorneys' fees) relating to, arising from or connected to this Agreement.
- 10.4 Term and Termination. This Agreement shall be effective from the Effective Date until the earlier of (a) one year from the Effective Date and (b) the withdrawal of the Generator's Interconnection Request, unless extended in writing by the Parties. Notwithstanding the foregoing, the EDC may terminate this Agreement fifteen (15) days after providing written notice to the Generator that it has breached any of its obligations hereunder, if such breach has not been cured within such fifteen (15) day period.
- 10.5 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Connecticut applicable to contracts made and performed in such State and without regard to conflicts of law doctrines.
- 10.6 Severability. If any provision of this Agreement is held to be unenforceable for any reason, such provision shall be adjusted rather than voided, if possible, to achieve the intent of the Parties. If no such adjustment is possible, such provision shall be fully severable and severed, and all other provisions of this Agreement will be deemed valid and enforceable to the extent possible.
- 10.7 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, and all counterparts so executed shall constitute one agreement binding on all of the Parties hereto, notwithstanding that all of the Parties are not signatories to the same counterpart. Facsimile counterparts may be delivered by any Party, with the

## **ATTACHMENT VI**

### **FACILITY STUDY AGREEMENT**

intention that they shall have the same effect as an original counterpart hereof.

- 10.8 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 10.9 Survival. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of termination.
- 10.10 Independent Contractor. EDC shall at all times be deemed to be an independent contractor of the Generator, and none of the EDC's employees, contractors or the employees of its contractors shall be deemed to be employees of the Generator as a result of this Agreement.
- 10.11 No Implied Waivers. No failure on the part of any Party to exercise or delay in exercising any right hereunder shall be deemed a waiver thereof, nor shall any single or partial exercise of any right hereunder preclude any further or other exercise of such or any other right.
- 10.12 Successors and Assigns. Neither Party may assign this Agreement, by operation of law or otherwise, without the prior written consent of the other Party, which consent shall not be unreasonably withheld. In the event of an assignment authorized hereunder, each and every term and condition hereof shall be binding upon and inure to the benefit of the Parties and their respective successors and assigns.
- 10.13 Due Authorization. Each Party represents and warrants to the other that (a) it has full power and authority to enter into this Agreement and to perform its obligations hereunder, (b) execution of this Agreement will not violate any other agreement with a third party, and (c) the individual signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

***[Signature page follows.]***

**ATTACHMENT VI  
FACILITY STUDY AGREEMENT**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**[Insert name of the Generator]**

\_\_\_\_\_

Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_

Title \_\_\_\_\_

**[Insert name of the EDC]**

\_\_\_\_\_

Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_

Title \_\_\_\_\_

**ATTACHMENT VI**  
**FACILITY STUDY AGREEMENT**  
EXHIBIT A

**DATA**

The Facility Study shall be based upon the conclusions of the System Impact Study(ies), and the following data provided by Generator:

**ATTACHMENT VII  
CONTINGENT APPROVAL TO  
INTERCONNECT**

**Contingent Approval to Interconnect**

***( CL&P/UI Use Only )***

- |                          |  |                   |
|--------------------------|--|-------------------|
| <input type="checkbox"/> | Elec. Inspector Signoff/<br>Copy of Inspection Sticker | Date Cured: _____ |
| <input type="checkbox"/> | Signed IA's  | Date Cured: _____ |
| <input type="checkbox"/> | Witness Test   | Date Cured: _____ |

Interconnection of the Generating Facility is approved contingent upon compliance with the Interconnection Agreement (Exhibit A) and the Generator's return of a completed Certificate of Completion.

Electric Distribution Company Name: \_\_\_\_\_

Electric Distribution Company Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

Application ID number: \_\_\_\_\_

Generator Name \_\_\_\_\_

Electric Distribution Company waives inspection/witness test? Yes\_\_\_No\_\_\_

**ATTACHMENT VIII  
APPROVAL TO ENERGIZE**

**Approval to Energize the Generating Facility**

***( CL&P/UI Use Only )***

Energizing the Generating Facility is approved contingent upon ongoing compliance with the Interconnection Agreement and Final Approval for

\_\_\_\_\_ Generating Facility.

Electric Distribution Company Name: \_\_\_\_\_

Electric Distribution Company Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

# **ATTACHMENT IX**

## **Certification of Small Generator Equipment Packages**

- 1.0 Small Generating Facility equipment proposed for use separately or packaged with other equipment in an interconnection system shall be considered certified for interconnected operation if (1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards referenced below by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment pursuant to the relevant codes and standards listed in Attachment X (2) it has been labeled and is publicly listed by such NRTL at the time of the interconnection application, and (3) such NRTL makes readily available for verification all test standards and procedures it utilized in performing such equipment certification, and, with consumer approval, the test data itself. The NRTL may make such information available on its website and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.
- 2.0 The Generator must verify that the intended use of the equipment falls within the use or uses for which the equipment was tested, labeled, and listed by the NRTL.
- 3.0 Certified equipment shall not require further type-test review, testing, or additional equipment to meet the requirements of this interconnection procedure; however, nothing herein shall preclude the need for an on-site commissioning test by the parties to the interconnection nor follow-up production testing by the NRTL.
- 4.0 If the certified equipment package includes only interface components (switchgear, inverters, or other interface devices), then the Generator must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and is consistent with the testing and listing specified for this type of interconnection equipment.
- 5.0 Provided the generator or electric source, when combined with the equipment package, is within the range of capabilities for which it was tested by the NRTL, and does not violate the interface components' labeling and listing performed by the NRTL, no further design review, testing or additional equipment on the customer side of the point of common coupling shall be required to meet the requirements of this interconnection procedure.
- 6.0 An equipment package does not include equipment provided by the utility.
- 7.0 Any equipment package approved and listed in a state by that state's regulatory body for interconnected operation in that state prior to the effective date of these small generator interconnection procedures shall be considered certified under these procedures for use in that state.



## **ATTACHMENT X CODES AND STANDARDS**

The following existing codes and standards (in addition to any successor codes and standards) shall be applied as appropriate:

ANSI C12.1-2001 “American National Standard for Electric Meter Code for Electricity Metering”

ANSI C12.11-1993 “Instrument Transformers for Metering 15 kV and Below”

ANSI C84.1-1995 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

ANSI/IEEE C37.90-1989 IEEE Standard “Relays and Relay Systems Associated with Electric Power Apparatus”

ANSI/IEEE C37.90-1-1989 IEEE Standard “Surge Withstand Capability [SWC] Tests for Protective Relays and Relay Systems”

ANSI/IEEE C57.13-1987 “Requirements for Instrument Transformers”

ANSI/IEEE Std C37.90.2 (1995), IEEE Standard “Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers”

ANSI/IEEE C62.41-1991 “Recommended Practice on Surge Voltages in Low Voltage AC Power Circuits”

ANSI/IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits

ANSI/IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits

IEC 1000-4-15 Flicker meter- Functional and Design Specifications

IEC 61400-21 Wind Turbine Generator Systems

IEC 61400-21 Part 21 Measurement and Assessment of Power Quality Characteristics of Grid Connected Wind Turbines

IEEE Std p1453 Draft, Recommended Practices for Measurement and Limits of Voltage Flicker on AC Power Systems

IEEE p 1547.1 Drafts Std for Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems

IEEE p 1547.2 Draft Application Guide for IEEE Standard 1547 for Interconnecting Distributed Resources with Electric Power Systems

# **ATTACHMENT X CODES AND STANDARDS**

IEEE p 1547.3 Draft Guide for Monitoring, Information Exchange and Control of DR Interconnection with Electric Power Systems

IEEE 1547-2003 IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems.

IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms

IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network Transformers

IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors

National Electrical Code, NFPA/ANSI 70 (Note: As adopted by State of CT)

NEMA MG 1-1998, Motors and Resources, Revision 3

UL (Underwriters Laboratories) Std 1741- 2007, Inverters, Converters and Charge Controllers for Use in Independent Power Systems

ANSI/ IEEE C37.90.3

IEEE C37.98 Seismic Testing (fragility) of Protective and Auxiliary Relays

ANSI C37.2 Electric Power System Device Function Numbers

IEC 255-21-1 Vibration

IEC 255-22-2 Electrostatic Discharge

IEC 255-5 Insulation (Impulse Voltage Withstand)

# **ATTACHMENT XI**

## **GLOSSARY**

**ANSI:** American National Standards Institute.

**Affected Party or Parties:** The entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the Interconnection process.

**Affected System:** Any electric system that is within the EDC service territory, including, but not limited to generator owned electric facilities, or any other electric system that is not within the EDC service territory that may be affected by the proposed Interconnection.

**Applicable Laws and Regulations:** All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Standards:** The requirements and guidelines of NERC, NPCC and the New England Control Area, ISO, ISO-NE, including publicly available local reliability requirements of Interconnecting EDC or other Affected Systems, and any successor documents.

**Application Review:** A review by the EDC of the completed Interconnection Request Form to determine if a Feasibility, Impact and Facility Studies are required.

**Area Network:** See **Low Voltage Secondary Network Grid System**

**Business Day:** Monday through Friday, excluding Federal Holidays.

**Calendar Day:** Shall mean any day including Saturday, Sunday, Federal and State Holidays.

**CL&P:** The Connecticut Light and Power Company, the EDC that provides service to all of Connecticut except for (a) the towns serviced by UI and (b) the towns of Wallingford, Norwich, Bozrah and certain parts of Groton, Norwalk, and Lebanon.

**Codes and Standards:** The codes and standards set forth on Attachment IX hereto.

**Commercial Operation Date:** The date on which the Generator commences commercial operation of the unit after the unit has been commissioned and likely to be associated with a specific date that is identified in a purchase power agreement or the date that the power transaction starts.

**Communications Costs:** Any costs associated with installing, testing, and maintaining the communications infrastructure necessary to provide protection and/or monitoring for the generating facility.

**Contract Path:** A specific contiguous electrical path from a point of receipt to a point of delivery for which EPS rights have been contracted.

**Default:** The failure of a breaching Party to cure its breach under the Generator Interconnection Agreement.

# ATTACHMENT XI

## GLOSSARY

**Distribution System:** The Interconnecting EDC's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries. The voltage levels at which Distribution Systems generally operate at 69 kV and less.

**Distribution System Impact Study (DSI Study):** An engineering study that evaluates the impact of the proposed Interconnection on the safety and reliability of the EPS. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on the adverse system impacts identified in the Interconnection Feasibility Study, or to study potential impacts, including but not limited to those identified in the Scoping Meeting.

**DPUC:** Connecticut Department of Public Utility Control.

**EDC:** An electric distribution company, either CL&P or UI.

**EDC Facilitator:** A facilitator designated by an EDC to be its primary point of contact for any Interconnection.

**EPS:** The electric power system, consisting of all electrical wires, equipment, and other facilities owned or provided by the EDC to provide distribution service to the EDC's customers.

**Facility Study:** The study conducted by the EDC to determine the scope and costs of required modifications and upgrades to the EPS and/or a Generating Facility necessary for an Interconnection of such Generating Facility.

**Fault:** An equipment failure, short circuit, or other condition resulting from abnormally high amounts of current from the power source.

**Feasibility Study:** A preliminary study to assess the feasibility of interconnecting the Generating Facility to the EPS.

**FERC:** Federal Energy Regulatory Commission.

**Generator:** The owner and/or operator of a Generating Facility.

**Generating Facility:** The device used for the production of electricity identified in the Interconnection Request, but shall not include the Generating Facility's Interconnection Facilities.

**Generating Facility Capacity:** The maximum gross megawatt electrical output at an ambient temperature of 20 degrees Fahrenheit of the Generating Facility or the aggregate maximum gross megawatt electrical output of the Generating Facility at an ambient temperature of 20 degrees Fahrenheit where it includes multiple energy production devices.

**Good Utility Practice:** The practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the

# ATTACHMENT XI

## GLOSSARY

facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Guidelines:** The “Guidelines for Generator Interconnection: Fast Track and Study Process,” prepared by CL&P and UI to describe the protocols and procedures for interconnecting to the EPS.

**IEEE:** Institute of Electrical and Electronics Engineers.

**Independent System Operator (ISO):** An entity supervising the collective transmission facilities of a power region; the ISO is charged with nondiscriminatory coordination of market transactions, system-wide transmission planning, and bulk power network reliability.

**Induction Generator:** An induction generator is a rotating AC machine that operates above synchronous speed over its range of power output. The faster it is driven above synchronous speed by a prime mover, the more electrical power is generated. Excitation is provided by the utility in the form of reactive power. The induction generator normally loses its ability to produce voltage and power output when it is isolated from the utility since it loses its source of excitation.

**In-Service Date:** The date on which the Generating Facility and system modification (if applicable) are complete and ready for service, even if the Generating Facility is not placed in service on such date.

**Intentional Islanding:** Intentional Islanding occurs when the Generating Facility has been isolated from the EPS by planned operation of disconnecting means consistent with the Technical Requirements and the Generating Facility as a result is serving segregated load(s) on the Generating Facility's side of the Point of Interconnection.

**Interconnecting EDC:** The EDC (i) to which an appropriate Interconnection Request is made or (ii) owning or providing the EPS to which an Interconnection is made.

**Interconnection:** The physical connection of a Generating Facility to the EPS so that parallel operation can occur.

**Interconnection Agreement:** A written agreement between a Generator and the Interconnecting EDC setting forth the terms, conditions, obligations and rights with respect to an Interconnection. An Interconnection Agreement is required to be signed by the Generator and the EDC before parallel operation of the Generating Facility may commence. Note: the form of Interconnection Agreement is attached to these Guidelines as Exhibit A.

**Interconnection Facilities:** Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically

# **ATTACHMENT XI**

## **GLOSSARY**

interconnect the Generating Facility to the Distribution System. The EDC and the Generator may each own Interconnection Facilities with respect to the Generating Facility.

**Interconnection Request:** A Generator's request, in the form of Attachment I, to interconnect a new Generating Facility to the EPS or increase the capacity or operating characteristics an existing Generating Facility currently interconnected to the EPS.

**Interconnection Service:** The service provided by the Interconnecting EDC associated with interconnecting the Generating Facility to the EPS and enabling the delivery of electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Interconnection Agreement.

**Inverter:** A machine, device or system that changes direct-current power to alternating-current power.

**Islanding:** A situation where electrical power remains in a portion of an EPS when the EPS has ceased providing power for whatever reason (emergency conditions, maintenance, etc.) to that portion of the EPS.

**Isolation Device:** A device used for isolating a circuit or equipment from a source of power. Also referred to as a "Disconnect Switch".

**ISO-NE:** The ISO, established in accordance with the NEPOOL Agreement and applicable FERC approvals, that is responsible for managing the bulk power generation and transmission systems in New England, or any successor organization approved by FERC.

**Line Section:** That section of the EPS connected or proposed to be connected to a Generating Facility, which portion is bounded by automatic sectionalizing devices or the end of the distribution line, as the case may be.

**Low Voltage Secondary Network Grid System (Area Network):** A Network Secondary Distribution System typically with a nominal voltage of 208Y/120 volts in which the secondaries of distribution transformers are connected to a common network bus through Network Protectors. The distribution transformers, Network Protectors and network buses are located in multiple locations which are interconnected to form a grid.

**Material Modification:** (i) Any modification to an Interconnection Request submitted by a Generator that is reasonably expected to require significant additional study of the such Interconnection Request, substantially change the Interconnection design and/or have a material impact on the cost or timing of any studies or upgrades associated with any other Interconnection Request with a later queue priority date; (ii) a change to the design or operating characteristics of an existing Generating Facility that is interconnected with the EPS which may have an adverse effect on the reliability of the EPS; or (iii) a significant delay to the Commercial Operation Date or In-Service Date, the reason for which is unrelated to construction schedules or permitting.

# **ATTACHMENT XI**

## **GLOSSARY**

**Metering Point:** The point at which the billing meter is connected (for meters that do not use instrument transformers). For meters that use instrument transformers, the point at which the instrument transformers are connected.

**NEC:** National Electric Code

**NEMA:** National Electrical Manufacturers Association.

**NERC:** North American Electric Reliability Corporation.

**NESC:** National Electric Safety Code.

**NEPOOL:** New England Power Pool.

**Net Metering:** The process, in accordance with applicable EDC rates, whereby the metered electrical energy production by a Generating Facility is subtracted from the metered EDC electrical energy sales to the Generator at such Generating Facility.

**Network Protector (power and distribution transformers):** An assembly comprising a circuit breaker and its complete control equipment for automatically disconnecting a transformer from a secondary network in response to predetermined electrical conditions on the primary feeder or transformer, and for connecting a transformer to a secondary network either through manual control or automatic control responsive to predetermined electrical conditions on the feeder and the secondary network.

**Network Secondary Distribution System:** A system of alternating current distribution in which the secondaries of the distribution transformers are connected to a common network for supplying power directly to consumer's services.

**Network Service:** Network service consists of two or more primary distribution feeders electrically connected together on the secondary (or low voltage) side to form a single power source for one or more customers.

**Non-Islanding:** Describes the ability of a Generating Facility to avoid unintentional islanding through the operation of its Interconnection equipment.

**NRTL:** An accredited Nationally Recognized Testing Laboratory, which has been approved to perform the certification testing required for Generating Facilities.

**Operating Requirements:** Any operating and technical requirements that may be required by the Interconnecting EDC, including those set forth in the Interconnection Agreement (Exhibit A), or the Applicable Reliability Standards.

**Party:** Each of the Interconnecting EDC and the Generator, collectively the "**Parties.**"

**Point of Delivery:** See Contract Path

# **ATTACHMENT XI**

## **GLOSSARY**

**Point of Interconnection:** The point at which the Generating Facility's local electric power system connects to the EPS, such as the electric power revenue meter or premises service transformer.

**Point of Receipt:** See Contract Path

**Pre-certified, Pre-certification:** A specific generating and protective equipment system or systems that have been certified and documented as meeting applicable test requirements and standards relating to safety and reliability by a NRTL or, in the absence of such test requirements and standards, by tests and standards approved by the DPUC.

**Scoping Meeting:** A scoping meeting is to discuss the Interconnection Request, review any existing studies relevant to the application, and discuss whether the EDC should perform a Feasibility Study or proceed directly to an Impact Study, or a Facility Study, or an Interconnection Agreement.

**Spot Network:** A small network typically with a nominal voltage of 480Y/277 volts in which the secondaries of two or more distribution transformers are connected to a common network bus through Network Protectors usually in a single location.

**Switchgear:** Components for switching, protecting, monitoring and controlling the EPS.

**Synchronous Generator:** A synchronous alternating-current machine which transforms mechanical power into electric power. (A synchronous machine is one in which the average speed of normal operation is exactly proportional to the frequency of the system to which it is connected.)

**System Impact Studies:** The Transmission System Impact Study and the Distribution System Impact Study.

**Tariffs:** Rates and charges of the EDC for service as filed and approved by the DPUC.

**Technical Requirements:** Technical requirements for the Interconnection, attached hereto as Exhibit B.

**Telemetry:** The transmission of Generating Facility data using telecommunications techniques.

**Terms and Conditions:** The EDC's terms and conditions for providing electric delivery service as approved by the DPUC.

**Transfer Switch:** A switch designed so that it will disconnect the load from one power source and reconnect it to another source.

**Transmission System:** The Interconnecting EDC's facilities and equipment used to transmit electricity generally at voltage levels greater than 69 kV.



# **ATTACHMENT XI**

## **GLOSSARY**

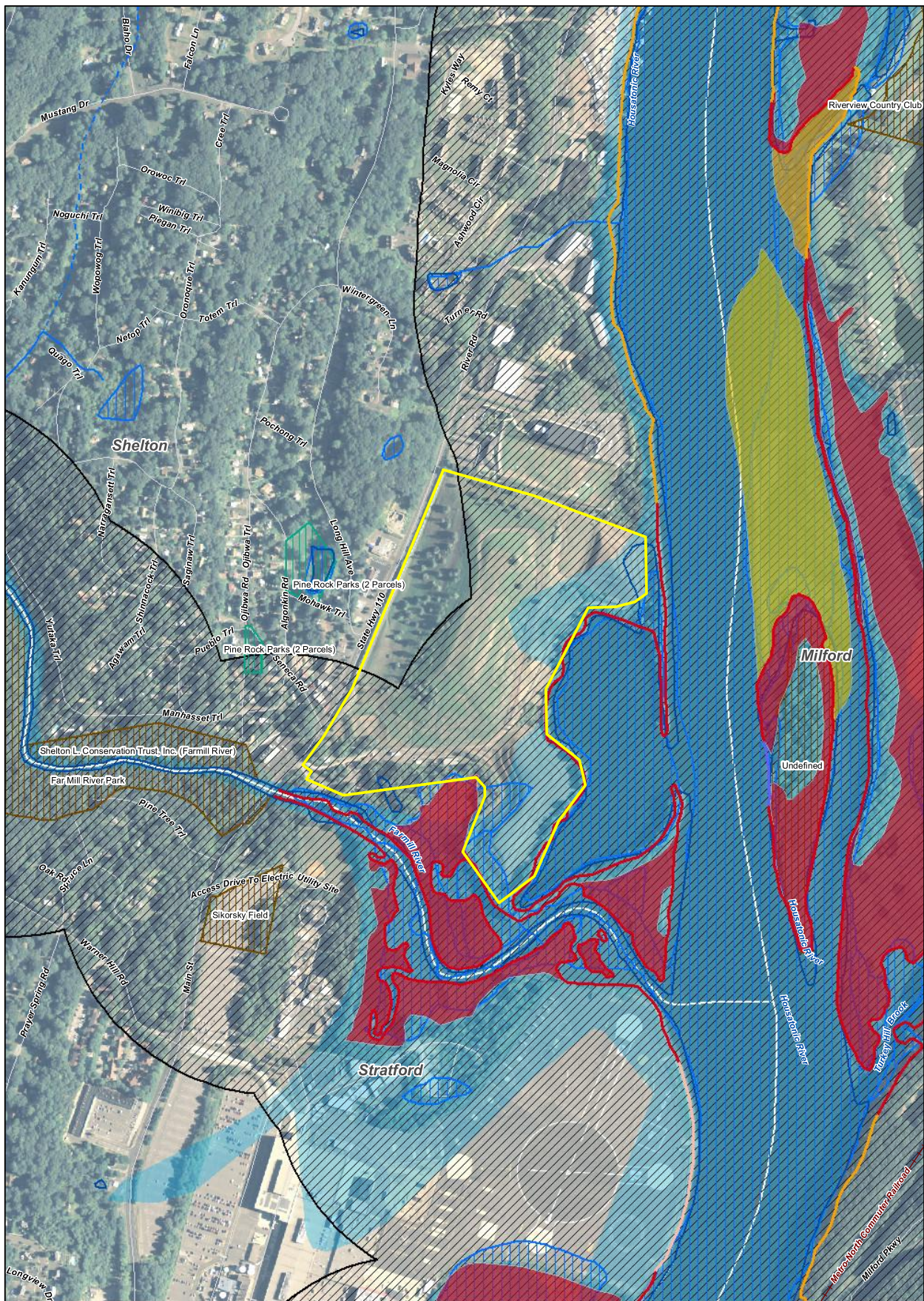
**Transmission System Impact Study:** An engineering study that evaluates the impact of the proposed Interconnection on the safety and reliability of the Transmission System without project modifications or system modifications, focusing on the adverse system impacts identified in the Feasibility Study and/or at the Scoping Meeting.

