

Exhibit CS-BW-34

Docket 8302

Exhibit CS-ECOS-5

System Impact Study Agreement

SYSTEM IMPACT STUDY AGREEMENT

THIS SYSTEM IMPACT STUDY AGREEMENT (this "Agreement") is made and entered into this _____ day of _____, 20__ by and between **Ecos Energy (Chelsea Solar Project)**, ("Interconnection Requester"), and GREEN MOUNTAIN POWER CORPORATION ("GMP"), a corporation existing under the laws of the State of Vermont. Interconnection Requester and GMP each may be referred to as a "Party" or collectively as the "Parties".

RECITALS:

WHEREAS, Interconnection Requester is proposing to develop a **2 MW Solar** electric generation project to be located in **Bennington**, Vermont (the "Generating Resource" or "Project") that will interconnect with the existing electric system of GMP; and

WHEREAS, Interconnection Requester will need a Certificate of Public Good ("CPG") under 30 V.S. A. § 248 or 30 V.S.A. § 219 for the Project and obtaining such CPG will require that the Interconnection Requester prove that the Project will not adversely affect the safety, reliability, and stability of GMP's electric system or any electric system that is either directly or indirectly connected to GMP's electric system; and

WHEREAS, in order to assess any negative impacts the proposed Project may have on the electric systems, Interconnection Requester has requested that GMP perform a System Impact Study on three interconnection scenarios:

- Modification of existing Mill Street MS50 circuit,
- Installation of dedicated or express circuit between the point of interconnection and closest substation, and
- Interconnection to existing 46kV transmission circuit near the point on interconnection ; and

WHEREAS, the Parties desire to enter into a voluntary arrangement pursuant to Public Service Board (the "Board" or "PSB") Rule 5.503(B) that sets forth the procedures pursuant to which they will proceed to conduct the study described herein and have agreed to utilize terms and conditions that may be different from the arrangements contemplated under PSB Rule 5.500; and

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

1.0 Interconnection Requester requests and GMP shall cause to be performed a System Impact Study which shall evaluate the impact of the interconnected operation of the proposed Project on the safety, reliability, and stability of the Electric System. As further discussed in Section 4.0 hereof, the System Impact Study will consider the following data on the date the System Impact Study is commenced:

- (a) the base power flow data bases and contingency lists which shall include all

generation, transmission, and distribution projects proposed for the Electric System for which an expansion plan has been submitted and approved by the applicable authority; and

- (b) all generating facilities that (i) are directly interconnected to the Electric System of GMP or an Affected System (as defined in Board Rule 5.500), (ii) have a higher-queued, pending Interconnection Request to interconnect with the Electric System of GMP or an Affected System, or (iii) have executed an Interconnection and Operating Agreement or requested that an unexecuted Interconnection and Operating Agreement be filed with the Federal Energy Regulatory Commission or the Vermont Public Service Board.

The System Impact Study will consist of a short circuit analysis, a power flow analysis and, if deemed necessary, a stability analysis. The System Impact Study Report will state the assumptions upon which it is based, state the results of the analysis, and provide the requirements for or potential impediments to interconnecting the Project with the Electric System including a preliminary, non-binding, good faith estimate of the facilities, their cost and length of time to complete construction.

- 2.0 The scope of the System Impact Study shall, at all times, be subject to any and all assumptions set forth in the completed Board Rule 5.500 application(s) provided by Interconnection Requester and in the Fast Track (as defined in Board Rule 5.500) analysis completed by GMP (the "Fast Track Analysis"). Said application shall be deemed to be a part of this Agreement.
- 3.0 The System Impact Study will be based upon the technical information provided by the Interconnection Requester or their designated agents. GMP reserves the right to request additional technical information from the Interconnection Requester as may reasonably become necessary consistent with Good Utility Practice during the course of the performance of the System Impact Study. If the Interconnection Requester modifies its designated Point of Interconnection or the technical information provided by the Interconnection Requester is modified or requires updating, the time and/or cost to complete the System Impact Study, including a stability analysis described below, and subsequent Facilities Study described below, may be extended and/or increased, respectively, if warranted, or completely redone if having already been completed. Increased or additional costs will be paid for by the Interconnection Requester in accordance with the terms and conditions of Sections 5.0 and 9.0 herein.
- 4.0 The System Impact Study Report shall provide the following information, as appropriate:
 - (a) Identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
 - (b) Identification of any thermal overload or voltage limit violations resulting from the interconnection;
 - (c) If a stability analysis is warranted, identification of any instability or inadequately damped response to system disturbances resulting from the interconnection; and