**UI:** The United Illuminating Company, the EDC that provides service to the principal cities of Bridgeport and New Haven and their surrounding municipalities: Ansonia, Derby, East Haven, Easton, Fairfield, Hamden, Milford, North Branford, North Haven, Orange, Shelton, Stratford, Trumbull, West Haven and Woodbridge.

**Utility Grade Relay:** A relay that is constructed to comply with, as a minimum, the most current version of the following standards; ANSI/ IEEE C37.90, ANSI/ IEEE C37.90.1, ANSI/ IEEE C37.90.2, ANSI/ IEEE C37.90.3 and; IEEE C37.98 Seismic Testing (fragility) of Protective and Auxiliary Relays, ANSI C37.2 Electric Power System Device Function Numbers, IEC 255-21-1 Vibration, IEC 255-22-2 Electrostatic Discharge, and IEC 255-5 Insulation (Impulse Voltage Withstand).

**Attachment 3**  
**Site Constraint Figures**





<p><b>Approximate Site Boundary</b></p> <p><b>Hydrography</b></p> <ul style="list-style-type: none"> <li><span style="color: blue;">—</span> Water</li> <li><span style="color: blue;">—</span> Shore</li> <li><span style="color: blue;">- - -</span> Intermittent Water</li> </ul>	<p><b>Natural Diversity Area</b></p> <ul style="list-style-type: none"> <li><span style="background-color: #e0e0e0; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> NWI Wetlands</li> <li><span style="background-color: #e0e0e0; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 100 Year Flood Zones</li> </ul> <p><b>Protected Open Space</b></p> <ul style="list-style-type: none"> <li><span style="background-color: #e0e0e0; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Municipal</li> <li><span style="background-color: #e0e0e0; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Private</li> <li><span style="background-color: #e0e0e0; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> State</li> <li><span style="background-color: #e0e0e0; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Public Roads</li> <li><span style="background-color: #e0e0e0; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Railroads</li> </ul>	<p><b>Environmental Sensitivity Index (2002)</b></p> <ul style="list-style-type: none"> <li><span style="background-color: #ff0000; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 10A-Salt- &amp; brackish-water marshes</li> <li><span style="background-color: #ff0000; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 9A-Sheltered tidal flats</li> <li><span style="background-color: #ff0000; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 7-Exposed tidal flats</li> <li><span style="background-color: #ff0000; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 10A+-Salt- &amp; brackish-water marshes</li> <li><span style="background-color: #ff0000; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 10A+-Salt- &amp; brackish-water marshes (most sens)</li> <li><span style="background-color: #ff0000; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 9B-Sheltered vegetated low banks</li> <li><span style="background-color: #ff0000; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 9B+-Sheltered vegetated low banks (most sens)</li> <li><span style="background-color: #ff0000; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 8C-Sheltered rip-rap</li> <li><span style="background-color: #ff0000; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> 5-Mixed sand &amp; gravel beaches</li> </ul>
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1 inch = 550 feet

0 250 500 Feet

Orthophotography: National Agriculture Imagery Program, 2010  
 R:\Projects\GIS\_2012\174968\_CRRA\_CT\mxd\Fig1\_Shelton\_Enviro\_2012-05-02.mxd

650 Suffolk Street  
 Wannalancit Mills  
 Lowell, MA 01854  
 978-970-5600

**FIGURE 1**  
**CRRA**  
**SHELTON, CT**  
**ENVIRONMENTAL**  
**DUE DILIGENCE**

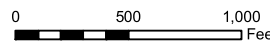
Project Number: 174968	Date: 5/2/2012
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- |                    |                                   |                             |                        |
|--------------------|-----------------------------------|-----------------------------|------------------------|
|                    | Approximate Site Boundary         |                             | Natural Diversity Area |
| <b>Hydrography</b> |                                   |                             | NW1 Wetlands           |
|                    | Water                             |                             | 100 Year Flood Zones   |
|                    | Shore                             | <b>Protected Open Space</b> |                        |
|                    | Intermittent Water                |                             | Municipal              |
|                    | Fisheries Management Trout Stream |                             | Private                |
|                    |                                   |                             | State                  |
|                    |                                   |                             | Public Roads           |
|                    |                                   |                             | Railroads              |

1 inch = 550 feet



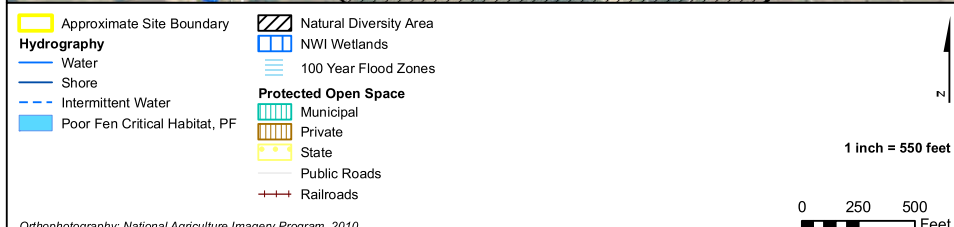
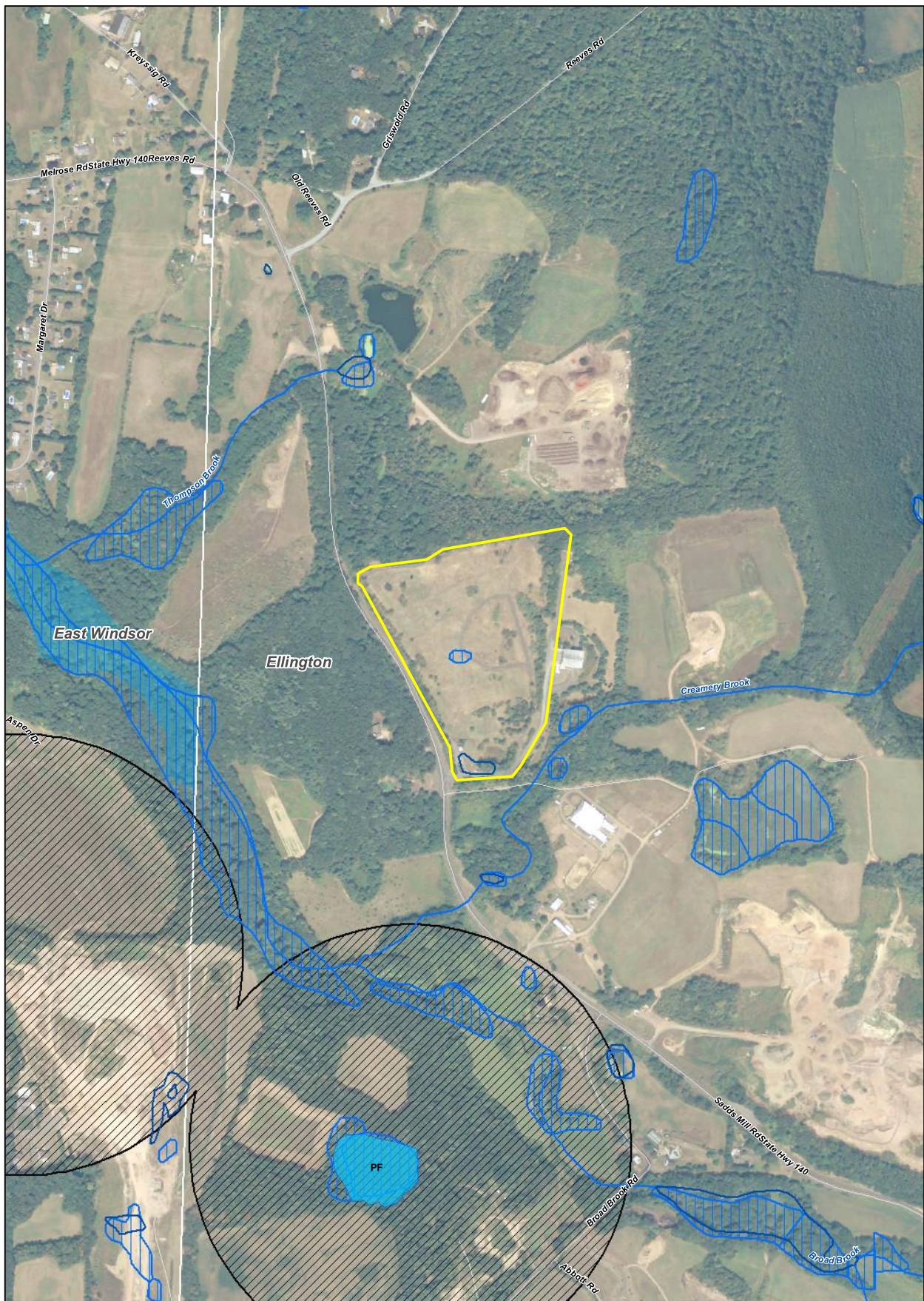
**TRC**  
 650 Suffolk Street  
 Wannalancit Mills  
 Lowell, MA 01854  
 978-970-5600

**FIGURE 2**  
**CRRA**  
**WATERBURY, CT**  
**ENVIRONMENTAL**  
**DUE DILIGENCE**

Project Number: 174968  
 Date: 5/2/2012

Orthophotography: National Agriculture Imagery Program, 2010





Orthophotography: National Agriculture Imagery Program, 2010  
 R:\Projects\GIS\_2012\174968\_CRRA\_CT\mxd\Fig3\_Ellington\_Enviro\_2012-05-02.mxd

	650 Suffolk Street Wannalancit Mills Lowell, MA 01854 978-970-5600	
	<b>FIGURE 3</b> <b>CRRA</b> <b>ELLINGTON, CT</b> <b>ENVIRONMENTAL</b> <b>DUE DILIGENCE</b>	
Project Number: 174968	Date: 5/2/2012	

**REQUEST FOR PROPOSALS  
FOR  
DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE  
OF SOLAR GENERATING FACILITIES (SGF) AT THE  
ELLINGTON, SHELTON, AND WATERBURY LANDFILLS**

**SECTION 4  
NOTICE OF INTEREST FORM**



<b>NOTICE OF INTEREST FORM</b>
--------------------------------

Individuals and firms that have an interest in the Connecticut Resources Recovery Authority (“CRRA”) solicitation listed below are encouraged to submit this Notice Of Interest Form to CRRA as early as they can. Forms should be submitted no later than the date specified below. Request For Proposal documents and other information released by CRRA related to the solicitation will be directly provided to those firms that have submitted this Form to CRRA by the Form Due Date.

Solicitation:	<b>DESIGN, INSTALLATION, AND OPERATION OF SOLAR GENERATING FACILITIES (SGF) AT THE ELLINGTON, SHELTON, AND WATERBURY LANDFILLS.</b>
RFP Number:	<b>13-EN-001</b>
Form Due Date:	<b>3:00 p.m., Wednesday, October 10, 2012</b>

Provide the following information about the individual/firm and the contact person for the firm.

Name of Individual/Firm:	
Name of Contact Person:	
Title of Contact Person:	
Mailing Address:	
Telephone Number:	
Fax Number:	
E-Mail Address:	

Submit this form to the CRRA contact listed below via e-mail, fax or correspondence as listed below.

CRRA Contact:	<b>Roger Guzowski</b>
E-Mail Address:	<a href="mailto:rguzowski@crra.org">rguzowski@crra.org</a>
Fax Number:	<b>(860) 757-7742</b>
Correspondence Address:	<b>Connecticut Resources Recovery Authority 100 Constitution Plaza, 6<sup>th</sup> Floor Hartford, CT 06103</b>

**REQUEST FOR PROPOSALS  
FOR  
DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE  
OF SOLAR GENERATING FACILITIES (SGF) AT THE  
ELLINGTON, SHELTON, AND WATERBURY LANDFILLS**

**SECTION 5  
REQUIRED PROPOSAL FORMS**

**Includes:**

- 5.1 Proposal Form**
- 5.2 Issues and Questions Form**
- 5.3 Proposal Payment Rate Schedule**
- 5.4 SGF Equipment Form**
- 5.5 Firm Background and Experience Form**
- 5.6 Personnel Background and Experience Form**
- 5.7 References Form**
- 5.8 Questionnaire Concerning Affirmative Action**
- 5.9 Subcontractor Identification Form**
- 5.10 Affidavit Concerning Non-Discrimination**
- 5.11 Affidavit Of Third Party Fees**
- 5.12 Background Questionnaire**
- 5.13 Business Disclosure Form**
- 5.14 SEEC Form 11**
- 5.15 Business Exception Form**





## PROPOSAL FORM

**PROJECT:** General

**RFP NUMBER:** FY13-EN-001

**CONTRACT FOR:** Design, Installation, Operation, and Maintenance of Solar Generating Facilities (SGF) at the Ellington, Shelton, and Waterbury Landfills

**PROPOSALS SUBMITTED TO:** Connecticut Resources Recovery Authority  
100 Constitution Plaza, 6<sup>th</sup> Floor  
Hartford, Connecticut 06103-1722

### 1. DEFINITIONS

Unless otherwise defined herein, all terms that are not defined and used in this Proposal Form (a "Proposal") shall have the same respective meanings assigned to such terms in the Contract Documents.

### 2. TERMS AND CONDITIONS

The undersigned (the "Proposer") accepts and agrees to all terms and conditions of the Request For Proposals, Instructions To Proposers, the Agreement and any Addenda to any such documents. This Proposal shall remain open and subject to acceptance for one hundred twenty (120) days after the proposal due date.

If CRRA issues a Notice Of Award to Proposer, Proposer shall within ten (10) days after the date thereof:

- (a) Execute and deliver to CRRA the two attached counterparts of the non-negotiable Agreement;
- (b) Execute and deliver to CRRA the Contractor's Certification Concerning Gifts;
- (c) Deliver to CRRA the requisite certificates of insurance;
- (d) Execute and deliver to CRRA all other Contract Documents attached to the Notice Of Award along with any other documents required by the Contract Documents; and

- (e) Satisfy all other conditions of the Notice Of Award.

**3. FINAL AGREEMENT**

The successful Proposer will be required to execute a written agreement, Agreement For Design, Installation, Operation, And Maintenance of Solar Generating Facilities At The Ellington, Shelton, And Waterbury Landfills (the “Agreement”). By submitting a proposal, the Proposer substantially agrees to all the terms and conditions of this attached Agreement, except as set forth in **Section 11.1** of the Instructions to Proposers (Section 2 of the RFP package documents).

**4. PROPOSER’S OBLIGATIONS**

Proposer proposes and agrees, if this Proposal is accepted by CRRA and CRRA issues a Notice Of Award to Proposer, to the following:

- (a) To perform, furnish and complete all the Work as specified or indicated in the Contract Documents and Agreement for the applicable prices, rates and/or costs set forth in this Proposal and in accordance with the terms and conditions of the Contract Documents and Agreement; and
- (b) As needed, to comply with all Prevailing Wage terms and conditions that may apply during Proposer’s implementation of the Agreement
- (c) At the request of CRRA and if the successful Proposer qualifies, to apply with the State of Connecticut Department of Administrative Services, and do all that is necessary to make itself qualify, as a Small Contractor and/or Minority/Women/ Disabled Person Business Enterprise in accordance with Section 4a-60g of the *Connecticut General Statutes*.

**5. PROPOSER’S REPRESENTATIONS CONCERNING EXAMINATION OF CONTRACT DOCUMENTS**

In submitting this Proposal, Proposer represents that:

- (a) Proposer has thoroughly examined and carefully studied the RFP Package Documents and the following Addenda, receipt of which is hereby acknowledged (list Addenda by Addendum number and date):

Addendum Number	Date Issued

- (b) Without exception the Proposal is premised upon performing, furnishing and completing the Work required by the Contract Documents and applying the specific means, methods, techniques, sequences or procedures (if any) that may be shown, indicated or expressly required by the Contract Documents;
- (c) Proposer is fully informed and is satisfied as to all Laws and Regulations that may affect cost, progress, performance, furnishing and/or completion of the Work;
- (d) Proposer has studied and carefully correlated Proposer's knowledge and observations with the Contract Documents and such other related data;
- (e) Proposer has given CRRA written notice of all conflicts, errors, ambiguities and discrepancies that Proposer has discovered in the Contract Documents and the written resolutions thereof by CRRA are acceptable to Proposer;
- (f) If Proposer has failed to promptly notify CRRA of all conflicts, errors, ambiguities and discrepancies that Proposer has discovered in the Contract Documents, such failure shall be deemed by both Proposer and CRRA to be a waiver to assert these issues and claims in the future;
- (g) Proposer is aware of the general nature of work to be performed by CRRA and others that relates to the Work for which this Proposal is submitted; and
- (h) The Contract Documents are generally sufficient to indicate and convey understanding by Proposer of all terms and conditions for performing, furnishing and completing the Work for which this Proposal is submitted.

**6. PROPOSER'S REPRESENTATIONS CONCERNING INFORMATION MADE AVAILABLE**

In submitting this Proposal, Proposer acknowledges and agrees that Proposer shall not use any information made available to it or obtained in any examination made by it in connection with this RFP in any manner as a basis or grounds for a claim or demand of any nature against CRRA arising from or by reason of any variance which may exist between information offered or so obtained and the actual materials, conditions, or structures encountered during performance of any of the Work.

**7. PROPOSER'S REPRESENTATIONS CONCERNING STATE OF CONNECTICUT TAXES**

In submitting this Proposal, Proposer acknowledges and agrees that CRRA is exempt from all State of Connecticut taxes and assessments, including sales and use taxes. Accordingly, Proposer shall not charge CRRA any State of Connecticut taxes or assessments at any time in connection with Proposer's performance of this Agreement, nor shall Proposer include any State of Connecticut taxes or assessments in any rates, costs, prices or other charges to CRRA hereunder. Proposer represents and warrants that no State of Connecticut taxes or

assessments were included in any rates, costs, prices or other charges presented to CRRA in any Proposal or other submittal to CRRA in connection with this RFP.

## **8. PROPOSER'S REPRESENTATIONS CONCERNING DISCLOSURE OF INFORMATION**

In submitting this Proposal, Proposer:

- (a) Recognizes and agrees that CRRA is subject to the Freedom of Information provisions of the *Connecticut General Statutes* and, as such, any information contained in or submitted with or in connection with Proposer's Proposal is subject to disclosure if required by law or otherwise; and
- (b) Expressly waives any claim(s) that Proposer or any of its successors and/or assigns has or may have against CRRA or any of its directors, officers, employees or authorized agents as a result of any such disclosure.

## **9. PROPOSER'S REPRESENTATIONS CONCERNING SITE CONDITIONS**

In submitting this Proposal, Proposer acknowledges and agrees that:

- (a) All information and data included in the RFP Package Documents relating to the surface, subsurface and other conditions of the Site are from presently available sources and are being provided only for the information and convenience of the Proposers;
- (b) CRRA does not assume any responsibility for the accuracy or completeness of such information and data, if any, shown or indicated in the Contract Documents with respect to any surface, subsurface or other conditions of the Site;
- (c) Proposer is solely responsible for investigating and satisfying itself as to all actual and existing Site conditions, including surface conditions, subsurface conditions and underground facilities; and
- (d) Proposer has visited the Site and has become familiar with and is satisfied as to the general, local, and site conditions that may affect cost, progress, performance, furnishing and completion of the Work.

## **10. PROPOSER'S REPRESENTATIONS CONCERNING NON-COLLUSION**

By submission of this Proposal, the Proposer, together with any affiliates or related persons, the guarantor and any joint ventures, hereby represents that, under risk of termination of the Agreement, if awarded, to the best of its knowledge and belief:

- (a) The prices in the Proposal have been arrived at as the result of an independent business judgment without collusion, consultation, communication, agreement or

otherwise for the purpose of restricting competition, as to any matter relating to such prices and any other person or company;

- (b) Unless otherwise required by law, the prices that have been quoted in this Proposal have not, directly or indirectly, been knowingly disclosed by the Proposer prior to “opening” to any other person or company;
- (c) No attempt has been made or will be made by the Proposer to induce any other person, partnership or corporation to submit, or not to submit, a Proposal for the purpose of restricting competition;
- (d) Proposer has not directly or indirectly induced or solicited any other Proposer to submit a false or sham Proposal; and
- (e) Proposer has not sought by collusion to obtain for itself any advantage for the Work over any other Proposer for the Work or over CRRA.

## **11. PROPOSER’S REPRESENTATIONS CONCERNING RFP FORMS**

By submission of this Proposal, the Proposer, together with any affiliates or related business entities or persons, the guarantor and any joint ventures, hereby represents that, under risk of termination of the Agreement, if awarded, all of the forms included in the RFP Package Documents that are submitted to CRRA as part of its Proposal are identical in form and content to the preprinted forms in the RFP Package Documents except that information requested by the forms has been inserted in the spaces on the forms provided for the insertion of such requested information.

## **12. PROPOSER’S WAIVER OF DAMAGES**

Proposer and all its affiliates and subsidiaries understand that by submitting a Proposal, Proposer is acting at its and their own risk and Proposer does for itself and all its affiliates, subsidiaries, successors and assigns hereby waive any rights any of them may have to receive any damages for any liability, claim, loss or injury resulting from:

- (a) Any action or inaction on the part of CRRA or any of its directors, officers, employees or authorized agents concerning the evaluation, selection, non-selection and/or rejection of any or all Proposals by CRRA or any of its directors, officers, employees or authorized agents;
- (b) Any agreement entered into for the Work (or any part thereof) described in the Contract Documents; and/or
- (c) Any award or non-award of a contract for the Work (or any part thereof) pursuant to the Contract Documents.

### **13. PROPOSER'S REPRESENTATION REGARDING THE CONNECTICUT CAMPAIGN CONTRIBUTION AND SOLICITATION BAN**

With regard to a State contract as defined in P.A. 07-1 having a value in a calendar year of \$50,000 or more or a combination or series of such agreement or contracts having a value of \$100,000 or more, the authorized signatory to this submission in response to CRRA's solicitation expressly acknowledges receipt of the State Elections Enforcement Commission's notice advising prospective state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice. See Exhibit H of the Agreement [SEEC Form 11] in the Agreement Documents.

### **14. ATTACHMENTS**

The following documents are attached hereto and made a part of this Proposal:

- (a) Answers to the Issues And Questions To Be Addressed, with a written answer provided to each question and each answer beginning on a new page;
- (b) The completed Proposal Price And Payment Rate Schedule Form;
- (c) The completed SGF Equipment Form
- (d) The completed Firm Background And Experience Form;
- (e) The completed Personnel Background And Experience Form;
- (f) The completed References Form;
- (g) The completed Questionnaire Concerning Affirmative Action, Small Business Contractors And Occupational Health And Safety;
- (h) The completed Subcontractor Identification Form
- (i) The completed Affidavit Concerning Nondiscrimination, with the Proposer's nondiscrimination policies and procedures attached;
- (j) The completed Affidavit Of Third Party Fees that has been signed before a Notary Public or Commissioner of the Superior Court;
- (k) The completed Background Questionnaire that has been signed before a Notary Public or Commissioner of the Superior Court;
- (l) The completed Business Disclosure Form;
- (m) The completed Business Exception Form; and
- (n) A copy of the proposer's up-to-date certificate of insurance showing all current insurance coverage.

**15. NOTICES**

Communications concerning this Proposal should be addressed to Proposer at the address set forth below.

Proposer Name:	
Proposer Contact:	
Title:	
Address:	
Telephone Number:	
Fax Number:	
E-Mail Address:	

**16. ADDITIONAL REPRESENTATION**

Proposer hereby represents that the undersigned is duly authorized to submit this Proposal on behalf of Proposer.

**AGREED TO AND SUBMITTED ON** \_\_\_\_\_, 2012

Name of Proposer (Firm):	
Signature of Proposer Representative:	
Name (Typed/Printed):	
Title (Typed/Printed):	



**AFFIDAVIT CONCERNING  
NONDISCRIMINATION**

This Affidavit must be completed and properly executed under penalty of false statement by a chief executive officer, president, chairperson, member or other corporate officer duly authorized to adopt company, corporate or partnership policy of the business entity submitting a proposal to the Connecticut Resources Recovery Authority that certifies such business entity complies with the nondiscrimination agreement and warranties contained in Connecticut General Statutes §§ 4a-60(a)(1) and 4a-60a(a)(1), as amended, regarding nondiscrimination against persons on account of their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability, physical disability or sexual orientation.

I, the undersigned, am over the age of eighteen and understand and appreciate the obligation of an oath. I am \_\_\_\_\_ (title) of \_\_\_\_\_ (firm name), an entity duly formed and existing under the laws of \_\_\_\_\_ (name of state or commonwealth) ("Contractor").

I certify that I am authorized to execute and deliver this affidavit on behalf of Contractor, as follows:

1. Contractor seeks to enter into the "DESIGN, INSTALLATION, AND OPERATION OF SOLAR GENERATING FACILITIES AT THE ELLINGTON, SHELTON, AND WATERBURY LANDFILLS" (the "Agreement") with the Connecticut Resources Recovery Authority; and
2. Contractor has in place a company or corporate policy that complies with the nondiscrimination agreements and warranties required under Connecticut General Statutes §§ 4a-60(a)(1) and 4a-60a(a)(1), as amended, and the said company or corporate policy is in effect as of the date hereof.

By (Signature): \_\_\_\_\_

Name (Print): \_\_\_\_\_

Title: \_\_\_\_\_

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

\_\_\_\_\_  
Notary Public/Commissioner of the Superior Court

\_\_\_\_\_  
Commission Expiration Date



Sections 4a-60(a)(1) and 4a-60a(a)(1) of the Connecticut General Statutes follow.

**Sec. 4a-60. (Formerly Sec. 4-114a). Nondiscrimination and affirmative action provisions in contracts of the state and political subdivisions other than municipalities.**

- (a) Every contract to which the state or any political subdivision of the state other than a municipality is a party shall contain the following provisions:
  - (1) The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the state of Connecticut; and the contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved;

**Sec. 4a-60a. Contracts of the state and political subdivisions, other than municipalities, to contain provisions re nondiscrimination on the basis of sexual orientation.**

- (a) Every contract to which the state or any political subdivision of the state other than a municipality is a party shall contain the following provisions:
  - (1) The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or of the state of Connecticut, and that employees are treated when employed without regard to their sexual orientation;



## AFFIDAVIT OF THIRD PARTY FEES

This Affidavit must be completed and properly executed by an individual or business entity submitting a bid/proposal/statement of qualifications to the Connecticut Resources Recovery Authority (such individual or business entity hereinafter referred to as the "Contractor"). The purpose of this Affidavit is to ascertain if the Contractor has made or promised any payment to a third party attributable to this Agreement. If no such payment has been made or promised, Contractor should write "None" in the first box in the table and execute this Affidavit. For purposes of the Affidavit, Contractor's subcontractors, if any, are not considered third parties.

I, \_\_\_\_\_, a duly authorized officer and/or representative of \_\_\_\_\_ (firm name) (the "Contractor"), being duly sworn, hereby depose and say that:

1. I am over eighteen (18) years of age and believe in the obligations of an oath;
2. The Contractor seeks to enter into the "AGREEMENT FOR DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE OF SOLAR GENERATING FACILITIES AT THE ELLINGTON, SHELTON, AND WATERBURY LANDFILLS" (the "Agreement") with the Connecticut Resources Recovery Authority; and
3. All third party fees and agreements to pay third party fees attributable to the Agreement are as follows:

Name Of Payee	Dollar Amount Paid Or Value Of Non-Cash Compensation <u>AND</u> Date	Fee Arrangement	Specific Services Performed Or To Be Performed By Payee <sup>1</sup>

*(Attach additional copies of this page as necessary.)*

**NOTE:** For each third party fee arrangement described above (if any), complete the attached Form A2a.

4. The information set forth herein is true, complete and accurate to the best of my knowledge and belief under penalty of perjury.

Signed: \_\_\_\_\_  
 Name (Print): \_\_\_\_\_  
 Title: \_\_\_\_\_

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

\_\_\_\_\_  
 Notary Public/Commissioner of the Superior Court

<sup>1</sup> Please attach documents evidencing the terms of the fee arrangement and services.



## **ADDENDUM TO AFFIDAVIT OF THIRD PARTY FEES**

For each third party fee arrangement disclosed in the attached Affidavit, please explain whether and how each such payment falls within one or more of the following categories of compensation:

- (1) Compensation earned for the rendering of legal services when provided by an attorney while engaged in the ongoing practice of law;
- (2) Compensation earned for the rendering of investment services, other than legal services, when provided by an investment professional while engaged in the ongoing business of providing investment services;
- (3) Compensation for placement agent, due diligence or comparable tangible marketing services when paid to a person who is an investment professional (i) engaged in the ongoing business of representing providers of investment services, or (ii) in connection with the issuance of bonds, notes or other evidence of indebtedness by a public agency;
- (4) Compensation earned by a licensed real estate broker or real estate salesperson while engaging in the real estate business on an ongoing basis; or
- (5) Payments for client solicitation activities meeting the requirements of Rule 206(4)-3 under the Investment Advisers Act of 1940.

***Attach additional pages as necessary.***



**BACKGROUND QUESTIONNAIRE**

This Questionnaire must be completed and properly executed by an individual or business entity submitting a proposal to the Connecticut Resources Recovery Authority (such individual or business entity hereinafter referred to as the “Contractor”).

**Please answer the following questions by placing an “X” in the appropriate box.**

	Yes	No
<p>1. Has the Contractor or any of the following ever been the subject of a <b>criminal</b> investigation?</p> <p>(a) A principal of the Contractor;                      (b) An owner of the Contractor;                      (c) An officer of the Contractor;                      (d) A partner in the Contractor;                      (e) A director of the Contractor; or                      (f) A stockholder of the Contractor holding 50% or more of the stock of the Contractor.</p> <p><i>If you answered “Yes” to Question 1, proceed to Question 1A and, on a separate sheet of paper, state the following: the court in which the investigation is taking or took place; the approximate date the investigation commenced and, if applicable, concluded; the subject matter of the investigation; and the identity of the person or entity involved.</i></p> <p><i>If you answered “No” to Question 1, proceed to Question 2.</i></p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>1A. Has any indictment arisen out of any such investigation?</p> <p><i>If you answered “Yes” to Question 1A, proceed to Question 1B and, on a separate sheet of paper, state the following: the name of the person or entity indicted; and the status of any such indictment.</i></p> <p><i>If you answered “No” to Question 1A, proceed to Question 2.</i></p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>1B. Has any conviction arisen out of any such indictment?</p> <p><i>If you answered “Yes” to Question 1B, proceed to Question 2 and, on a separate sheet of paper, state the following: the name of the person or entity convicted, the sentence imposed and whether or not an appeal of the conviction is pending.</i></p> <p><i>If you answered “No” to Question 1B, proceed to Question 2.</i></p>	<input type="checkbox"/>	<input type="checkbox"/>

<p>2. Has the Contractor or any of the following ever been the subject of a <b>civil</b> investigation<sup>1</sup>?</p> <p>(a) A principal of the Contractor;          (b) An owner of the Contractor;          (c) An officer of the Contractor;          (d) A partner in the Contractor;          (e) A director of the Contractor; or          (f) A stockholder of the Contractor holding 50% or more of the stock of the Contractor.</p> <p><i>If you answered "Yes" to Question 2, proceed to Question 3 and, on a separate sheet of paper, state the following: the court or other forum in which the investigation took or is taking place; the approximate date the investigation commenced and, if applicable, concluded; the subject matter of the investigation; the identity of the person or entity involved; the status of the investigation; and the outcome of the investigation.</i></p> <p><i>If you answered "No" to Question 2, proceed to Question 3.</i></p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>3. Has any entity (e.g., corporation, partnership, etc.) in which any of the following has an ownership interest of 50% or more in such entity ever been the subject of a <b>criminal</b> investigation?</p> <p>(a) A principal of the Contractor;          (b) An owner of the Contractor;          (c) An officer of the Contractor;          (d) A partner in the Contractor;          (e) A director of the Contractor; or          (f) A stockholder of the Contractor.</p> <p><i>If you answered "Yes" to Question 3, proceed to Question 3A and, on a separate sheet of paper, state the following: the court in which the investigation is taking or took place; the approximate date the investigation commenced and, if applicable, concluded; the subject matter of the investigation; and the identity of the person or entity involved.</i></p> <p><i>If you answered "No" to Question 3, proceed to Question 4.</i></p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>3A. Has any indictment arisen out of any such investigation?</p> <p><i>If you answered "Yes" to Question 3A, proceed to Question 3B and, on a separate sheet of paper, state the following: the name of the person or entity indicted; and the status of any such indictment.</i></p> <p><i>If you answered "No" to question 3A, proceed to Question 4.</i></p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>3B. Has any conviction arisen out of any such indictment?</p> <p><i>If you answered "Yes" to Question 3B, proceed to Question 4 and, on a separate sheet of paper, state the following: the name of the person or entity convicted, the sentence imposed and whether or not an appeal of the conviction is pending.</i></p> <p><i>If you answered "No" to Question 3B, proceed to Question 4.</i></p>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>1</sup> The phrase "civil investigation" means an investigation undertaken by a governmental entity (e.g., federal, state or municipal) that has investigative and enforcement authority (e.g., the Office of the Connecticut Attorney General, the Connecticut Ethics Commission, the Connecticut Elections Enforcement Commission, the federal Securities and Exchange Commission).

<p>4. Has any entity (e.g., corporation, partnership, etc.) in which any of the following has an ownership interest of 50% or more in such entity ever been the subject of a <b>civil</b> investigation<sup>1</sup>?</p> <ul style="list-style-type: none"> <li>(a) A principal of the Contractor;</li> <li>(b) An owner of the Contractor;</li> <li>(c) An officer of the Contractor;</li> <li>(d) A partner in the Contractor;</li> <li>(e) A director of the Contractor; or</li> <li>(f) A stockholder of the Contractor.</li> </ul> <p><i>If you answered "Yes" to Question 4, proceed to Question 5 and, on a separate sheet of paper state the following: the court in which the investigation is taking or took place; the approximate date the investigation commenced and, if applicable, concluded; the subject matter of the investigation; the identity of the person or entity involved; the status of the investigation; and the outcome of the investigation..</i></p> <p><i>If you answered "No" to question 4, proceed to Question 5.</i></p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>5. Has the Contractor or any of the following ever been debarred from bidding on, or otherwise applying for, any contract with the State of Connecticut or any other governmental authority?</p> <ul style="list-style-type: none"> <li>(a) A principal of the Contractor;</li> <li>(b) An owner of the Contractor;</li> <li>(c) An officer of the Contractor;</li> <li>(d) A partner in the Contractor;</li> <li>(e) A director of the Contractor; or</li> <li>(f) A stockholder of the Contractor holding 50% or more of the stock of the Contractor.</li> </ul> <p><i>If you answered "Yes" to Question 5, proceed to the Certification on the following page and, on a separate sheet of paper please explain.</i></p> <p><i>If you answered "No" to question 5, proceed to the Certification on the following page.</i></p>	<input type="checkbox"/>	<input type="checkbox"/>

**CERTIFICATION**

Signature: \_\_\_\_\_

Name (print/type): \_\_\_\_\_

Title: \_\_\_\_\_

State Of: \_\_\_\_\_

County Of: \_\_\_\_\_

\_\_\_\_\_, being fully sworn, deposes and says that he/she is the \_\_\_\_\_ (Title) of \_\_\_\_\_ (Firm Name), the Contractor herein, that he/she has provided answers to the foregoing questions on the Contractor's background, and, under the penalty of perjury, certifies that each and every answer is true.

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_

\_\_\_\_\_  
Notary Public/Commissioner of the Superior Court



**BUSINESS DISCLOSURE  
FORM**

Proposer (hereinafter referred to as “Contractor”) must provide the information requested in the following sections/tables.

**1. CONFLICTS OF INTEREST**

In the table below, disclose any material assignments, relationships or other employment that the Contractor or any employee of the Contractor has with any member of CRRA’s past or present Board of Directors, any CRRA employee, governmental entity, or other person or entities that may create a conflict of interest or the appearance of a conflict of interest in providing to CRRA the Services that are the subject of this solicitation.

[Attach Additional Pages If Necessary]

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**2. CONFLICT OF INTEREST MEASURES**

In the table below, discuss any measures that the Contractor either has in place or would take to identify, disclose and resolve any possible conflicts of interest.

[Attach Additional Pages If Necessary]

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**3. BUSINESS WITH MAJOR CRRA CONTRACTORS**

In the table below, disclose any services similar to the Services that are the subject of this solicitation that the Contractor has provided to any of the following major CRRA contractors. Place a check in the box for any such contractor for which the Contractor has provided the services. If the Contractor has provided any such services, provide a summary description of the services provided.

Having provided the services similar to the Services that are the subject of this solicitation to one or more of the contractors listed below does not disqualify a Contractor from consideration under this solicitation.

[Attach Additional Pages If Necessary]

Entity	Summary Description of Services Provided
<input type="checkbox"/> Covanta	
<input type="checkbox"/> Copes Rubbish Service	
<input type="checkbox"/> CWPM, LLC	
<input type="checkbox"/> The Metropolitan District	
<input type="checkbox"/> NAES Corporation	
<input type="checkbox"/> Wheelabrator (Waste Management)	
<input type="checkbox"/> ReCommunity/ FCR, LLC	

SEEC FORM 11

**NOTICE TO EXECUTIVE BRANCH STATE CONTRACTORS AND PROSPECTIVE STATE CONTRACTORS OF CAMPAIGN CONTRIBUTION AND SOLICITATION BAN**

This notice is provided under the authority of Connecticut General Statutes 9-612(g)(2), as amended by P.A. 07-1, and is for the purpose of informing state contractors and prospective state contractors of the following law (italicized words are defined on the following page):

**Campaign Contribution and Solicitation Ban**

*No state contractor, prospective state contractor, principal of a state contractor or principal of a prospective state contractor, with regard to a state contract or state contract solicitation with or from a state agency in the executive branch or a quasi-public agency or a holder, or principal of a holder of a valid prequalification certificate, shall make a contribution to, or solicit contributions on behalf of (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of Governor, Lieutenant Governor, Attorney General, State Comptroller, Secretary of the State or State Treasurer, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee;*

In addition, no holder or principal of a holder of a valid prequalification certificate, shall make a contribution to, or solicit contributions on behalf of (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of State senator or State representative, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee.

**Duty to Inform**

State contractors and prospective state contractors are required to inform their principals of the above prohibitions, as applicable, and the possible penalties and other consequences of any violation thereof.

**Penalties for Violations**

Contributions or solicitations of contributions made in violation of the above prohibitions may result in the following civil and criminal penalties:

Civil penalties--\$2000 or twice the amount of the prohibited contribution, whichever is greater, against a principal or a contractor. Any state contractor or prospective state contractor which fails to make reasonable efforts to comply with the provisions requiring notice to its principals of these prohibitions and the possible consequences of their violations may also be subject to civil penalties of \$2000 or twice the amount of the prohibited contributions made by their principals.

Criminal penalties—Any knowing and willful violation of the prohibition is a Class D felony, which may subject the violator to imprisonment of not more than 5 years, or \$5000 in fines, or both.

**Contract Consequences**

Contributions made or solicited in violation of the above prohibitions may result, in the case of a state contractor, in the contract being voided.

Contributions made or solicited in violation of the above prohibitions, in the case of a prospective state contractor, shall result in the contract described in the state contract solicitation not being awarded to the prospective state contractor, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

The State will not award any other state contract to anyone found in violation of the above prohibitions for a period of one year after the election for which such contribution is made or solicited, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

Additional information and the entire text of P.A 07-1 may be found on the website of the State Elections Enforcement Commission, [www.ct.gov/seec](http://www.ct.gov/seec). Click on the link to "State Contractor Contribution Ban."

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RFP Exhibit 14

Definitions:

"State contractor" means a person, business entity or nonprofit organization that enters into a state contract. Such person, business entity or nonprofit organization shall be deemed to be a state contractor until December thirty-first of the year in which such contract terminates. "State contractor" does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Prospective state contractor" means a person, business entity or nonprofit organization that (i) submits a response to a state contract solicitation by the state, a state agency or a quasi-public agency, or a proposal in response to a request for proposals by the state, a state agency or a quasi-public agency, until the contract has been entered into, or (ii) holds a valid prequalification certificate issued by the Commissioner of Administrative Services under section 4a-100. "Prospective state contractor" does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Principal of a state contractor or prospective state contractor" means (i) any individual who is a member of the board of directors of, or has an ownership interest of five per cent or more in, a state contractor or prospective state contractor, which is a business entity, except for an individual who is a member of the board of directors of a nonprofit organization, (ii) an individual who is employed by a state contractor or prospective state contractor, which is a business entity, as president, treasurer or executive vice president, (iii) an individual who is the chief executive officer of a state contractor or prospective state contractor, which is not a business entity, or if a state contractor or prospective state contractor has no such officer, then the officer who duly possesses comparable powers and duties, (iv) an officer or an employee of any state contractor or prospective state contractor who has *managerial or discretionary responsibilities with respect to a state contract*, (v) the spouse or a *dependent child* who is eighteen years of age or older of an individual described in this subparagraph, or (vi) a political committee established or controlled by an individual described in this subparagraph or the business entity or nonprofit organization that is the state contractor or prospective state contractor.

"State contract" means an agreement or contract with the state or any state agency or any quasi-public agency, let through a procurement process or otherwise, having a value of fifty thousand dollars or more, or a combination or series of such agreements or contracts having a value of one hundred thousand dollars or more in a calendar year, for (i) the rendition of services, (ii) the furnishing of any goods, material, supplies, equipment or any items of any kind, (iii) the construction, alteration or repair of any public building or public work, (iv) the acquisition, sale or lease of any land or building, (v) a licensing arrangement, or (vi) a grant, loan or loan guarantee. "State contract" does not include any agreement or contract with the state, any state agency or any quasi-public agency that is exclusively federally funded, an education loan or a loan to an individual for other than commercial purposes.

"State contract solicitation" means a request by a state agency or quasi-public agency, in whatever form issued, including, but not limited to, an invitation to bid, request for proposals, request for information or request for quotes, inviting bids, quotes or other types of submittals, through a competitive procurement process or another process authorized by law waiving competitive procurement.

"Managerial or discretionary responsibilities with respect to a state contract" means having direct, extensive and substantive responsibilities with respect to the negotiation of the state contract and not peripheral, clerical or ministerial responsibilities.

"Dependent child" means a child residing in an individual's household who may legally be claimed as a dependent on the federal income tax of such individual.

"Solicit" means (A) requesting that a contribution be made, (B) participating in any fund-raising activities for a candidate committee, exploratory committee, political committee or party committee, including, but not limited to, forwarding tickets to potential contributors, receiving contributions for transmission to any such committee or bundling contributions, (C) serving as chairperson, treasurer or deputy treasurer of any such committee, or (D) establishing a political committee for the sole purpose of soliciting or receiving contributions for any committee. Solicit does not include: (i) making a contribution that is otherwise permitted by Chapter 155 of the Connecticut General Statutes; (ii) informing any person of a position taken by a candidate for public office or a public official, (iii) notifying the person of any activities of, or contact information for, any candidate for public office; or (iv) serving as a member in any party committee or as an officer of such committee that is not otherwise prohibited in this section.



**BUSINESS EXCEPTION FORM**

Using this form (add additional sheets of paper as needed), Proposer (hereinafter collectively referred to as “Contractor”) shall identify any portion of the Work required or described in the RFP Package Documents, or any provision of the Agreement, except as set forth in section 12.1 of the Instructions to Proposers, that Contractor desires to take exception to, including insurance, if any.

Contractor shall be specific regarding any exceptions listed. Contractor shall describe in detail the portion(s) of the Work or Agreement terms that the Contractor is taking exception to and why. Contractor shall also describe what, if any, alternative Work, terms, or conditions Contractor is willing to provide or accept as a substitution for the Work or business terms to which Contractor has taken exception, if any.

If Contractor does not take exception to any portion of the Work required or described in this RFP Package Documents or to any terms of the Agreement, Contractor shall simply indicate below that Contractor “takes no exceptions”, and submit this form along with the other Proposal forms as part of its Proposal submittal.

Note that, except as set forth in section 12.1 of the Instructions to Proposers, CRRA will negotiate with Contractor on only those items identified by Contractor on this Business Exception Form. Also note that revisions to the work or Agreement will be at CRRA’s sole discretion. Also note that pursuant to State of Connecticut statutes and regulations, the Agreement contains a number of provisions that CRRA, as a quasi-public entity, is required to incorporate in all of its contracts and are, therefore, non-negotiable.

	Description of Exception Item	Reason for Exception	Proposed Alternative
1.			
2.			

Design, Installation, Operation, and Maintenance of Solar Generating Facilities  
At The Ellington, Shelton, And Waterbury Landfills  
RFP Exhibit 15

Description of Exception Item	Reason for Exception	Proposed Alternative
3.		
4.		
5.		
6.		
7.		



## BUSINESS EXCEPTION FORM

Using this form (add additional sheets of paper as needed), Proposer (hereinafter collectively referred to as "Contractor") shall identify any portion of the Work required or described in the RFP Package Documents, or any provision of the Agreement, except as set forth in section 11.1 of the Instructions to Proposers, that Contractor desires to take exception to, including insurance, if any.

Contractor shall be specific regarding any exceptions listed. Contractor shall describe in detail the portion(s) of the Work or Agreement terms that the Contractor is taking exception to and why. Contractor shall also describe what, if any, alternative Work, terms, or conditions Contractor is willing to provide or accept as a substitution for the Work or business terms to which Contractor has taken exception, if any.

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	Description of Exception Item	Reason for Exception	Proposed Alternative
1.			
2.			

Design, Installation, Operation, and Maintenance of Solar Generating Facilities  
At The Ellington, Shelton, And Waterbury Landfills  
RFP Exhibit 15

Description of Exception Item	Reason for Exception	Proposed Alternative
3.		
4.		
5.		
6.		
7.		



## ISSUES AND QUESTIONS TO BE ADDRESSED FORM

**INSTRUCTIONS:** Complete, written answers must be provided to each of the following issues/questions and each answer must begin on a new page.

1. In the Firm Background And Experience Form (RFP Exhibit 5) or an attachment thereto, please specify:
  - a. Previous experience developing, designing and constructing solar photovoltaic projects, including a minimum of three (3) completed SGF projects within the Northeastern United States, totaling 5 MW DC;
  - b. Experience and completed projects pertaining to solar on all types of lands, including closed landfill SGF development;
  - c. General expertise and expertise involving construction projects of \$1,000,000 or more;
  - d. Past experience in public-private joint projects;
  - e. Firms participating on the Proposer SGF development team complete with SGF qualifications and experience;
  - f. Demonstrate knowledge of civil and electrical engineering requirements, the applicable permitting processes and relationships with the appropriate agencies associated with SGF development, including solar on closed landfills; and
  - g. Expertise involving testing, operation, maintenance and decommissioning SGF installations.
2. On a separate page, titled “[insert name of proposer] Financial Information,” provide Proposer's financial plan and financial ability to execute project. This plan will include proof of viable financing and commitment from the financier identified on the SGF development team. The Proposer will provide a summary of the project financier expertise and previous experience with SGF development projects.
3. Provide detailed explanation of the proposed project approach and provide the CRRA an understanding of SGF development schedule, which includes financing and contracting, due diligence, permitting, engineering, construction, operation and maintenance, and decommissioning.
4. On a separate page, titled “Organization Chart” provide an organization chart illustrating the Proposer’s overall team management structure, which will include specific project personnel responsible for financing, development, engineering, procurement, construction and operation.



5. Utilizing the Personnel Background and Experience Form (RFP Exhibit 6), detail specific qualifications and experience by the Proposer for key personnel identified on the SGF development team.
6. On a separate page, titled “Schematics,” provide schematics illustrating the proposed site plan on a conceptual one-line electrical diagram.
7. Utilizing the SGF Equipment Form (RFP Exhibit 4) provide information regarding the equipment proposed for use in your proposal as well as warranty information for that equipment.
8. Proposer is to submit an anticipated schedule for SGF development utilizing Day 0 as the execution date in addition to completion of the following:

Contract Signing by selected Proposer:	0 days
Regulatory Approvals and Permitting Period:	0+ _____ days
SGF Engineering and Interconnection:	0+ _____ days
Equipment and Contractor Procurement Period:	0+ _____ days
SGF Construction:	0+ _____ days
Target SGF Commercial Operation Period:	0+ _____ days

9. On a separate page, titled “Interconnection Summary,” include a summary, anticipated schedule and approval pathway for interconnection of the SGF to either UI or C&LP electrical infrastructure. The selected Proposer will finalize an electrical one-line diagram from the proposed location of the solar arrays to the point of interconnection to be utilized by the Proposer to submit an interconnection application with the appropriate utility.
10. On a separate page, titled “SGF Footprint” utilizing the information detailed in Section 3 of the RFP Package Documents and the site tours, specify the general size and “footprint” of the SGF. CRRA expects to negotiate the final details of the exact size and footprint of the SGF during final contract negotiations.
11. On a separate page, titled “Operation and Maintenance Plan,” Provide an operation and maintenance plan to summarize the ongoing activities required to maintain SGF operations and consistent energy production. The plan will also address measures to maintain the integrity of the landfill capping components during the development, construction, operation and decommissioning phases of the SGF project. The plan will also include details pertaining to the required security measures needed to maintain the SGF integrity, including any proposed surveillance equipment and fencing. The operation and maintenance plan will address all proposed measures necessary for consistent SGF energy production throughout the entire term of the agreement.
12. In the unlikely event, the Ellington or Shelton Landfills require repair or replacement during the term of the Agreement, the selected Proposer shall temporarily remove all or part of the installed SGF. During landfill repair and replacement, the removed

components may be temporarily stored off-site. During such temporary storage, the selected Proposer shall be responsible for the security of the SGF and shall store the equipment in a manner that prevents access. The Proposer shall include in its non-price submission a proposal for the cost allocation, which may potentially occur from removing all or part of the SGF from production during landfill cap restoration activities. To the extent that damage occurs to the property through acts or omissions by the selected Proposer, the selected Proposer shall indemnify the CRRA for any and all resulting administrative penalties or fines imposed on the CRRA, and all costs incurred in the restoration of the cap in compliance with CTDEEP requirements, or other governmental authority having jurisdiction over the maintenance of the closed landfills.

13. Virtual net metering is not currently available in Connecticut. However, if virtual net metering becomes available during the term of any Agreement that results from this RFP, CRRA may be interested in entering into a virtual net meter power purchase agreement with the successful Contractor to purchase the power generated by the SGFs on the CRRA landfills. On a separate page, titled "Virtual Net Metering Option" please contemplate how that would affect your proposal, including any resulting Agreement, and provide a proposed pricing structure for such a virtual net metering PPA.
14. Provide a description of the proposed SGF project fate following the operation and maintenance phase. Include an initial decommissioning plan, to ensure that the SGF will be decommissioned following the term of the Agreement as per Section 2.1.5 therein.
15. The Proposer will demonstrate the team performance record involving SGF development and shall provide a minimum of three (3) references from contracting officers for SGF projects with a similar magnitude, layout and complexity, totaling a minimum of 5 MW. A brief project description will be provided by the Proposer along with full contact information for each reference. The Proposer will state whether or not the given reference is currently employed with the firm which completed the SGF project



**PRICE AND PAYMENT RATE SCHEDULE FORM**

Name of Proposer:	
Name of RFP:	<b>Design, Installation, and Operation of Solar Generating Facilities at the Ellington, Shelton, and Waterbury Landfills</b>
Proposal Option:	<b>Host Payment Proposal Option</b>

**1. Host PAYMENT PROPOSAL**

A. The Proposer proposes to utilize CRRRA-owned properties to design, permit, construct, own, operate, maintain and decommission a solar generating facility and will compensate CRRRA via a monthly .

		<b>Assumptions</b>	
<b>Site</b>	<b>Host Payment (\$/month)</b>	<b>Proponent LREC/ZREC Sale Price (\$/MWh)</b>	<b>Proponent Electricity Sale Price (\$/MWh)</b>
<b>Ellington</b>			
<b>Shelton</b>			
<b>Waterbury</b>			

This payment will be increased by \_\_\_\_\_ % per year for a period of \_\_\_ years.

B. Estimated average annual energy production \_\_\_\_\_ (MWh/year)

**2. VIRTUAL NET METERING OPTION**

Please see question #12 in the Issues and Questions Form (Section 5.2 of the RFP package documents) regarding the potential of virtual net metering if that were to become available as an option during the term of the agreement. How would that impact the pricing herein?



**SGF EQUIPMENT FORM**

In the tables below, list the equipment that would be used to perform the Work. As an attachment to this for, please provide warranty information for solar panels, inverters, and other equipment proposed for use in the Solar Generation Facility.

**1. SOLAR PANEL**

	Description of Equipment
Manufacturer	
Model Number	
Model Wattage	
Panel Count	
SGF Tilt	

**2. INVERTERS**

	Description of Equipment
Manufacturer	
Model Number	
Model Wattage	
Panel Count	

**3. FOUNDATION COMPONENTS AND RACKING SYSTEM**

Please specify and describe all SGF foundation and racking components and equipment that you are proposing to utilize at each of the sites. Be sure to specify any variations in such components that are proposed for the different areas of each sites, including areas of the landfill with flat topography, areas of the landfill with steep topography, and non-landfill areas.



## **FIRM BACKGROUND AND EXPERIENCE FORM**

In the space below, summarize work performed/services provided by the Proposer that are of a similar nature to that specified in the Contract Documents which will enable CRRA to evaluate the experience and professional capabilities of the Proposer. In your summary, please detail the following considerations:

- Previous experience developing, designing and constructing solar photovoltaic projects, including a minimum of three (3) completed SGF projects within the Northeastern United States, totaling 5 MW DC;
- Experience and completed projects pertaining to solar on all types of lands, including closed landfill SGF development;
- General expertise and expertise involving construction projects of \$1,000,000 or more;
- Past experience in public-private joint projects;
- Firms participating on the Proponent SGF development team complete with SGF qualifications and experience;
- Demonstrate knowledge of civil and electrical engineering requirements, the applicable permitting processes and relationships with the appropriate agencies associated with SGF development, including solar on closed landfills; and
- Expertise involving testing, operation, maintenance and decommissioning SGF installations.

[Attach Additional Pages If Necessary]

Design, Installation, Operation, and Maintenance of Solar Generating Facilities  
At The Ellington, Shelton, And Waterbury Landfills  
RFP Exhibit 5



## **PERSONNEL BACKGROUND AND EXPERIENCE FORM**

Provide the names, titles, certification levels, academic backgrounds, and salary grades of the individuals who would be assigned to work with CRRA.

Using the forms contained herein, provide brief descriptions of the background of each such individual including, but not limited to:

- his/her area of expertise (e.g. financing, development, engineering, procurement, construction and operation); and
- demonstration of his/her complete knowledge and understanding of the SGF development process.

Please provide a brief resume (i.e. no more than two pages) for each individual detailed herein.

[Attach Additional Pages If Necessary]



**PROFESSIONAL 1**

Name:		Staff Level:	
Title:		% of Time Available:	
Probable Areas of Responsibility:			
Background:			
Experience Providing Services Similar to those Requested by this RFP:			
Key Strengths and Qualifications to Provide Services Requested by this RFP:			

**PROFESSIONAL 2**

Name:		Staff Level:	
Title:		% of Time Available:	
Probable Areas of Responsibility:			
Background:			
Experience Providing Services Similar to those Requested by this RFP:			
Key Strengths and Qualifications to Provide Services Requested by this RFP:			

**PROFESSIONAL 3**

Name:		Staff Level:	
Title:		% of Time Available:	
Probable Areas of Responsibility:			
Background:			
Experience Providing Services Similar to those Requested by this RFP:			
Key Strengths and Qualifications to Provide Services Requested by this RFP:			

**PROFESSIONAL 4**

Name:		Staff Level:	
Title:		% of Time Available:	
Probable Areas of Responsibility:			
Background:			
Experience Providing Services Similar to those Requested by this RFP:			
Key Strengths and Qualifications to Provide Services Requested by this RFP:			

**PROFESSIONAL 5**

Name:		Staff Level:	
Title:		% of Time Available:	
Probable Areas of Responsibility:			
Background:			
Experience Providing Services Similar to those Requested by this RFP:			
Key Strengths and Qualifications to Provide Services Requested by this RFP:			



## REFERENCES FORM

In space below, provide the names of three (3) references who are contracting officers for SGF projects by the Proposer with a similar magnitude, layout and complexity, totaling a minimum of 5 MW AC, who can attest to the quality of work performed/services provided by Proposer and demonstrate the Proposer's team performance record involving SGF development.

Provide a brief project description along with full contact information for each reference. The Proponent will state whether or not the given reference is currently employed with the firm which completed the SGF project.

### REFERENCE 1

Name of Person:	
Title:	
Name of Firm:	
Address:	
Telephone Number:	
Description Of Work Performed:	

**REFERENCE 2**

Name of Person:	
Title:	
Name of Firm:	
Address:	
Telephone Number:	
Description Of Work Performed:	

**REFERENCE 3**

Name of Person:	
Title:	
Name of Firm:	
Address:	
Telephone Number:	
Description Of Work Performed:	



**QUESTIONNAIRE CONCERNING AFFIRMATIVE ACTION, SMALL BUSINESS CONTRACTORS AND OCCUPATIONAL HEALTH AND SAFETY**

Because CRRA is a political subdivision of the State of Connecticut, it is required by various statutes and regulations to obtain background information on prospective contractors prior to entering into a contract. The questions below are designed to assist CRRA in procuring this information. Many of the questions are required to be asked by RCSA 46a-68j-31. For the purposes of this form, "Contractor" means Bidder, Proposer or Statement of Qualifications Submitter, as appropriate.

	Yes	No
1. Is the Contractor an Individual? <i>If you answered "Yes" to Question 1, skip to Question 2.</i> <i>If you answered "No" to Question 1, proceed to Question 1A and then to Question 2.</i>	<input type="checkbox"/>	<input type="checkbox"/>
1A. How many employees does the Contractor have? <input style="width: 100px;" type="text"/>		
2. Is the Contractor a Small Business Enterprise based on the criteria in Schedule A? <i>If you answered "Yes" to Question 2, proceed to Question 2A and then to Question 3.</i> <i>If you answered "No" to Question 2, skip to Question 3.</i>	<input type="checkbox"/>	<input type="checkbox"/>
2A. Is the Contractor certified by DAS as a Small Business Enterprise? <sup>1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is the Contractor a Minority Owned Business Enterprise based on the criteria in Schedule B? <i>If you answered "Yes" to Question 3, proceed to Question 3A and then to Question 4.</i> <i>If you answered "No" to Question 3, skip to Question 4.</i>	<input type="checkbox"/>	<input type="checkbox"/>
3A. Is the Contractor certified by DAS as a Minority Owned Business Enterprise? <sup>1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the Contractor have an Affirmative Action Plan? <sup>2</sup> <i>If you answered "Yes" to Question 4, proceed to Question 4A and then to Question 5.</i> <i>If you answered "No" to Question 4, skip to Question 4B and then to Question 5.</i>	<input type="checkbox"/>	<input type="checkbox"/>
4A. Has the Affirmative Action Plan been approved by the CHRO?	<input type="checkbox"/>	<input type="checkbox"/>
4B. Will the Contractor develop and implement an Affirmative Action Plan?	<input type="checkbox"/>	<input type="checkbox"/>
5. Does the Contractor have an apprenticeship program complying with RCSA 46a-68-1 through 46a-68-17?	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the Contractor been cited for three or more willful or serious violations of any occupational safety and health act?	<input type="checkbox"/>	<input type="checkbox"/>
7. Has the Contractor received one or more criminal convictions related to the injury or death of any employee in the three-year period preceding the issuance of this Request For Bids/Proposals/Qualifications?	<input type="checkbox"/>	<input type="checkbox"/>
8. Has the Contractor been the recipient of one or more ethical violations from the State of Connecticut Ethics Commission during the three-year period preceding the issuance of this Request For Bids/Proposals/Qualifications?	<input type="checkbox"/>	<input type="checkbox"/>
9. Will subcontractors be involved? <i>If you answered "Yes" to Question 9, proceed to Question 9A.</i> <i>If you answered "No" to Question 9, you are finished with the questionnaire.</i>	<input type="checkbox"/>	<input type="checkbox"/>
9A. How many subcontractors will be involved? <input style="width: 100px;" type="text"/>		



### LIST OF ACRONYMS

- RCSA – Regulations of Connecticut State Agencies  
CHRO – State of Connecticut Commission on Human Rights and Opportunities  
DAS – State of Connecticut Department of Administrative Services

### FOOTNOTES

- <sup>1</sup> If the Contractor answered “yes” to Question 2A and/or 3A, Contractor must attach a copy of its DAS Set-Aside Certificate to this Questionnaire.
- <sup>2</sup> If the Contract is a "public works contract" (as defined in Section 46a-68b of the Connecticut General Statutes), the dollar amount exceeds Fifty Thousand Dollars (\$50,000.00) in any fiscal year, and the Contractor has fifty (50) or more employees, the Contractor, in accordance with the provisions of Section 46a-68c of the Connecticut General Statutes, shall develop and file an affirmative action plan with the Connecticut Commission on Human Rights and Opportunities.

### SCHEDULE A CRITERIA FOR A SMALL BUSINESS ENTERPRISE

Contractor must meet all of the following criteria to qualify as a Small Business Enterprise:

1. Has been doing business under the same ownership or management and has maintained its principal place of business in the Connecticut for at least one year immediately prior to the issuance of the Request For Bids/ Proposals/Qualifications;
2. Has had gross revenues not exceeding fifteen million dollars (\$15,000,000) during its most recent fiscal year; and
3. At least 51% of the ownership of the Contractor is held by a person(s) who exercises the operational authority over daily affairs of the business and has the power to direct policies and management and receives beneficial interests of the business.

### SCHEDULE B CRITERIA FOR A MINORITY OWNED BUSINESS ENTERPRISE

Contractor must meet all of the following criteria to qualify as a Minority Owned Business Enterprise:

1. Satisfies all of the criteria in Schedule A for a Small Business Enterprise;
2. At least 51% of the ownership of the Contractor by one or more minority person(s) who exercises operational authority over daily affairs of the business, has the power to direct management and policies and receives the beneficial interests of the business;
3. A minority is a person(s) who is American Indian, Asian, Black, Hispanic, has origins in the Iberian Peninsula, a woman, or an individual with a disability.

### CONNECTICUT GENERAL STATUTES SECTION 46a-68b

As used in this section and sections 4a-60, 4a-60a, 4a-60g, 4a-62, 46a-56 and 46a-68c to 46a-68k, inclusive: "Public works contract" means any agreement between any individual, firm or corporation and the state or any political subdivision of the state other than a municipality for construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, or which is financed in whole or in part by the state, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.



## SUBCONTRACTOR IDENTIFICATION FORM

Proposer (hereinafter referred to as "Contractor") shall list below all subcontractor(s) Contractor intends to use in the performance of Work/Services if Contractor is selected to perform the Work/Services and awarded the Agreement. Contractor shall include a description of the Work/Services to be provided by each of the subcontractor(s).

### Subcontractor 1

Company Name	
Work/Services To Be Provided	

### Subcontractor 2

Company Name	
Work/Services To Be Provided	

### Subcontractor 3

Company Name	
Work/Services To Be Provided	

### Subcontractor 4

Company Name	
Work/Services To Be Provided	

**REQUEST FOR PROPOSALS  
FOR  
DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE  
OF SOLAR GENERATING FACILITIES (SGF) AT THE  
ELLINGTON, SHELTON, AND WATERBURY LANDFILLS**

**SECTION 6  
SAMPLE NOTICES**

**Includes:**

**6A Sample Notice Of Selection To Begin Contract Negotiations**

**6B Sample Notice Of Award**



## NOTICE OF SELECTION TO BEGIN CONTRACT NEGOTIATIONS

**TO:** [NAME OF PROPOSER]  
[ADDRESS OF PROPOSER]  
[ADDRESS OF PROPOSER]

**RFB NO.:** FY13-EN-001

**CONTRACT:** DESIGN, INSTALLATION, OPERATION AND MAINTENANCE OF SOLAR GENERATING FACILITIES AT THE ELLINGTON, SHELTON, AND WATERBURY LANDFILLS

The Connecticut Resources Recovery Authority (“CRRA”) has considered the Proposal submitted by you dated \_\_\_\_\_, 2012 in response to CRRA’s Notice To Contractors – Request For Proposals for the above-referenced Work, which Work is more particularly described in the Agreement For Design, Installation, Operation, and Maintenance of Solar Generating Facilities At The Ellington, Shelton, And Waterbury Landfills (the ”Services”).

You are hereby notified that your firm has been selected to begin contract negotiations with CRRA, with the goal of negotiating a mutually acceptable scope of work and final Agreement for the above-referenced services.

Within fourteen (14) days of receipt of this notice, you are hereby required to acknowledge and accept this notice by signing where specified herein, and returning this to CRRA as specified herein. By acknowledging your receipt and acceptance of this notice, you are hereby agreeing to:

- Negotiate the contract in good faith
- Provide in a timely manner clarifications and additional information as might be requested by CRRA during the negotiations.
- Attend meetings with CRRA and its Board, as necessary, to negotiate, obtain approval for, and execute the contract
- Bear all of your costs and expenses for contract negotiations and approval.

Further, by acknowledging your receipt and acceptance of this notice, you recognize that CRRA has no liability to any party until a contract is approved and executed, and only to the extent provided for in such Agreement.

If the remittance address/contact information for the Agreement negotiation is different from the address/contact information indicated on Page 1 of this notice, provide such remittance address/contact information in the following table;

Contractor Name:	
Remittance Contact:	
Title:	
Street Address:	
Street Address:	
City, State, Zip Code	
Telephone Number:	
Fax Number:	
E-Mail Address:	

You are required to acknowledge your receipt of this Notice Of Selection by signing below and returning the same to CRRA at the following address within fourteen (14) days:

Connecticut Resources Recovery Authority  
100 Constitution Plaza, 6<sup>th</sup> Floor  
Hartford, CT 06103  
Attention: Roger Guzowski

Dated this [DAY] day of [MONTH], [YEAR].

Connecticut Resources Recovery Authority

By: \_\_\_\_\_  
Roger Guzowski  
Title: Contracts and Procurement Manager

**ACCEPTANCE OF NOTICE**

Receipt of this NOTICE OF SELECTION TO BEGIN CONTRACT NEGOTIATIONS is hereby acknowledged this \_\_\_\_\_ day of \_\_\_\_\_, 2012.

By:

Signature: \_\_\_\_\_

Name (print/type): \_\_\_\_\_

Title: \_\_\_\_\_



## NOTICE OF AWARD

**TO:** [NAME OF SUCCESSFUL PROPOSER]  
[ADDRESS OF SUCCESSFUL PROPOSER]

**PROJECT:** General Fund

**RFP NUMBER:** FY13-EN-001

**CONTRACT:** Design, Installation, and Operation of Solar Generating Facility at the Ellington, Shelton, and Waterbury Landfills

The Connecticut Resources Recovery Authority (“CRRA”) has considered the Proposal submitted by you dated [DATE] in response to CRRA’s Notice To Firms And Individuals – Invitation To Propose for the above-referenced Work, which Work are more particularly described in the Agreement For The Design, Installation, and Operation of Solar Generating Facility at the Ellington, Shelton, and Waterbury Landfills (the “Work”).

You are hereby notified that your Proposal has been accepted for the Work.

Within ten (10) days from the date of this Notice of Award you are required to:

- (a) Execute the two attached counterparts of the non-negotiable “Agreement For The Design, Installation, Operation, Maintenance of Solar Generating Facilities At The [Insert Name Of Awarded Landfill(s)]” and deliver such executed counterparts to CRRA. Such execution includes entering the requested information in the “Notices” Section (Section 8.7, Page 20) of the Agreement, signing the Agreement (Page 23), printing the signer’s name under the signature line (Page 23) and printing the signer’s title following the word “Its” (Page 23);
- (b) Execute the attached Contractor’s Certification Concerning Gifts and deliver such executed Certification to CRRA;
- (c) Deliver to CRRA the requisite certificates of insurance;
- (d) Deliver to CRRA a copy of your completed and up to date W-9 Request for Taxpayer Identification Number and Certification form; and

(e) Satisfy all other conditions set forth herein.

**As you have agreed, the terms and conditions of the Agreement, as attached, are non-negotiable.**

If you fail within ten (10) days from the date of this Notice Of Award to perform and complete any of your obligations set forth in items (a) through (d) above, CRRA will be entitled to consider all your rights arising out of CRRA's acceptance of your Proposal as abandoned and terminated. CRRA will also be entitled to such other rights and remedies as may be granted at law or in equity.

You are required to acknowledge your receipt of this Notice Of Award by signing below and returning the same to CRRA at the following address:

Connecticut Resources Recovery Authority  
100 Constitution Plaza, 6<sup>th</sup> Floor  
Hartford, CT 06103  
Attention: Roger Guzowski

Dated this [DAY] day of [MONTH], 2012.

Connecticut Resources Recovery Authority

By: \_\_\_\_\_

[NAME OF CRRA OFFICIAL]

Title: [TITLE OF CRRA OFFICIAL]

### ACCEPTANCE OF NOTICE

Receipt of this NOTICE OF AWARD is hereby acknowledged this \_\_\_\_\_ day of \_\_\_\_\_, 2012.

By:

Signature: \_\_\_\_\_

Name (print/type): \_\_\_\_\_

Title: \_\_\_\_\_



**REQUEST FOR PROPOSALS  
FOR  
DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE  
OF SOLAR GENERATING FACILITIES (SGF) AT THE  
ELLINGTON, SHELTON, AND WATERBURY LANDFILLS**

**SECTION 7  
FORM OF AGREEMENT AND EXHIBITS**

**(Form of) AGREEMENT  
FOR  
THE DESIGN, INSTALLATION, OPERATION, AND  
MAINTENANCE OF SOLAR GENERATING FACILITIES (SGF)  
AT [THE ELLINGTON, SHELTON, AND WATERBURY]  
LANDFILL[S]**

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This **AGREEMENT FOR THE DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE OF SOLAR GENERATING FACILITIES AT THE ELLINGTON, SHELTON, AND WATERBURY LANDFILLS (the “Agreement”)** is made and entered into as of this 1st day of \_\_\_\_\_, 2012 by and between the **CONNECTICUT RESOURCES RECOVERY AUTHORITY**, a body politic and corporate, constituting a public instrumentality and political subdivision of the State of Connecticut, having its principal offices at 100 Constitution Plaza, 6<sup>th</sup> Floor, Hartford, Connecticut 06103 (hereinafter “CRRA” or “Owner”) and [NAME OF SUCCESSFUL BIDDER], having its principal offices at [ADDRESS OF SUCCESSFUL BIDDER] (hereinafter “Contractor”).

### **PRELIMINARY STATEMENT**

**WHEREAS** CRRA owns a certain parcel of real property located at 217 Sadds Mill Road in Ellington, Connecticut, upon which Ellington property CRRA formerly operated and now monitors and maintains a certain closed sanitary landfill known as the “Ellington Landfill;”

**WHEREAS** CRRA owns a certain parcel of real property located at 866 River Road (Route 110) in Shelton, Connecticut, upon which Shelton property CRRA formerly operated and now monitors and maintains a certain sanitary landfill known as the “Shelton Landfill;”

**WHEREAS** CRRA owns a certain parcel of real property located at 109 Nichols Drive (the intersection of Highland Avenue and Highview Street) in Waterbury, Connecticut, upon which Waterbury property CRRA formerly operated and now monitors and maintains a certain sanitary landfill known as the “Waterbury Landfill;”

**WHEREAS** CRRA desires to utilize a portion of each of the above-named landfills as a site to develop new sources of renewable energy, and simultaneously to generate revenue that can be utilized to support both CRRA’s post-closure activities at the landfills and CRRA’s general mission; and

**WHEREAS** the Contractor has represented to CRRA their desire, intent and ability to design, permit, operate and maintain a photovoltaic solar generating facility under a land lease agreement with CRRA, in accordance with the Contract Documents,

**WHEREAS** CRRA now desires to lease to the Contractor a portion of each property in order for the contractor to design, permit, operate and maintain a photovoltaic solar generating facility under a land lease agreement with CRRA, in accordance with the Contract Documents,

**NOW, THEREFORE**, in consideration of the mutual covenants, promises, and representations contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows.

## 1. DEFINITIONS, CONSTRUCTION AND INTERPRETATION

### 1.1 Definitions

Capitalized terms used in this Agreement and in other Contract Documents, and not otherwise defined, shall have the meanings as set forth in **Exhibit A** of this Agreement.

### 1.2 Construction And Interpretation

For purposes of this Agreement:

- (a) Whenever nouns or pronouns are used in this Agreement, the singular shall mean the plural, the plural shall mean the singular, and any gender shall mean all genders or any other gender, as the context may require;
- (b) Words that have well-known technical or trade meanings are used herein in accordance with such recognized meanings unless otherwise specifically provided;
- (c) All accounting terms not otherwise defined herein have the meanings assigned to them in accordance with “generally accepted accounting principles,” and the term “generally accepted accounting principles” with respect to any computation required or permitted hereunder shall mean such accounting principles that are generally accepted as of the Effective Date of this Agreement;
- (d) The words “herein”, “hereof” and “hereunder” and words of similar import refer to this Agreement as a whole and not to any particular Article, Section or Subsection;
- (e) Reference to any particular party shall include that party’s employees and the authorized agents of that party;
- (f) All references to agreements are references to the agreements as the provisions thereof that may be amended, modified or waived from time to time; and,
- (g) The captions contained in this Agreement have been inserted for convenience only and shall not affect or be effective to interpret, change or restrict the terms of provisions of this Agreement.
- (h) All Exhibits to this Agreement are incorporated into the body of this Agreement as part hereof.

## 2. TERM OF AGREEMENT

### 2.1 Phases

This Agreement will contain five (5) distinct phases. The Contractor shall not begin any new phase of this Agreement until the preceding phase has been completed to the satisfaction of CRRA, and CRRA has issued to the Contractor a Notice to Proceed to the next phase of the agreement. These phases are as follows:

- 2.1.1 Phase 1 – Secure Renewable Energy Credits and/or other financing: In this phase 1, as detailed in **Section 2.1 of Exhibit B**, the Contractor will obtain renewable energy credits, and any other price support mechanisms presumed in their proposal to CRRA.
- 2.1.2 Phase 2 - Final Planning, Permitting, and Design: In this phase 2, the Contractor will develop final design and construction plans, execute an Interconnection Agreement with the EDC, and obtain all other necessary permits and authorizations necessary to begin construction of the SGF, as per **Section 2.2 of Exhibit B**, and provide copies of all such plans, agreements, permits and authorizations to CRRA for approval. Contractor shall not proceed to the work in Phase 3 of the Agreement until it has received from CRRA written notice that CRRA is satisfied that the Contractor has completed all terms and conditions of Phase 2, and is authorizing the Contractor to Proceed to Phase 3.
- 2.1.3 Phase 3 - Construction of SGF: In this phase 3, the Contractor shall be responsible for all costs and tasks necessary to construct, install, and interconnect an operational SGF as per the terms of Section 2.3 of Exhibit B this Agreement, and as per the approvals obtained within Phase 2. Once constructed, this SGF shall be subject to a Commissioning Test witnessed by the EDC and by CRRA. Contractor shall not proceed to the work in Phase 4 of the Agreement until it has received from CRRA written notice that CRRA is satisfied that the Contractor has completed all terms and conditions of Phase 3, and is authorizing the Contractor to Proceed to Phase 4.
- 2.1.4 Phase 4 – Operation and Maintenance: In this phase 4, the Contractor shall be responsible for all costs and tasks necessary to operate and maintain the SGF as per the terms of **Section 2.4 of Exhibit B** of this Agreement.
- 2.1.5 Phase 5 – Decommissioning: In this phase 5, the Contractor shall be responsible for the decommissioning of the SGF as per the terms and conditions of Exhibit D.

## **2.2 Term**

The term of this Agreement shall commence on the Effective Date, as defined in Exhibit A and, unless otherwise terminated or extended in accordance with the terms and provisions hereof, shall continue in effect until the completion of the Decommissioning Period as detailed in Exhibit D.

The respective obligations of the Parties under this Agreement shall continue in effect after the expiration or termination hereof to the extent necessary to provide for accountings, final billings, payment of liquidated damages, resolution of any court or administrative proceedings or arbitration, payments, or decommissioning. Notwithstanding anything to the contrary in this Agreement herein, expiration or termination of the Agreement shall not relieve either party of any right or obligation accrued or accruing hereunder prior to such expiration or termination, nor shall expiration or termination of this Agreement affect or excuse the performance of either party under any provision of this Agreement that, by its terms, survives any expiration or termination.

Contractor shall retain and maintain accurate records and documents relating to the performance of Work under this Agreement for a minimum of three (3) years after final payment by the Contractor to CRRA for the Work hereunder and shall make them available for inspection and audit by CRRA. Contractor's obligations under this paragraph shall survive the termination or expiration of this Agreement.

This Agreement may be extended upon the mutual written agreement of the parties.

## **2.3 Time is of the Essence**

Contractor hereby acknowledges and agrees that time is of the essence with respect to Contractor's performance of the Work hereunder. Accordingly, upon the Effective Date of the Agreement, Contractor shall immediately commence performance of the Work and continue to perform the same during the term of this Agreement until the Termination Date of the Agreement.

## **2.4 Restoration**

Upon termination of this agreement, whether such termination occurs because of the conclusion of the Agreement Term or because of an act of Default, as specified in Section 4, herein, unless otherwise directed in writing by CRRA, Contractor shall:

- (a) Restore any part of the Landfills disturbed or damaged by Contractor or any of its directors, officers, employees, agents, subcontractors or materialmen to the same condition existing on the Effective Date; and
- (b) Restore or repair any completed Work so disturbed or damaged to the condition required by the Contract Documents for acceptance of such Work by CRRA.

### 3. SCOPE OF WORK

#### 3.1 Contractor's Responsibilities

- 3.1.1 The Contractor is Responsible for making monthly host payment to CRRA, beginning on the Effective Date of this Agreement, as per the terms and conditions of Exhibit C.
- 3.1.2 The Contractor is further Responsible for providing all work for each phase of the project, and bearing all costs as detailed in Exhibit B and Section 2.1 of this Agreement, that will lead to the installation, operation, and maintenance of a Solar Generating Facility, including but not limited to planning, permitting, design, construction, interconnection, commissioning, operation, maintenance, SGF energy production monitoring and decommissioning.

#### 3.2 CRRA's Responsibilities

As the property owner, and operator, CRRA will continue to be responsible for the long-term maintenance and monitoring of the landfill and will continue to perform tasks related to those duties including but not limited to landfill maintenance, and monitoring of groundwater and landfill gas.

CRRA will receive host payments from the Contractor and shall be responsible for administering this Agreement.

CRRA will provide the Contractor and its agents access to the landfills as per the terms of Section 3.3 of this Agreement.

#### 3.3 Contractor's Access to the Landfills

The Contractor shall have the right to access and use the area of the landfill described in Exhibit F hereto only for the construction, operation, maintenance, and decommissioning of the SGF. The SGF and all of the components thereof shall remain the property of the Contractor.

#### 3.4 No Absolution

Except as otherwise set forth in Section 2.1.2 of Schedule B, the failure of the Contractor to perform any of the requirements specified in Section 3.1 herein, shall not absolve the Contractor of any host payments or obligations to CRRA under the terms of this Agreement.

#### 3.5 Performance and Completion of the Work

All Tasks and Work shall be performed and completed by Contractor in a good workmanlike manner consistent and in accordance with:



- (a) Any and all instructions, guidance and directions provided by CRRA to Contractor;
- (b) The Contract Documents;
- (c) Sound equipment operation practices;
- (d) The highest industry standards applicable to Contractor and its performance of the Work hereunder; and
- (e) All Laws And Regulations.

Items (a) through (e) above are hereinafter collectively referred to as the “Standards.”

### **3.6 Direction of Work**

CRRA may, where necessary or desired, provide Contractor with instructions, guidance and directions in connection with Contractor’s performance of the Work hereunder.

### **3.7 CRRA’s Inspection Rights**

Contractor’s performance of the Work hereunder, as well as all products of Contractor’s Work are subject to inspection by CRRA. Inspections may be conducted at any time by CRRA. In the event of an inspection, Contractor shall provide to CRRA any documents or other materials that may be necessary in order for CRRA to conduct the inspection. If, after any such inspection, CRRA is unsatisfied with Contractor’s performance of the Work hereunder or any of the products thereof, Contractor shall, at the direction of CRRA, render such performance or Work products satisfactory to CRRA at no additional cost or expense to CRRA and without any extension of or addition to any schedule included herein. For the purpose of this Section 3.7, CRRA shall mean CRRA and/or its authorized agents.

### **3.8 CRRA Right to Exclude Certain Individuals**

Without limitation of Contractor’s overall responsibility for the acts and omissions of all on-site personnel and other employees, CRRA reserves the right to exclude anyone from the site who CRRA reasonably believes is a danger to themselves or any other Person, to CRRA property.

### **3.9 Site and Subsurface Conditions**

All information and data shown or indicated in the Contract Documents with respect to underground facilities, surface conditions, subsurface conditions or other conditions at or contiguous to the landfills are furnished for information only and CRRA does not assume any responsibility for the accuracy or completeness of such information and data. Contractor acknowledges and agrees that CRRA does not assume any responsibility for such information and data and that Contractor is solely responsible for investigating and satisfying itself as to all actual and existing conditions at the site(s), including but not limited to surface

conditions, subsurface conditions and underground facilities. Contractor has carefully studied all such information and data and Contractor has obtained and carefully studied (or assumes responsibility for having done so) all such additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (including but not limited to surface conditions, subsurface conditions and underground facilities) at or contiguous to the site(s) and all other conditions or factors which may affect cost, progress, performance, furnishing or completion of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction or performance of the Work to be employed by Contractor and safety precautions and programs incident thereto. Contractor does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for Contractor to conclusively determine, and Contractor has so determined, that the Work can be performed, furnished and completed in accordance with the terms and conditions of the Contract Documents. In the event that the information or data shown or indicated in the Contract Documents with respect to underground facilities or surface, subsurface or other conditions at or contiguous to the site(s) differs from conditions encountered by Contractor during performance of the Work, there shall be no decrease in the Contract Prices and/or no extension of time to perform any Work as a result of such differing conditions, unless CRRA, in its sole and absolute discretion, agrees to such increase and/or extension.

### **3.10 Proprietary Information**

Contractor shall not use, publish, distribute, sell or divulge any information obtained from CRRA by virtue of this Agreement for Contractor's own purposes or for the benefit of any person, firm, corporation or other entity (other than CRRA) without the prior written consent of CRRA. Any report or document prepared by Contractor in connection with the performance of the Work hereunder shall be owned solely and exclusively by CRRA and cannot be used by Contractor for any purpose beyond the scope of this Agreement without the prior written consent of CRRA.

### **3.11 Books and Records**

Contractor shall maintain proper books and records containing complete and correct information on all Work performed by Contractor pursuant to this Agreement in accordance with generally accepted accounting principles and practices. CRRA has the right to inspect and review all such books and records during Contractor's business hours.

### **3.12 Status of Contractor**

CRRA and Contractor acknowledge and agree that Contractor is acting as an independent contractor in performing any Work for CRRA hereunder and that Contractor shall perform such Work in its own manner and method subject to the terms of this Agreement. Nothing in this Agreement shall be construed or interpreted as creating a partnership, a joint venture, an agency, a master-servant relationship, an employer-employee relationship or any other relationship between CRRA and Contractor other than that of an owner and an independent contractor. Contractor is expressly forbidden from transacting any business in the name of or on

account of CRRA, and Contractor has no power or authority to assume or create any obligation or responsibility for or on behalf of CRRA in any manner whatsoever.

### **3.13 Subcontractors**

Contractor shall consult with CRRA and obtain its approval before hiring any subcontractors to perform any Work hereunder. Contractor shall require all of its subcontractors to abide by the terms and conditions of this Agreement. Moreover, Contractor's subcontracts with such subcontractors shall specifically provide that, in the event of a default by Contractor thereunder or under this Agreement, CRRA may directly enforce such subcontracts and make payments thereunder. Contractor shall provide CRRA with all contracts, amendments, books, records, accounts, correspondence and other materials necessary to enforce such subcontracts. Also Contractor's subcontracts with its subcontractors shall specifically include CRRA as a third party beneficiary and shall provide that such subcontractors shall not be excused from any of their obligations under such subcontracts by reason of any claims, setoffs, or other rights whatsoever that they may have with or against Contractor other than through such subcontracts.

### **3.14 Contractor's Employees**

All persons employed by Contractor shall be subject and responsible solely to the direction of Contractor and shall not be deemed to be employees of CRRA.

### **3.15 Contractor Cooperation**

Contractor shall perform all the Work in cooperation with CRRA and all CRRA contractors and/or agents. Such cooperation shall include, but not be limited to, routine reporting, communications with CRRA and other parties, interfacing with other CRRA contractors to ensure the smooth operation of the landfills. Such cooperation shall also involve scheduling of staff and Work hereunder, without limitation. Under no circumstances shall Contractor speak to or otherwise communicate with the press or any other media regarding its performance of Work under this Agreement. Contractor shall direct all inquiries from the press or any other media to CRRA.

### **3.16 Notice of Damage or Theft**

Contractor shall immediately upon learning of an incident of damage to or theft of any CRRA equipment or property, or of any Contractor equipment or property located at the Landfill(s), provide the CRRA with notice of the same, followed by an incident report. Such incident report shall be in a format acceptable to CRRA but shall at a minimum contain the date and time of the incident (if known), a description of the missing or damaged equipment or property, and the party(ies) responsible for such theft or damage.

### **3.17 Mechanic's Liens**

Contractor shall claim no interest in the Properties or any equipment, fixtures or improvements located or to be located thereon, including but not limited to the landfills or any part thereof, other than equipment, other than Contractor's Equipment installed by the Contractor pursuant to this Agreement. Contractor shall not file any mechanic's liens or other liens or security interests against CRRA or any of its properties, including but not limited to the Properties. Contractor shall defend, indemnify and hold harmless CRRA against all costs associated with the filing of such liens or interests by Contractor or any of its subcontractors or materialmen. Before any subcontractor or materialman of Contractor commences any Work hereunder, Contractor shall deliver to CRRA an original waiver of mechanic's liens properly executed by such subcontractor or materialman. If any mechanic's lien is filed against CRRA or any of its properties in connection with the Work hereunder, Contractor shall cause the same to be canceled and discharged of record within fifteen (15) days after the filing of such lien and, if Contractor fails to do so, CRRA may, at its option but without any obligation to do so, make any payment necessary to obtain such cancellation or discharge and the cost thereof, at CRRA's election, shall be either deducted from any payment due to Contractor hereunder or reimbursed to CRRA promptly upon demand by CRRA to Contractor.

### **3.18 Assignment**

Unless expressly permitted in writing by CRRA, Contractor shall not assign, mortgage, pledge, sublet, or otherwise transfer its rights or interests contained herein this Agreement.

### **3.19 Environmental**

Contractor shall not dispose of or store any hazardous materials at the Landfill(s) or into any of the plumbing, sewage, or drainage systems thereon, as applicable and shall indemnify, defend, and hold CRRA, its indemnify and hold harmless CRRA and its board of directors, officers, agents and employees harmless from and against any and all claims, damages, losses, judgments, liability, Workers' compensation payments and expenses (including but not limited to attorneys' fees), as per the terms of Section 8 herein, arising out of any and all claims, liability, loss, or damage, on account of Contractor's use or disposal of hazardous wastes or hazardous materials.

## **4. CONTRACTOR'S GUARANTY**

### **4.1 Creditworthiness**

If on the Effective Date, the Contractor does not have an Investment Grade credit rating, then the Contractor shall provide to CRRA within 10 days after the Effective Date, a written Guarantee from the Contractor's Guarantor.

## **4.2 Additional Assurances**

If at any time during the Term, the credit rating assigned to the unsecured debt obligations of the Contractor or the Guarantor falls below investment grade, then within thirty (30) days, the Contractor will provide to CRRA a Qualified Letter of Credit.

## **5. SECURITY FOR FAITHFUL PERFORMANCE OF DECOMMISSIONING PLAN**

### **5.1 Required Performance Security for Decommissioning (Phase 5)**

Prior to the completion of Phase 4 Work, the Contractor shall provide CRRA with a letter of credit as security for the faithful decommissioning of the SGF, as specified in Exhibit D.

### **5.2 Failure To Maintain The Security**

Failure to maintain the Letter of Credit until completion of Phase 5 shall constitute a default by the Contractor hereunder.

### **5.3 Exercise Of Rights And Remedies**

In the event Contractor fails to perform any of its obligations under this Decommissioning Plan, CRRA shall have the right, in addition to all other rights and remedies available to CRRA hereunder or otherwise, to exercise any or all of CRRA's rights and remedies detailed in Exhibit D.

### **5.4 Issuing Companies**

The Letter of Credit shall be issued and executed by a bank or by a national banking association acceptable to CRRA.

## **6. EVENTS OF DEFAULT**

### **6.1 Events of Default by Contractor**

Each of the following shall constitute an Event of Default on the part of Contractor:

- (a) An Act of Bankruptcy with respect to the Contractor or the Guarantor occurs.
- (b) Contractor's breach of any of its covenants or representations hereunder.
- (c) Failure of Contractor to pay the monthly host payment, as specified in **Exhibit C** to CRRA by the twentieth (20) day of any calendar month in any Operating Year that such payment is due.

- (d) Failure of Contractor to perform any of the Work as specified herein.
- (e) Contractor's allowing or conducting any activities on any of the Properties not expressly authorized by this Agreement.
- (f) Contractor's failure to comply with any and all Applicable laws as relating to this Agreement and Contractor's performance hereunder.
- (g) Contractor's failure to provide or maintain the Insurance as required and specified in **Section 9** of this Agreement, or the Letter of Credit as required and specified in Exhibit B
- (h) Contractor's storage or disposal of any hazardous materials at the landfill(s).

## 6.2 Events of Default by CRRA

Each of the following shall constitute an Event of Default on the part of CRRA:

- (a) The failure by CRRA to fulfill, substantially in accordance with this Agreement, CRRA's material obligations under this Agreement; and
- (b) CRRA's breach of any of its covenants or representations hereunder, provided, however, that no such failure or breach shall constitute an Event of Default giving Contractor the right to damages or to terminate this Agreement under **Section 6** of this Agreement unless and until:
- (c) Contractor has given written notice to CRRA by overnight express mail or certified mail, return receipt requested, specifying that a particular default or defaults exist which will, unless corrected, constitute an Event of Default on the part of CRRA; and
- (d) In the case in which an Event of Default is reasonably capable of being cured, CRRA has not corrected such default within thirty (30) days of the date of its receipt of the notice, or if such such default cannot be reasonably cured within thirty (30) days, CRRA has not diligently initiated reasonable steps to correct the same within such longer period as Contractor and CRRA shall agree in writing is reasonably necessary to complete the cure.

## 6.3 Contractor's Right to Cure

Assuming that the Contractor's payment obligations are current under Section 3.1 of this Agreement, Contractor shall have a thirty (30) calendar day cure period from the date Contractor receives from CRRA written notice of its breach of any provision of **Section 6.1** of this Agreement to remedy its breach of the Agreement. Notwithstanding the foregoing, CRRA may terminate this Agreement without providing the above required written notice and Contractor shall have no right to cure a Contractor's Event of Default described in Section 6.1(a) or (h).

## 6.4 Force Majeure

If Contractor shall be unable to perform or shall be delayed in its performance of any of the terms of this Agreement by reason of Force Majeure or a Change In Law, and provided that Contractor shall have provided CRRA with written notice of said Force Majeure and/or Change In Law within five (5) business days of any event of Force Majeure and/or Change In Law, Contractor shall be excused from any failure or delay in its performance of the Work subject to the conditions of this Section 6. Operational failure of the Contractor's equipment shall not constitute Force Majeure. However, throughout the term of the Agreement and in the foregoing event whereby Contractor is excused from its failure or delay in its performance, Contractor must continually do the following at Contractor's sole expense throughout the term of the Agreement and during any such excused failure or delay period:

- (a) Be and remain current on its payment obligations to CRRA under Section 3 of this Agreement (Force Majeure shall in no event excuse failure or delay of Contractor to make a Contractor's Monthly Host Payment, or any other amount due to CRRA from Contractor hereunder);
- (b) If applicable and at CRRA's discretion, proceed within a commercially reasonable timeframe to rebuild/complete the construction of the SGF, with due regard to the Force Majeure event.

## 7. REMEDIES

### 7.1 Selection of Remedies

1. Subject to **Section 6.2** and **6.3** herein, each party shall have the right to terminate this Agreement when there is an Event of Default on the part of the other party. Absent an Event of Default, neither party may terminate this Agreement unless it is otherwise specifically provided for in this Agreement.
2. If a party declares an Event of Default by the other party, the non-defaulting party may elect not to immediately terminate this Agreement, but to collect actual damages. The failure of a party to immediately terminate this Agreement shall not limit or restrict in any way such party's right to terminate this Agreement at a later time.
3. If the Contractor fails to perform any of its obligations hereunder, or if there is an Event of Default by Contractor, CRRA shall have the right, but not the obligation, to cure such failure or Event of Default without notice to the Contractor. Contractor shall fully reimburse CRRA for any and all reasonable costs and expenses incurred by CRRA in taking such curative action, including, but not limited to, reasonable attorneys' fees and court costs, within twenty (20) days after Contractor's receipt of an invoice for such costs and expenses.

4. Upon the occurrence of an Event of Default by the Contractor, and subject to any applicable cure period as set forth in Section 6.3, CRRA shall have the right to make a claim against the Guaranty.
5. All of the remedies provided in this Agreement are the exclusive remedies available at law, but this Agreement shall not limit any equitable remedies available to a party. All the remedies hereunder shall be deemed cumulative and the election of one shall not be deemed a waiver of any other or further rights or remedies.

## **7.2 Mitigation**

Contractor and CRRA agree that in the event one party terminates or seeks damages pursuant to this Agreement due to an Event of Default, the injured party is obligated, to the extent not detrimental to its interests, to mitigate its damages, costs and expenses and to credit the savings there from to any damages, costs and expenses otherwise payable by the defaulting party.

## **7.3 Termination by CRRA**

If CRRA terminates this Agreement for an Event of Default on the part of Contractor pursuant to **Section 6.1** hereof, CRRA reserves the right to take any of the following actions:

- 7.3.1 Exclude the Contractor from the premises, claim possession of the SGF, lease the property and SGF to a new contractor, and maintain any action against the Contractor to recover any administrative or legal costs associated with such action.
- 7.3.2 Decommission the SGF or otherwise restore the property the substantially the same condition it was in on the Effective Date and maintain any action against the Contractor to recover any costs, including administrative and legal costs associated with such action.
- 7.3.3 Pursue any other remedy now or hereafter existing in law or in equity.

## **7.4 Consequential Damages**

Contractor acknowledges that the failure of Contractor to perform Contractor's obligations hereunder may have both direct and indirect impacts on CRRA. Accordingly, Contractor agrees that the actual damages owed to CRRA for such failure to perform by Contractor includes indirect and consequential damages, as available under Applicable Laws, as well as direct damages.



## 8. INDEMNIFICATION

### 8.1 Contractor's Indemnity

Contractor shall at all times defend, indemnify and hold harmless CRRA and its board of directors, officers, agents and employees from and against any and all claims, damages, losses, judgments, liability, Workers' compensation payments and expenses (including but not limited to attorneys' fees) arising out of injuries to the person (including death), damage to property or any other damages alleged to have been sustained by: (a) CRRA or any of its directors, officers, agents, employees or other contractors, or (b) Contractor or any of its directors, officers, agents, employees, subcontractors or materialmen, or (c) any other person, to the extent any such injuries, damage or damages are caused or alleged to have been caused in whole or in part by the acts, omissions or negligence of Contractor or any of its directors, officers, agents, employees, subcontractors or materialmen. Contractor further undertakes to reimburse CRRA for damage to property of CRRA caused by Contractor or any of its directors, officers, agents, employees, subcontractors or materialmen, or by faulty, defective or unsuitable material or equipment used by it or any of them. The existence of insurance shall in no way limit the scope of this indemnification. Contractor's obligations under this Section 6.1 shall survive the termination or expiration of this Agreement.

## 9. INSURANCE

### 9.1 Required Insurance

At all times during the term of this Agreement, Contractor shall, at its sole cost and expense, procure and maintain the insurance coverages described below for claims which may arise from or in connection with the work set forth in the scope of work hereunder (the "Work") performed by the Contractor and those for whom they are legally responsible.

#### (a) Minimum Scope of Insurance

Coverage shall be at least as broad as:

1. Commercial General Liability insurance as specified by the most recent version of ISO Form Number CG 00 01 (occurrence).
2. Automobile Liability insurance as specified by the most recent edition of ISO Form Number CA 0001, Symbol 1 (any auto). An MCS 90 Endorsement and a CA 9948 Endorsement shall be attached **if any hazardous materials are transported by the Contractor during its performance of the Work.**
3. Workers' Compensation insurance as required by all states in which the Work is being done and Employer's Liability insurance.
4. Professional Liability insurance.

5. Contractor's Pollution Liability Insurance

(b) Contractor is allowed to use Excess/Umbrella insurance to meet the limits set forth in this agreement.

(c) Minimum Limits of Insurance

Contractor shall maintain the following limits of liability for the insurance described above:

1. Commercial General Liability:

- a. \$10,000,000 Each Occurrence for Bodily Injury & Property Damage.
- b. \$10,000,000 General Aggregate
- c. \$10,000,000 Products & Completed Operations Aggregate
- d. \$10,000,000 Personal & Advertising Injury

2. Automobile Liability:

- a. \$10,000,000 Combined Single Limit Each Accident for Bodily Injury and Property Damage.
- b. Include Owned, Hired and Non-Owned Auto Liability

3. Workers' Compensation: Statutory limits.

Employer's Liability:

- \$1,000,000 - Each Accident
- \$1,000,000 Disease – Policy Limit
- \$1,000,000 Disease – Each Employee

4. Professional Liability insurance with a limit not less than \$10,000,000.

5. Contractor's Pollution Liability with a limit not less than \$10,000,000.

(c) Deductibles, Self-insured Retentions and Uninsured Losses

The Contractor shall be responsible for payment of all deductibles and self-insured retentions on any of the insurance policies required under this Agreement. The Contractor is also responsible for the payment of all losses arising out of its performance of the Work that may not be covered by the insurance policies required under this Agreement.

(d) Other Insurance Provisions

All policies required under this Agreement shall contain the following provisions:

1. CRRA, its subsidiaries, officials and employees are to be covered as additional insureds on a primary and non-contributing basis on the following insurance policies purchased by the Contractor:
  - a. Commercial General Liability
  - b. Automobile Liability
  - c. Contractor's Pollution Liability
2. The Contractor agrees to notify CRRA at least thirty (30) days in advance of any cancellation or change to insurance coverages required under this Agreement. Notice of cancellation or change in coverage shall be provided to CRRA's Risk Manager by fax to 860-757-7740, or by e-mail to [lmartin@crra.org](mailto:lmartin@crra.org), or by correspondence to CRRA, 100 Constitution Plaza, 6<sup>th</sup> Floor, Hartford, Connecticut 06103-1722.
3. The Contractor should waive (and require their insurers to waive) subrogation rights against CRRA for losses and damages incurred under the insurance policies required by this Agreement.
4. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

(e) Acceptability of Insurance

Insurance is to be placed with insurers with current A.M. Best ratings of not less than A-VIII, and be lawfully authorized to conduct business in the state(s) or jurisdiction(s) where the Work is being performed, unless otherwise approved by CRRA.

(f) Verification of Coverage

Contractor shall furnish CRRA with a Certificate of Insurance evidencing the coverages required under this Agreement. All certificates are to be received and approved by CRRA before the Work commences. Contractor shall provide new Certificates of Insurance upon renewal, replacement or addition of any insurance required under this Agreement.

(g) Subcontractors

Contractor shall either include all subcontractors as insureds under its insurance policies or shall require subcontractors to provide their own insurance subject to all of the requirements stated herein.

## 9.2 Other Conditions

CRRA shall not, because of accepting, rejecting, approving, or receiving any certificate of insurance required hereunder, incur any liability for:

- (a) The existence, non-existence, form or legal sufficiency of the insurance described on such certificate,
- (b) The solvency of any insurer, or
- (c) The payment of losses.

## **10. MISCELLANEOUS**

### **10.1 Non-Discrimination**

Contractor agrees to the following:

- (a) Contractor agrees and warrants that in the performance of the Work, Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, including civil union status, national origin, ancestry, sex, sexual orientation, gender identity or expression, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by Contractor that such disability prevents performance of the Work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut. Contractor further agrees to take affirmative action to insure that applicants with job related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, including civil union status, national origin, ancestry, sex, sexual orientation, gender identity or expression, mental disability, or physical disability, including, but not limited to, blindness, unless it is shown by Contractor that such disability prevents performance of the Work involved;
- (b) Contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of Contractor, to state that it is an “affirmative action-equal opportunity employer” in accordance with regulations adopted by the Connecticut Commission on Human Rights and Opportunities (The “Commission”);
- (c) Contractor agrees to provide each labor union or representative of workers with which Contractor has a collective bargaining agreement or other contract or understanding and each vendor with which Contractor has a contract or understanding, a notice to be provided by the Commission, advising the labor union, workers’ representative and vendor of Contractor’s commitments under Sections 4a-60 and 4a-60a of the *Connecticut General Statutes* and to post copies of the notice in conspicuous places available to employees and applicants for employment;
- (d) Contractor agrees to comply with each applicable provision of Sections 4a-60, 4a-60a, 46a-68e, and 46a-68f, inclusive, of the *Connecticut General Statutes* and

with each regulation or relevant order issued by the Commission pursuant to Sections 46a-56, 46a-68e, and 46a-68f of the *Connecticut General Statutes*; and

- (e) Contractor agrees to provide the Commission with such information requested by the Commission, and permit access to pertinent books, records and accounts concerning the employment practices and procedures of Contractor as related to the applicable provisions of Sections 4a-60, 4a-60a and 46a-56 of the *Connecticut General Statutes*. If this Agreement is a public works contract, Contractor agrees and warrants that it will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials in such public works project.

## **10.2 Entire Agreement**

This Agreement constitutes the entire agreement and understanding between the parties hereto and concerning the subject matter hereof, and supersedes any previous agreements, written or oral, between the parties hereto and concerning the subject matter hereof.

## **10.3 Governing Law**

This Agreement shall be governed by, and construed, interpreted and enforced in accordance with the laws of the State of Connecticut as such laws are applied to contracts between Connecticut residents entered into and to be performed entirely in Connecticut.

## **10.4 Assignment**

This Agreement may not be assigned in whole or in part by either party without the prior written consent of the other party or such assignment shall be void.

## **10.5 No Waiver**

Failure to enforce any provision of this Agreement or to require at any time performance of any provision hereof shall not be construed to be a waiver of such provision, or to affect the validity of this Agreement or the right of any party to enforce each and every provision in accordance with the terms hereof. No waiver of any provision of this Agreement shall affect the right of CRRA or Contractor thereafter to enforce such provision or to exercise any right or remedy available to it in the event of any other default involving such provision or any other provision. Making payment or performing pursuant to this Agreement during the existence of a dispute shall not be deemed to be and shall not constitute a waiver of any claims or defenses of the party so paying or performing.

## **10.6 Modification**

This Agreement may not be amended, modified or supplemented except by a writing signed by the parties hereto that specifically refers to this Agreement. Any oral representations or letters by the parties or accommodations shall not create a pattern or practice or course of

dealing contrary to the written terms of this Agreement unless this Agreement is formally amended, modified or supplemented.

**10.7 Notices**

All notices, requests, demands and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed via certified first class mail return receipt requested postage prepaid or overnight express mail service to the pertinent address below.

(a) If to CRRA:

Connecticut Resources Recovery Authority  
100 Constitution Plaza, 6<sup>th</sup> Floor  
Hartford, Connecticut 06103  
Attention: Thomas Gaffey

With a copy to:

Connecticut Resources Recovery Authority  
100 Constitution Plaza, 6<sup>th</sup> Floor  
Hartford, Connecticut 06103  
Attention: President

(b) If to Contractor:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Attention: \_\_\_\_\_

**10.8 Binding Effect**

This Agreement shall inure to the benefit of and be binding upon the heirs, personal representatives, successors and assigns of the parties hereto.

**10.9 Severability**

CRRA and Contractor hereby understand and agree that if any part, term or provision of this Agreement is held by any court to be invalid, illegal or in conflict with any applicable law, the validity of the remaining portions of this Agreement shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if this Agreement did not contain the particular part, term or provision held to be invalid, illegal or in conflict with any applicable law.

## **10.10 Counterparts**

This Agreement may be executed in any number of counterparts by the parties hereto. Each such counterpart so executed shall be deemed to be an original and all such executed counterparts shall constitute but one and the same instrument.

## **10.11 Campaign Contribution And Solicitation Prohibitions**

For all State contracts as defined in P.A. 07-1 having a value in a calendar year of \$50,000 or more or a combination or series of such agreements or contracts having a value of \$100,000 or more, the authorized signatory to this Agreement expressly acknowledges receipt of the State Elections Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice. See **Exhibit H**[SEEC Form 11].

## **10.12 Whistleblower Provision**

If the Contractor is a large state Contractor, the Contractor shall comply with the provisions of Section 4-61dd of the Connecticut General Statutes, as may be revised. "Large State Contractor" shall have the same meanings as set forth in Section 4-61dd(h) of the Connecticut General Statutes, as may be revised. Each contract between a state or quasi-public agency and a large state contractor shall provide that, if an officer, employee, or appointing authority of a large state contractor takes or threatens to take any personnel action against any employee of the contractor in retaliation for such employee's disclosure of information to the Auditors of Public Accounts or the Attorney General under the provisions of subsection (a) of Section 4-61dd of the Connecticut General Statutes, the Contractor shall be liable for a civil penalty of not more than five thousand dollars for each offense, up to a maximum of twenty percent of the value of the contract. Each violation shall be a separate and distinct offense and in the case of a continuing violation, each calendar day's continuance of the violation shall be deemed to be a separate and distinct offense. The executive head of the state or quasi-public agency may request the Attorney General to bring a civil action in the Superior Court for the judicial district of Hartford to seek imposition and recovery of such civil penalty.

Each large state contractor shall post a notice of the provisions of Section 4-61dd relating to large state contractors in a conspicuous place that is readily available for viewing by the employees of the contractor.

## **10.13 Affidavit of Third Party Fees**

At the time the Contractor submitted its bid to CRRA, it simultaneously executed a document entitled Affidavit of Third Party Fees and said document is attached hereto and made a part of this Agreement as **Exhibit I**.

#### **10.14 Affidavit Concerning Nondiscrimination**

At the time the Contractor submitted its bid to CRRA, it simultaneously executed a document entitled Affidavit Concerning Nondiscrimination and said document is attached hereto and made a part of this Agreement as **Exhibit J**.

#### **10.15 Affidavit Concerning Consulting Fees**

At the time of Contractor's execution of this Agreement, Contractor simultaneously executed a document entitled Affidavit Concerning Consulting Fees and said document is attached hereto and made a part of this Agreement as **Exhibit K**.

#### **10.16 Contractor's Certification Concerning Gifts**

At the time of Contractor's execution of this Agreement, Contractor simultaneously executed a document entitled Contractor's Certification Concerning Gifts and said document is attached hereto and made a part of this Agreement as **Exhibit L**.

#### **10.17 President's Certification Concerning Gifts**

At the time of the President of CRRA's execution of this Agreement, the President of CRRA simultaneously executed a document entitled President's Certification Concerning Gifts and said document is attached hereto and made a part of this Agreement as **Exhibit M**.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

[SIGNATURE PAGE FOLLOWS]



**IN WITNESS WHEREOF**, the parties hereto have set their hands and seals as of the day and year first written above.

CONNECTICUT RESOURCES RECOVERY AUTHORITY

By: \_\_\_\_\_  
Thomas D. Kirk  
Its President  
Duly Authorized

[NAME OF CONTRACTOR]

By: \_\_\_\_\_  
Its  
Duly Authorized

## DEFINITIONS

*Note regarding Form of Agreement included in RFP: CRRA expects to negotiate a final scope of work with selected proposer(s) in the process of developing a final Agreement. The information included below shall constitute a basis for those discussions but may be modified as needed based on those discussions.*

As specified in Section 1.1 of the Agreement, the following terms used in this Agreement shall have the meanings set forth below:

“Addenda” means written or graphic documents issued prior to the proposal due date, which clarify, correct or change any or all of the Contract Documents.

“Affiliate” means a person that, directly or indirectly, controls or is controlled by, or is under common control with the Contractor

“Applicable Laws” means any applicable statute, law, constitution, charter, ordinance, resolution, judgment, order, procedures, permits (including but not limited to the Permits), decree, rule, regulation, directive, interpretation, standard or similar binding authority, which has been or shall hereinafter be enacted, promulgated, issued or enforced by any judicial or governmental authority having jurisdiction.

“Commissioning Test” means the commissioning test, witnessed by the EDC, and or CRRA, as applicable [note: additional details about what must be demonstrated in order to pass the commissioning test to be added during contract negotiations]

“Change In Law” means the adoption, promulgation, issuance, modification, or official change in interpretation, after the Commencement Date of this Agreement of a federal, state, city, or local law, ordinance, code, or regulation, rule, order or ruling by any federal, state, or local court, administrative agency or governmental body (except to the extent that such order or ruling is a result of the willful or negligent action or inaction of the party claiming such Change In Law) that imposes requirements or restrictions on: (i) the Contractor’s performance under this Agreement, provided however, that any requirement of any Permit related to Contractor’s performance under this Agreement which is based on existing law, ordinance, code, or regulation, rule, order, interpretation, or ruling by any federal, state, or local court, administrative agency or governmental body as of the Commencement Date of this Agreement shall not be a Change In Law; or (ii) CRRA’s performance of its obligations under this Agreement.

“CL&P” means the Connecticut Light and Power Company, its assigns and successors

“Connecticut Class I Renewable Energy Credits” means certain NEPOOL GIS Certificates and any and all other Environmental Attributes derived from the energy production of a generation facility that has been qualified by PURA as a Connecticut Class I renewable resource under Conn. Gen. Stat. § 16-1(a)(26).

“Contract Documents” means this Agreement including, as specified in Section 1.2(h) of the Agreement, all exhibits attached hereto, the Notice To Proceed (as defined herein), any written

amendments to any of the Contract Documents and any change order issued pursuant to Section 7.6 hereof.

“Contractor’s Equipment” means the equipment that is part of the solar generating facility and any equipment owned by the Contractor, or its subcontractors, that is used in the installation, interconnection, operation, maintenance, or decommissioning of the SGF. [*Need to specify when final Agreement is negotiated*]

“CRRRA” means the Connecticut Resources Recovery Authority, a body politic and corporate, constituting a public instrumentality and political subdivision of the State of Connecticut.

“CT DEEP” or “DEEP” means the Department of Energy and Environmental Protection of the State of Connecticut.

“Decommission” shall mean with respect to the SGF to decommission, remove, and dispose of all structures, facilities, installations, equipment, and other property, and other works that are part of the SGF and to restore the site on which the SGF is located to a condition that is as nearly as practicably equivalent to its condition immediately prior to the Effective Date, consistent with state and federal land use regulations.

“Decommissioning plan” shall mean a plan of works and an estimate of expenditures to Decommission the SGF, as estimated by an independent engineering firm having expertise in the area of construction, operation, and decommissioning of SGF facilities, including environmental engineering and feasibility studies in support of the plan which shall be undertaken at least every five (5) years.

“DPUC” refers to the former Department of Public Utilities Control of the State of Connecticut, which effective July 2011 merged with the Department of Environmental Protection to form DEEP. For the purposes of this Agreement, any reference to DPUC referring to a period of time on or after July 2011 shall be interpreted to mean the Public Utilities Regulatory Authority (“PURA”), part of the energy branch of DEEP which replaced DPUC.

“EDC” means the Electrical Distribution Company, either CL&P or UI

“Effective Date” means the date at which this Agreement comes into force as set forth in Section 2.1 of the Agreement.

“Energy Act” means Public Act 11-80, An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut’s Energy Future.

“EPS” means the Electrical Power System, the electrical grid and all of its components, as maintained by the EDC.

“FERC” means the Federal Energy Regulatory Commission, an independent agency that regulates the interstate transmission of electricity, natural gas, and oil.

“Final construction documents” means the final operation and maintenance plan, the final application submittal engineering drawings, and any related documents that CRRA requires the contractor to submit as part of the Phase 2 and Phase 3 work.

“Hazardous materials” shall mean material including but not limited to, any material in whatever form, which because of its quantity, concentration, or characteristics, including but not limited to chemical, corrosive, flammable, reactive, toxic, infectious, or radioactive, either separately or in combination with any substance or substances, constitutes a present or future threat to human health, safety, welfare, or the environment, when improperly stored, treated, transported, disposed of used, or otherwise managed, including insoluble or partially soluble oils of any kind, in any origin or in any form, including without limitation, crude of fuel oils, lubricating oil or sludge, asphalt, insoluble or partially insoluble derivatives of mineral, animal or vegetable oils.

“Interconnection Agreement” means a written contract between the Contractor and the EDC to distribute electricity generated by the SGF via the EDC’s EPS.

“Interconnection plan” means a plan of works to ensure that the SGF is connected into the electrical distribution grid, under the jurisdiction of either DPUC or FERC, including, but not limited to, all required feasibility studies, impact studies, facility studies, distribution studies, transmission studies, tariffs, and wiring diagrams, in accordance with all guidelines in Interconnection Agreement requirements of CL&P, UI, ISO-NE, FERC, and/or DPUC as applicable

“ISO-NE” means the Independent System Operator – New England, an independent, not-for-profit a regional transmission authority (RTO) serving Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

“kW” means a kilowatt

“kWh” means a kilowatt hour.

“Laws And Regulations” means any and all applicable current or future laws, rules, regulations, ordinances, codes, orders and permits of any and all federal, state and local governmental and quasi-governmental bodies, agencies, authorities and courts having jurisdiction.

“Lender” shall mean any Person which provides construction, working capital, permanent, long-term or other debt financing to the Contractor, but not suppliers who provide trade credit in the ordinary course of business.

“NERC” means the North American Electric Reliability Corporation, an international, independent not-for-profit organization whose mission is to ensure the reliability of the bulk power system in North America.

“Notice to Proceed” means written notice during the transition from each phase of the Agreement, as specified in section 2.1 of the Agreement from CRRA to the Contractor authorizing the Contractor to begin the work specified in this Agreement.

“NPCC” means the Northeast Power Coordinating Council, Inc., a not-for-profit corporation responsible for promoting and improving the reliability of the international interconnected bulk power system in Northeastern North America

“Operating Year” means any year “Periodic Interconnection Tests” means the process as required by the EDC, and as is typically specified by the manufacturer of the equipment used in the SGF, to verify that interconnection-related protections and batteries are functional, the written reports and logs for which will be maintained by the Contractor.

“Person” shall mean any of the following, as applicable: individual, corporation, partnership (limited or otherwise), limited liability company, government, government instrumentality, public corporation, agency, board, commission, or department, municipality, trust, or cooperative formed by agreement or by filing any applicable instrument or document with any applicable government or government instrumentality, agency, board, commission, or department.

“PPA” means Power Purchase Agreement the agreement or agreements between the Contractor and one or more electrical consumers to purchase the energy generated by the SGF.

“SGF” means solar generating facility

“Sites” means those areas of the Property upon which the Services are to be performed, furnished and completed by Contractor in accordance with the Contract Documents.

“Solid Waste” means unwanted and discarded solid materials, consistent with the meaning of that term pursuant to Section 22a-207(3) of the Connecticut General Statutes, excluding semi-solid, liquid materials collected and treated in a “water pollution abatement facility.”

“Ton” means a “short ton” of 2,000 pound unless expressly stated elsewhere in this Agreement.

“UI” means the United Illuminating Company, its assigns and successors.

“ZREC” means a Connecticut Class I Renewable Energy Credit from a zero-emissions facility which meets the zero emissions standards as defined in the Energy Act. One (1) ZREC shall represent one megawatt hour of energy,

## SCOPE OF WORK

*Note regarding Form of Agreement included in RFP: CRRA expects to negotiate a final scope of work with selected proposer(s) in the process of developing a final Agreement. The information included below shall constitute a basis for those discussions but may be modified as needed based on those discussions.*

### 1. General

Upon execution of this Agreement, CRRA shall provide site control to the Contractor for the purposes of developing, installing, operating, maintaining, and decommissioning a solar generating facility (SGF), as detailed herein this Agreement, on the CRRA properties as detailed herein this Agreement, for the term of this Agreement. Throughout the term of this agreement, the Contractor will perform the work herein.

### 2. Phases

#### **2.1 Phase 1: Secure Renewable Energy Credits and/or other financing**

In this Phase 1, the Contractor will obtain renewable energy credits, and any other price support mechanisms presumed in its proposal to CRRA.

- 2.1.1 This phase 1 presumes that within 9 months after the award of this Agreement, the applicable EDC will issue a solicitation for ZRECs, and that the Contractor will apply for such ZRECs as part of its funding plan for the SGF.
- 2.1.2 If within 4 months of the due date for the EDC's ZREC solicitation the Contractor has not been selected by the EDC as a winning bidder, or has been selected as a winning bidder but failed to execute a ZREC standard contract with the EDC, this agreement will terminate without further action by either party and neither party shall have any further rights or obligations hereunder [NOTE: If contractor indicates its desire to proceed with the development of the proposed SGF despite its failure to obtain a ZREC award, the parties may negotiate the conditions under which the Contractor will proceed].
- 2.1.3 None of the terms of this Agreement, including the site control granted to the Contractor herein will survive this Phase 1, unless CRRA provides written notice to the Contractor to proceed to Phase 2.

## **2.2 Phase 2: Final Planning, Permitting and Design**

Upon receipt of a Notice to Proceed to Phase 2, the Contractor will undertake all final planning permitting, and design work as follows, and shall submit such plans, permits, designs, and agreements to CRRA for approval. Specifically:

- 2.2.1 Contractor will develop final construction plans, including physical details of the SGF, technical details of the SGF, and a construction schedule.
- 2.2.2 Contractor will execute an Interconnection Agreement with the EDC
- 2.2.3 Contractor will execute a PPA with the EDC or other qualified electrical consumer.
- 2.2.4 Contractor will obtain all necessary permits required for the construction of the SGF.
- 2.2.5 Contractor will develop an infrastructure security plan to ensure that the SGF will comply with all requirements and recommendations of the National Infrastructure Advisory Council and NERC regarding the security of the electric system and obtain all necessary approvals for any applicable NERC compliance plan from the NPCC or any other applicable oversight organization.

Upon CRRA's satisfaction that Contractor has completed all appropriate Phase 2 work, CRRA shall issue to the Contractor a Notice to Proceed to Phase 3.

## **2.3 Phase 3: Construction**

Upon receipt of a Notice to Proceed to Phase 3, at its sole cost and expense, the Contractor In this Phase 3, the Contractor will promptly construct, install, and interconnect an operational SGF as per the terms and conditions of this Agreement. Specifically:

- 2.3.1 Install all mounting systems approved by CRRA for use at the landfill, and mount all panels into mounting and racking systems.
- 2.3.2 Install all inverters, cables and other electrical components.
- 2.3.3 Take all steps required with the EDC to interconnect the SGF to the EPS.
- 2.3.4 During this Phase 3, the Contractor is responsible, at its sole cost for mowing, landscaping, and vegetative control within a radius of the SGF and its components, and for augmenting, and if needed replacing vegetation around the solar panels to prevent erosion or degradation of the panel.
- 2.3.5 Once constructed, the Contractor will schedule a witnessed Commissioning Test, witnessed by both the EDC and CRRA.

Upon CRRA's satisfaction that Contractor has completed all appropriate Phase 3 work, CRRA shall issue to the Contractor a Notice to Proceed to Phase 4.

#### **2.4 Phase 4: Operation and Maintenance**

Upon receipt of a Notice to Proceed to Phase 4, at its sole cost and expense, the Contractor will operate and maintain the SGF, including but not limited to the following:

- 2.4.1 Contractor will maintain a real-time monitoring system to track the energy production of the SGF. The real time monitoring system will be maintained and operated by the Contractor and will provide CRRA access to the SGF energy production data through a web-based data interface. The system will track instantaneous, daily, monthly, annual and total power and energy production of the SGF. This real-time monitoring system shall be able to make energy production data available for CRRA to utilize for educational and promotional purposes
- 2.4.2 Contractor will maintain an interconnection agreement with the EDC, including providing the EDC with any notification of modification to the SGF and providing to the EDC a schedule for periodic interconnection tests of all applicable SGF components.
- 2.4.3 Contractor will at its sole cost, market all power generated by the SGF including fulfilling all of the Contractor's obligations under any PPA.
- 2.4.4 Contractor will at its sole cost maintain the SGF and all components thereof including but not limited to panels, inverters, and wiring.
- 2.4.5 Contractor will ensure that the SGF continues to comply with all requirements and recommendations of the National Infrastructure Advisory Council and NERC regarding the security of the electric system throughout the term of this Agreement and this phase thereof
- 2.4.6 The contractor is responsible, at its sole cost to pay all charges for water, gas, sewer, electricity, light, heat, power, telecommunications or other utilities or services provided to the Contractor at the landfill(s) for the purposes of operating the SGF.
- 2.4.7 The contractor is responsible, at its sole cost for mowing, landscaping, and vegetative control within a radius of the SGF and its components, and for augmenting, and if needed replacing vegetation around the solar panels to prevent erosion or degradation of the panel.



Prior to the end of Phase 4, the Contractor at its sole cost and expense will develop a Final Decommissioning Plan. Within one (1) year of the completion of Phase 4, the Contractor will present that Final Decommissioning Plan to CRRA for approval. If that Final Decommissioning Plan meets CRRA's approval, CRRA shall issue to the Contractor a Notice to Proceed to Phase 5.

## **2.5 Phase 5: Decommissioning**

The scope of work related to Decommissioning of the SGF is detailed in Exhibit D of this Agreement.

## COMPENSATION SCHEDULE

Note: The Compensation Schedule will be added to the Final Agreement included in the final agreement will be based upon the Contractor's Price and Payment Rate Schedule Form as such was submitted with their Proposal

### 1. MONTHLY HOST PAYMENT

The Contractor will pay to CRRA a monthly host payment to utilize CRRA-owned properties in order to complete the Work detailed in Exhibit A of this Agreement. This monthly host payment shall be equal for each month and shall not be subject to intra-year fluctuations that are based upon expected seasonally-adjusted variations in the monthly output of the SGF.

Site	Host Payment (\$/month)
Ellington	
Shelton	
Waterbury	

This payment will be increased by \_\_\_\_\_ % per year for a period of \_\_\_ years.

### 2. PAYMENT SCHEDULE

On the day Contractor receives from CRRA the Notice To Proceed With Task 1 Services, Contractor shall immediately be liable for the duration of the term of this Agreement to pay CRRA the Contractor's Monthly Host Payment on the first day of each month or partial month.

### 3. EXPECTED SEASONALLY ADJUSTED OUTPUT

Estimated seasonally-adjusted variation in monthly energy output (in MWh) of the SGF as a percentage of the average annual energy output per month (in MWh/month).

Example: If the expected average monthly energy output of the SGF is expected to be "X," (MWh/month) the expected seasonally-adjusted output in January might be 70% of X, whereas the seasonally-adjusted

Month	Expected MWh/month
January	

February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	

#### **4. IMPACT OF DISRUPTION OR DIMINISHMENT**

If the actions of CRRA or its agents, except those that could be construed to be part of the expected operation and maintenance of a closed landfill, are proven to be the sole cause a temporary diminishment or disruption to the electrical output of the SGF for more than one consecutive day, the Contractor shall be entitled to reduce their monthly host payment for the number of days that the disruption occurred based on the seasonally-adjusted expected energy output during the month that the disruption occurred, as determined in Section 2 of this Exhibit C, and as applied to the actual average monthly energy output of the SGF for the 12 month period immediately preceding the disruption or diminishment.

This clause shall in no way be construed to apply to weather-related events or Force Majeure; variances that would be expected to occur and/or have been demonstrated to occur between actual SGF performance vs. projected SGF performance in a similar settings; or any disruption or diminishment that could be construed as occurring because of the expected operations and maintenance of a closed landfill.

## **PHASE 5: DECOMMISSIONING AND DECOMMISSIONING PLAN**

*Note regarding Form of Agreement included in RFP: CRRA expects to negotiate a final scope of work with selected proposer(s) in the process of developing a final Agreement. The information included below shall constitute a basis for those discussions but may be modified as needed based on those discussions.*

### **1. REMOVAL AND RESTORATION**

#### **1.1 Removal of SGF**

Unless otherwise directed in writing by CRRA, Contractor shall remove its property and all components of the SGF.

#### **1.2 Restoration**

Unless otherwise directed in writing by CRRA, Contractor shall:

- (a) Restore any part of the Landfills disturbed or damaged by Contractor or any of its directors, officers, employees, agents, subcontractors or materialmen to the same condition existing on the Effective Date; and
- (b) Restore or repair any completed Work so disturbed or damaged to the condition required by the Contract Documents for acceptance of such Work by CRRA.

### **2. FINAL DECOMMISSIONING PLAN**

One year prior to the completion of the Phase 4 Work detailed in Section 2.1.4 of the Agreement, the Contractor will submit to CRRA a Final Decommissioning Plan. This Final Decommissioning Plan will include a Scope of Work and Schedule of the Final Decommissioning of the SGF.

CRRA, at its sole discretion, reserves the right to amend this Agreement to negotiate prices and terms by which CRRA would purchase the SGF from the Contractor in lieu of decommissioning the facility.

### **3. SECURITY FOR FAITHFUL DECOMMISSIONING OF FACILITY**

As specified in Section 5 of the Agreement, one year prior to the completion of the Phase 4 Work, the Contractor shall provide CRRA with a security for faithful decommissioning of the SGF.

## **INTERCONNECTION DIAGRAMS AND TECHNICAL DRAWINGS**

**Note:** This exhibit is reserved for interconnection diagrams and other technical diagrams to be included in the final Agreement based on Contractor's Proposal and the result of contract negotiations between CRRA and the Contractor.

## OTHER PROPERTY INFORMATION

**Note:** This exhibit is reserved for any information from the Property Description Information (Section 3.1 of the RFP Package Documents), the Due Diligence Report (Section 3.2 of the RFP Package Documents), or other information relevant to the final Agreement after the final details thereof have been negotiated with the Successful Bidder.



# **TRAVEL POLICY AND EXPENSE REPORTING**

**BOARD OF DIRECTORS POLICY AND PROCEDURE  
NUMBER 032**

**APPROVED BY CRRA BOARD OF DIRECTORS  
SEPTEMBER 29, 2005**

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## **CONNECTICUT RESOURCES RECOVERY AUTHORITY TRAVEL POLICY AND EXPENSE REPORTING**

### **1. GENERAL STATEMENT**

This Travel Policy and Expense Reporting guide presents the policies that all CRRA employees (hereafter “employee(s)”) must adhere to in the planning and conducting of their business travel and their reimbursement requests. CRRA requires that all travel expenditures and their accountings meet the Internal Revenue Service requirements of “ordinary, necessary and reasonable” and should be conservative and consistent with the nature of the business assignment. These policies safeguard CRRA and protect the employee from being assessed additional taxable income. All employees are expected to fully comply with the policies and instructions in this guide. Reimbursements for actual and necessary expenses made to Directors of CRRA shall be made consistent with the provisions of this Travel Policy And Expense Reporting guide; however, as stated in the Connecticut General Statutes, Directors shall not be required to obtain pre-approval from the President for any expenses.

### **2. APPROVALS**

Prior written approval by the President or the employee’s Division Head at least one (1) week in advance is required for all overnight trips out of state, except in an emergency. It is the obligation of the employee to obtain this prior approval and no reimbursement will be made without this approval.

Prior written approval by the President or the employee’s Division Head at least one (1) week in advance is required for all employee trips that are for educational seminars, professional conferences, vendor-initiated field trips, and industry organization events.

To obtain written approval, the employee must complete the overnight travel form, and, if a cash advance is requested, complete a cash advance form that estimates the out-of-pocket expenses, and submit the completed form(s) to the appropriate Division Head or President in as far in advance as possible of departure date.

### **3. TRANSPORTATION**

Transportation expenses should be kept to a minimum. The most direct and practical route should be selected.

### **3.1 Rental Automobile**

Rental car expenses will be paid by CRRA and whenever possible should be billed directly to CRRA to take advantage of CRRA's tax-exempt status and any other discounts available to CRRA.

#### **3.1.1 Insurance**

##### **3.1.1.1 Business Use Of A Rental Automobile**

Employees on business do not need to purchase additional insurance coverage (collision damage waiver or excess liability) from the rental company. The Corporate Insurance Program covers these risks. Please note that all vehicles must be rented in CRRA's name to have CRRA's policy cover the employee.

##### **3.1.1.2 Personal Use Of A Rental Automobile**

Employees are prohibited from using a CRRA rental automobile for personal use. Personal use that is incidental to CRRA business use will be covered by the CRRA insurance policy as long as the vehicle was rented in CRRA's name. Incidental usage is defined as usage of the vehicle that is directly related to business usage (e.g. mileage to get meals on a business trip).

### **3.2 Business Use Of Employee's Car**

#### **3.2.1 Reimbursement Rate**

The reimbursement rate for an employee's use of their personal automobile for CRRA business is the IRS approved rate, as adjusted from time to time by the IRS, for employee use of their personal car on business. The above mileage reimbursement allowance for business use of an employee's vehicle is calculated in a manner that takes into account all auto-related expenses, including the cost of carrying insurance (without a deductible). Therefore, CRRA will not reimburse an employee for vehicle damage or personal liability that occurs while a personal automobile is being used on CRRA business if the employee drives their personal vehicle 2,500 miles per year or more. This includes any deductible that may apply. However, if an employee's vehicle is driven on company business 2,500 miles or less annually, and is involved in a motor vehicle accident, CRRA will reimburse the employee through the normal expense reimbursement process for their physical damage deductible up to a maximum of \$500.00 per accident. Evidence of the payment of the deductible by the employee must be provided to CRRA in order to receive reimbursement. (Traveling on business does not include any travel involved in commuting to or from work, lunch time errands or anything other than authorized business use). Before an employee

seeks the foregoing reimbursement for the use of his personal automobile, the employee shall provide CRRA with written evidence of his personal automobile insurance with limits as required by the Connecticut General Statutes. The foregoing written proof shall be kept on file in the CRRA Finance Division.

### **3.2.2 Mileage Calculation**

In all travel away from the CRRA office, the employee will be reimbursed using the shortest distance between points. For travel from Hartford to a CRRA facility, the President shall cause the shortest distance to be determined and the President shall cause such determination to be made available to employees. Unless approved by an employee's Division Head, employees shall use the distances determined by the President in all requests for reimbursement for travel from Hartford to a CRRA facility. An employee may request and the employee's Division Head may approve distances other than those determined by the President in extraordinary circumstances when, for reasons beyond the control of the employee, the route of the shortest distance was not reasonably available for use.

In calculating mileage, the normal commute mileage to and from the employee's home to the employee's assigned place of work must be deducted from the total trip mileage. For example, if the total trip mileage equals 100 miles, and normal commute mileage equals 20 miles, CRRA will reimburse the employee for 80 miles. This is in accordance with Internal Revenue Service and State of Connecticut policy.

### **3.2.3 Tolls/Parking**

No receipts are necessary for tolls or parking unless they exceed five (\$5.00) dollars.

## **3.3 Air Travel**

All air travel requires prior approval from the CRRA President. For approved travel, CRRA will reimburse employees only for coach accommodations. Employees are encouraged to inquire about discount packages and to take advantage of the least costly route whenever possible. When an employee plans a trip, the reservations should be made as far in advance as practical to obtain the lowest rate. All approved air travel for the previous month shall be reported to the CRRA Board of Directors at its next Board Meeting.

## **3.4 Taxis**

Taxi service may be used when no other form of public transportation is available or when the cost of a taxi is close to the cost of public transportation. Employees are encouraged to use courtesy cars, airport limousines, or buses whenever possible.

Since some taxi services do not provide receipts, you should have the back of your business card signed, dated, and the amount of the fare indicated by the driver.

### **3.5 CRRA Owned Automobiles**

Please refer to the CRRA Vehicle Usage Policy adopted by the CRRA Board of Directors at its November 21, 2003, Board of Directors Meeting.

## **4. MEALS**

Permissible expenditures for meals and tips depend on location and circumstances. Only reasonable and customary charges will be allowed and reimbursed by CRRA. An exception may be granted by the President in unusual circumstances. In-state breakfast, lunch, and dinner will not be reimbursed unless they involve a business meeting.

## **5. LODGING**

Lodging accommodations in reasonable and economically priced single occupancy rooms, including customary tips, are reimbursable if the employee has to stay away from home overnight because of unfinished business or an early morning business meeting.

Employees should request government rates at the time of making reservations.

## **6. INCIDENTALS**

The incidentals allowance encompasses such things as gratuities and one telephone call a day of reasonable duration to the employee's home. It is anticipated that the cost of such calls generally will appear on the employee's hotel bill.

## **7. PERSONAL EXPENSES**

Some travel expenses are considered personal and CRRA will not reimburse them. The following, while not all inclusive, lists examples of such personal expenses that are not reimbursable expenses: amusements, athletic events, barbers, books for personal reading, athletic court or gym costs, damage to luggage, fines, hair stylists, magazines, newspapers, movies, and saunas.

## **8. OTHER BUSINESS EXPENSES**

With prior approval of the President, CRRA will reimburse an employee for the incidental costs necessary to further an important CRRA business purpose. Any foregoing expense must be reported to the Board at the Board's next Board of Directors meeting. Any such expense must be documented by showing the following:

- The name(s) of the person or persons and the location and nature of the expense.

- The business relationship with CRRA.
- The specific business reason for the expense.
- The actual business conducted.

CRRA will not reimburse the cost of home entertaining.

## **9. EXPENSE REPORTING**

All expense reporting must be submitted to CRRA using the CRRA expense reimbursement form(s) within twenty working days after the day the employee returns from his/her trip.

## **10. RECEIPTS**

Employees shall obtain receipts for all travel expenses, exclusive of mileage reimbursement. This includes receipts for all meals, airfare, bus fare, taxi, toll or parking charges in excess of \$5.00 dollars, limousine, hotel, and registration fees. Travel expenses in excess of the stated guidelines herein will be reimbursed only if all receipts accompany expense vouchers. Expenses submitted without a receipt, except for gratuity and certain transfer charges, may not be reimbursed.

Original receipts are required for all entertainment.

## **11. EXCEPTIONS**

Exceptions to these travel and expense guidelines will be authorized only upon the prior authorization of President when the circumstances warrant. Any such exception to these travel and expense guidelines should be documented and the President should notify the CRRA Board of Directors of such exception at the Board's next Board Meeting.

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### **ORIGINAL**

Approved by: Board of Directors  
Effective Date: 05/20/04

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### **REVISION 1**

Prepared by: Jim Bolduc, Chief Financial Officer  
Approved by: Board of Directors  
Effective Date: 09/29/05

SEEC FORM 11

**NOTICE TO EXECUTIVE BRANCH STATE CONTRACTORS AND PROSPECTIVE STATE CONTRACTORS OF CAMPAIGN CONTRIBUTION AND SOLICITATION BAN**

This notice is provided under the authority of Connecticut General Statutes 9-612(g)(2), as amended by P.A. 07-1, and is for the purpose of informing state contractors and prospective state contractors of the following law (italicized words are defined on the following page):

**Campaign Contribution and Solicitation Ban**

*No state contractor, prospective state contractor, principal of a state contractor or principal of a prospective state contractor, with regard to a state contract or state contract solicitation with or from a state agency in the executive branch or a quasi-public agency or a holder, or principal of a holder of a valid prequalification certificate, shall make a contribution to, or solicit contributions on behalf of (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of Governor, Lieutenant Governor, Attorney General, State Comptroller, Secretary of the State or State Treasurer, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee;*

In addition, no holder or principal of a holder of a valid prequalification certificate, shall make a contribution to, or solicit contributions on behalf of (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of State senator or State representative, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee.

**Duty to Inform**

State contractors and prospective state contractors are required to inform their principals of the above prohibitions, as applicable, and the possible penalties and other consequences of any violation thereof.

**Penalties for Violations**

Contributions or solicitations of contributions made in violation of the above prohibitions may result in the following civil and criminal penalties:

Civil penalties--\$2000 or twice the amount of the prohibited contribution, whichever is greater, against a principal or a contractor. Any state contractor or prospective state contractor which fails to make reasonable efforts to comply with the provisions requiring notice to its principals of these prohibitions and the possible consequences of their violations may also be subject to civil penalties of \$2000 or twice the amount of the prohibited contributions made by their principals.

Criminal penalties—Any knowing and willful violation of the prohibition is a Class D felony, which may subject the violator to imprisonment of not more than 5 years, or \$5000 in fines, or both.

**Contract Consequences**

Contributions made or solicited in violation of the above prohibitions may result, in the case of a state contractor, in the contract being voided.

Contributions made or solicited in violation of the above prohibitions, in the case of a prospective state contractor, shall result in the contract described in the state contract solicitation not being awarded to the prospective state contractor, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

The State will not award any other state contract to anyone found in violation of the above prohibitions for a period of one year after the election for which such contribution is made or solicited, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

Additional information and the entire text of P.A 07-1 may be found on the website of the State Elections Enforcement Commission, [www.ct.gov/seec](http://www.ct.gov/seec). Click on the link to "State Contractor Contribution Ban."

## Definitions:

"State contractor" means a person, business entity or nonprofit organization that enters into a state contract. Such person, business entity or nonprofit organization shall be deemed to be a state contractor until December thirty-first of the year in which such contract terminates. "State contractor" does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Prospective state contractor" means a person, business entity or nonprofit organization that (i) submits a response to a state contract solicitation by the state, a state agency or a quasi-public agency, or a proposal in response to a request for proposals by the state, a state agency or a quasi-public agency, until the contract has been entered into, or (ii) holds a valid prequalification certificate issued by the Commissioner of Administrative Services under section 4a-100. "Prospective state contractor" does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Principal of a state contractor or prospective state contractor" means (i) any individual who is a member of the board of directors of, or has an ownership interest of five per cent or more in, a state contractor or prospective state contractor, which is a business entity, except for an individual who is a member of the board of directors of a nonprofit organization, (ii) an individual who is employed by a state contractor or prospective state contractor, which is a business entity, as president, treasurer or executive vice president, (iii) an individual who is the chief executive officer of a state contractor or prospective state contractor, which is not a business entity, or if a state contractor or prospective state contractor has no such officer, then the officer who duly possesses comparable powers and duties, (iv) an officer or an employee of any state contractor or prospective state contractor who has *managerial or discretionary responsibilities with respect to a state contract*, (v) the spouse or a *dependent child* who is eighteen years of age or older of an individual described in this subparagraph, or (vi) a political committee established or controlled by an individual described in this subparagraph or the business entity or nonprofit organization that is the state contractor or prospective state contractor.

"State contract" means an agreement or contract with the state or any state agency or any quasi-public agency, let through a procurement process or otherwise, having a value of fifty thousand dollars or more, or a combination or series of such agreements or contracts having a value of one hundred thousand dollars or more in a calendar year, for (i) the rendition of services, (ii) the furnishing of any goods, material, supplies, equipment or any items of any kind, (iii) the construction, alteration or repair of any public building or public work, (iv) the acquisition, sale or lease of any land or building, (v) a licensing arrangement, or (vi) a grant, loan or loan guarantee. "State contract" does not include any agreement or contract with the state, any state agency or any quasi-public agency that is exclusively federally funded, an education loan or a loan to an individual for other than commercial purposes.

"State contract solicitation" means a request by a state agency or quasi-public agency, in whatever form issued, including, but not limited to, an invitation to bid, request for proposals, request for information or request for quotes, inviting bids, quotes or other types of submittals, through a competitive procurement process or another process authorized by law waiving competitive procurement.

"Managerial or discretionary responsibilities with respect to a state contract" means having direct, extensive and substantive responsibilities with respect to the negotiation of the state contract and not peripheral, clerical or ministerial responsibilities.

"Dependent child" means a child residing in an individual's household who may legally be claimed as a dependent on the federal income tax of such individual.

"Solicit" means (A) requesting that a contribution be made, (B) participating in any fund-raising activities for a candidate committee, exploratory committee, political committee or party committee, including, but not limited to, forwarding tickets to potential contributors, receiving contributions for transmission to any such committee or bundling contributions, (C) serving as chairperson, treasurer or deputy treasurer of any such committee, or (D) establishing a political committee for the sole purpose of soliciting or receiving contributions for any committee. Solicit does not include: (i) making a contribution that is otherwise permitted by Chapter 155 of the Connecticut General Statutes; (ii) informing any person of a position taken by a candidate for public office or a public official, (iii) notifying the person of any activities of, or contact information for, any candidate for public office; or (iv) serving as a member in any party committee or as an officer of such committee that is not otherwise prohibited in this section.

## **AFFIDAVIT OF THIRD PARTY FEES**

[The successful Proposer's Affidavit Of Third Party Fees (that was submitted with the successful Proposer's Proposal) will be added by CRRRA.]



## **AFFIDAVIT CONCERNING NONDISCRIMINATION**

[The successful Proposer's Affidavit Concerning Nondiscrimination (that was submitted with the successful Proposer's Proposal) will be added by CRRA.]



**AFFIDAVIT CONCERNING  
CONSULTING FEES**

Pursuant to Section 4a-81 of the Connecticut General Statutes, this Affidavit must be completed and properly executed under penalty of false statement by a chief official of the successful statement of qualifications submitter for an Agreement (the "Contractor"). Such chief official of the Contractor must be the person who is properly authorized to execute the Agreement on behalf of the Contractor. This Affidavit must be properly executed at the same time that the Contractor executes the Agreement. If the Contractor fails to execute this Affidavit, the Contractor shall be disqualified for the Agreement.

I, the undersigned, am over the age of eighteen and understand and appreciate the obligation of an oath. I am \_\_\_\_\_ (title) of \_\_\_\_\_ (firm name), an entity duly formed and existing under the laws of \_\_\_\_\_ (name of state or commonwealth) ("Contractor").

I certify that I am authorized to execute and deliver this affidavit on behalf of Contractor, as follows:

1. Contractor seeks to enter into the "Agreement For Design, Installation, and Operation of Solar Generating Facilities At The Ellington, Shelton, And Waterbury Landfills" (the "Agreement") with the Connecticut Resources Recovery Authority ("CRRA");
2. Except as disclosed in Table 1 below and except for a consulting agreement that is with a consultant who is registered under the provisions of Chapter 10 of the Connecticut General Statutes<sup>1</sup> as of the date this Affidavit is submitted, Contractor has not entered into any consulting agreement<sup>2</sup> in connection with the Agreement whereby any duties of the consultant pursuant to said consulting agreement<sup>2</sup> require that consultant pursue communications concerning business of CRRA, whether or not direct contact with CRRA, a CRRA official, a CRRA employee, a state agency, a state or public official, or a state employee was expected or made;
3. Contractor shall amend this Affidavit whenever Contractor enters into any new consulting agreement<sup>2</sup> during the term of the Agreement; and
4. The statements set forth herein are true, to the best of my knowledge and belief, subject to the penalties of false statement.

<sup>1</sup> Pursuant to Section 1-94 of Chapter 10 the Connecticut General Statutes, a lobbyist as defined in the Chapter is required to register with the Office of State Ethics.

<sup>2</sup> Pursuant to Section 41-81 of the Connecticut General Statutes, for the purposes of this Affidavit, "consulting agreement" means "any written or oral agreement to retain the services, for a fee, of a consultant for the purposes of (A) providing counsel to a contractor, vendor, consultant or other entity seeking to conduct, or conducting, business with the state, (B) contacting, whether in writing or orally, any executive, judicial, or administrative office of the state, including any department, institution, bureau, board, commission, authority, official or employee for the purpose of solicitation, dispute resolution, introduction, requests for information, or (C) any other similar activity related to such contract. Consulting agreement does not include any agreements entered into with a consultant who is registered under the provisions of chapter 10 as of the date such affidavit is submitted in accordance with the provisions of this section.

**TABLE 1: Disclosure of Consulting Agreements**

**(If Contractor has not entered into any consulting agreements<sup>2</sup> in connection with the Agreement, Contractor should enter “None” in the space provided for the “Name of Consultant.”)**

Name of Consultant:	
Name of Consultant’s Firm:	
Description of the Basic Terms of the Consulting Agreement:	
Brief Description of the Services Provided:	
Is the Consultant a Former State Employee or Public Official?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>If the answer to the question above concerning whether or not the consultant is a former state employee or public official is “Yes,” the following information must be provided.</b>	
Name of Former Agency:	
Date Employment Terminated:	

By (Signature): \_\_\_\_\_

Name (Print): \_\_\_\_\_

Title: \_\_\_\_\_

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

\_\_\_\_\_  
Notary Public/Commissioner of the Superior Court

\_\_\_\_\_  
Commission Expiration Date



**CONTRACTOR'S CERTIFICATION  
CONCERNING GIFTS**

**DESIGN, INSTALLATION, AND OPERATION OF SOLAR GENERATING FACILITIES  
AT THE ELLINGTON, SHELTON, AND WATERBURY LANDFILLS**

(This CERTIFICATION is to be signed by an authorized officer of the Contractor  
or the Contractor's managing general partner.)

Section 4-252 of the *Connecticut General Statutes* requires that a Contractor (i.e., the successful bidder/proposer for an Agreement) complete and properly execute this Certification Concerning Gifts at the same time that the Contractor executes the Agreement. If the Contractor fails to make the required certifications, the Contractor shall be disqualified for the Agreement.

I, \_\_\_\_\_, a duly authorized officer and/or representative  
of \_\_\_\_\_ (firm name)  
(the "Contractor"), being duly sworn, hereby depose and say that:

1. I am over eighteen (18) years of age and believe in the obligations of an oath; and
2. The Contractor has submitted a bid/proposal for the Independent Auditing Services Agreement (the "Agreement") to the Connecticut Resources Recovery Authority ("CRRA"), has been selected by CRRA as the successful bidder/proposer for the Agreement and is prepared to enter into the Agreement with CRRA; and
3. No gifts were made between July 2012 and the date of execution of the Agreement, by
  - (a) The Contractor,
  - (b) Any principals and key personnel of the Contractor who participated substantially in preparing the Contractor's bid/proposal for or the negotiation of the Agreement, or
  - (c) Any agent of the Contractor or principals and key personnel who participated substantially in preparing the Contractor's bid/proposal for or the negotiation of the Agreement

to

- (1) Any public official or employee of CRRA who participated substantially in the preparation of the bid/proposal solicitation for or the negotiation or award of the Agreement (such CRRA employees are listed in Table 2 below), or
- (2) Any public official or state employee of any state agency who has supervisory or appointing authority over CRRA (such public officials and state employees are listed in Table 3 below); and

Design, Installation, and Operation of Solar Generating Facilities  
At the Ellington, Shelton, and Waterbury Landfills  
Form of Agreement Exhibit L

4. No such principals and key personnel of the Contractor or agent of the Contractor or principals and key personnel knows of any action by Contractor to circumvent the prohibition on gifts by providing for any other principals and key personnel, official, employee or agent of the Contractor to provide a gift to any such public official or state employee; and
5. The Contractor made the bid/proposal for the Agreement without fraud or collusion with any person;
6. The information set forth herein is true, to the best of my knowledge and belief, subject to the penalties of false statement.

**TABLE 2: CRRA Substantial Participants in the Preparation of the Request for Bids/Proposals for the Agreement**

David Bodendorf, Senior Environmental Engineer
Roger Guzowski, Contract and Procurement Manager
Peter Egan, Director of Operations and Environmental Affairs
Thomas Kirk, President

**TABLE 3: Public Officials and State Employees of State Agencies Who Have Supervisory or Appointing Authority over CRRA**

Governor Dannel P. Malloy
Senator Donald E. Williams, Jr., President Pro Tempore of the Senate
Senator John McKinney, Minority Leader of the Senate
Representative Christopher G. Donovan, Speaker of the House of Representatives
Representative Lawrence F. Cafero, Jr., Minority Leader of the House of Representatives

Signature: \_\_\_\_\_

Name (type/print): \_\_\_\_\_

Title: \_\_\_\_\_

State Of: \_\_\_\_\_

County Of: \_\_\_\_\_

\_\_\_\_\_, being fully sworn, deposes and says that

he/she is the \_\_\_\_\_ (Title) of

\_\_\_\_\_, (Firm Name), the Contractor

herein, that he/she has read the foregoing statement concerning gifts, and, under the penalty of perjury, certifies that each and every part of said statement is true to his/her best knowledge and belief.

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20 12

\_\_\_\_\_  
Notary Public/Commissioner of the Superior Court

Design, Installation, and Operation of Solar Generating Facilities  
At the Ellington, Shelton, and Waterbury Landfills  
Form of Agreement Exhibit L

For the purposes of this Certification Concerning Gifts, the following terms are defined as follows:

"Gift" means anything of value, which is directly and personally received, unless consideration of equal or greater value is given in return. "Gift" shall **not** include:

- (1) A political contribution otherwise reported as required by law or a donation or payment as described in subdivision (9) or (10) of subsection (b) of section 9-333b of the *Connecticut General Statutes*;
- (2) Services provided by persons volunteering their time, if provided to aid or promote the success or defeat of any political party, any candidate or candidates for public office or the position of convention delegate or town committee member or any referendum question;
- (3) A commercially reasonable loan made on terms not more favorable than loans made in the ordinary course of business;
- (4) A gift received from (A) an individual's spouse, fiance or fiancée, (B) the parent, brother or sister of such spouse or such individual, or (C) the child of such individual or the spouse of such child;
- (5) Goods or services (A) which are provided to the state (i) for use on state property, or (ii) to support an event or the participation by a public official or state employee at an event, and (B) which facilitate state action or functions. As used in this Affidavit Concerning Gifts, "state property" means (i) property owned by the state, or (ii) property leased to an agency in the Executive or Judicial Department of the state;
- (6) A certificate, plaque or other ceremonial award costing less than one hundred dollars;
- (7) A rebate, discount or promotional item available to the general public;
- (8) Printed or recorded informational material germane to state action or functions;
- (9) Food or beverage or both, costing less than fifty dollars in the aggregate per recipient in a calendar year, and consumed on an occasion or occasions at which the person paying, directly or indirectly, for the food or beverage, or his representative, is in attendance;
- (10) Food or beverage or both, costing less than fifty dollars per person and consumed at a publicly noticed legislative reception to which all members of the General Assembly are invited and which is hosted not more than once in any calendar year by a lobbyist or business organization. For the purposes of such limit, (A) a reception hosted by a lobbyist who is an individual shall be deemed to have also been hosted by the business organization which he owns or is employed by, and (B) a reception hosted by a business organization shall be deemed to have also been hosted by all owners and employees of the business organization who are lobbyists. In making the calculation for the purposes of such fifty-dollar limit, the donor shall divide the amount spent on food and beverage by the number of persons whom the donor reasonably expects to attend the reception;
- (11) Food or beverage or both, costing less than fifty dollars per person and consumed at a publicly noticed reception to which all members of the

General Assembly from a region of the state are invited and which is hosted not more than once in any calendar year by a lobbyist or business organization. For the purposes of such limit, (A) a reception hosted by a lobbyist who is an individual shall be deemed to have also been hosted by the business organization which he owns or is employed by, and (B) a reception hosted by a business organization shall be deemed to have also been hosted by all owners and employees of the business organization who are lobbyists. In making the calculation for the purposes of such fifty-dollar limit, the donor shall divide the amount spent on food and beverage by the number of persons whom the donor reasonably expects to attend the reception. As used in this subdivision, "region of the state" means the established geographic service area of the organization hosting the reception;

- (12) Gifts costing less than one hundred dollars in the aggregate or food or beverage provided at a hospitality suite at a meeting or conference of an interstate legislative association, by a person who is not a registrant or is not doing business with the state of Connecticut;
- (13) Admission to a charitable or civic event, including food and beverage provided at such event, but excluding lodging or travel expenses, at which a public official or state employee participates in his official capacity, provided such admission is provided by the primary sponsoring entity;
- (14) Anything of value provided by an employer of (A) a public official, (B) a state employee, or (C) a spouse of a public official or state employee, to such official, employee or spouse, provided such benefits are customarily and ordinarily provided to others in similar circumstances; or
- (15) Anything having a value of not more than ten dollars, provided the aggregate value of all things provided by a donor to a recipient under this subdivision in any calendar year shall not exceed fifty dollars.

"Participated substantially" means participation that is direct, extensive and substantive, and not peripheral, clerical or ministerial.

"Principals and key personnel" means officers, directors, shareholders, members, partners and managerial employees.



**PRESIDENT'S CERTIFICATION  
CONCERNING GIFTS**

**DESIGN, INSTALLATION, AND OPERATION OF SOLAR GENERATING FACILITIES  
AT THE ELLINGTON, SHELTON, AND WATERBURY LANDFILLS**

**Awarded To**

**[NAME OF PROPOSER]**

(This CERTIFICATION is to be signed by the President of CRRA  
at the time the Agreement is executed by him/her.)

By submission of this Certification, the President of the Connecticut Resources Recovery Authority ("CRRA") hereby certifies that the selection of the most qualified or highest ranked person, firm or corporation for the Design, Installation, and Operation of Solar Generating Facilities At The Ellington, Shelton, And Waterbury Landfills was not the result of collusion, the giving of a gift or the promise of a gift, compensation, fraud or inappropriate influence from any person.

Signature: \_\_\_\_\_

Name: Thomas D. Kirk

Title: President

State Of: Connecticut

County Of: Hartford

Thomas D. Kirk, being fully sworn, deposes and says that he is the President of the Connecticut Resources Recovery Authority, that he has read the forgoing statement concerning collusion, the giving of gifts or the promise of gifts, compensation, fraud or inappropriate influence and, under the penalty of perjury, certifies that each and every part of said statement is true.

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 2012\_\_

\_\_\_\_\_  
Notary Public/Commissioner of the Superior Court