- (d) Description and preliminary, non-binding, good faith estimate of the cost and time of construction for facilities required to: (i) remove adverse impacts on the Electric System of any short circuit, instability, and power flow issues identified in the System Impact Study Report and (ii) interconnect the Project to the Electric System.

5.0 GMP's good faith estimated cost for performance of the System Impact Study is \$37,500, not including a stability analysis. GMP's good faith estimate for the date of completion of the System Impact Study is 60 business days (barring unusual circumstances outside of GMP's control) after both parties have signed this document and a deposit equal to the estimated costs of the study has been received by GMP. Interconnection Requester shall pay GMP the actual cost for performance of the System Impact Study. The actual costs shall include, but are not limited to, salaries, salary overheads, and out-of-pocket costs incurred by GMP including costs billed by other entities for studies or portions thereof which GMP does not itself perform. GMP shall not include the cost of existing studies or models, but shall include costs for new studies and any modifications to the models needed to analyze the impact of the Project itself. Prior to starting the System Impact Study, Interconnection Requester shall prepay the System Impact Study cost estimated above, and any difference between the prepayment and the actual cost for performance of the System Impact Study shall be paid by the Interconnection Requester or refunded to the Interconnection Requester, as appropriate. Within a commercially reasonable time after completion of the System Impact Study, but no later than forty-five (45) business days of submittal of the System Impact Study Report, GMP shall submit to the Interconnection Requester an invoice with reasonable detail itemizing the actual cost, with a refund if appropriate or the additional amount to be paid by the Interconnection Requester. Interconnection Requester agrees to pay any such amount, without interest, within forty-five (45) business days of receipt of such invoice. Any refund due the Interconnection Requester will be refunded, without interest, within forty-five (45) business days of the true-up of actual costs for the completion of the System Impact Study Report. Interconnecting Utility shall, prior to exceeding a previously-provided cost estimate, promptly notify the Interconnection Requester if study costs are likely to materially exceed the previously-provided estimate and shall provide the Interconnection Requester with a revised total estimated cost for the study. Interconnecting Utility shall proceed with completing the study unless and until requested to cease processing the Application by the Interconnection Requester, in which case the Interconnection Requester shall be responsible for all study costs incurred to date and the Application shall be deemed withdrawn. GMP reserves the right to request an amendment to this Agreement should the expected cost to complete all studies significantly exceed the agreed upon estimates.

- 5.0.1 If there are changes to the Electric System, including but not limited to loading, that occur before the execution of an Interconnection Agreement that would cause the results of the System Impact Study, including any stability analysis, to be inaccurate, the System Impact Study, including any stability analysis, and Facilities Study, if undertaken or completed, shall be updated at the option of the Interconnection Requester. If the Interconnection Requester elects not to update the System Impact Study, including any stability analysis, and Facilities Study,

then GMP may inform the Board that GMP can no longer affirm that the Project meets the requirements of 30 V.S.A. § 248(b)(3) or 30 V.S.A. § 219. If the Interconnection Requester elects to update the System Impact Study, including any stability analysis, and the Facilities Study, the Interconnection Requester shall prepay the estimated cost of such updates and the terms and conditions of Sections 5.0 and 10.0 shall apply. GMP shall make a good faith effort to include all known or reasonably foreseeable changes to the Electric System in the model and in its System Impact Study, including any stability analysis, and Facilities Study, so as to minimize the necessity for further updating the System Impact Study, including any stability analysis, and Facilities Study.

- 5.0.2 If GMP deems that a stability analysis is necessary, GMP shall inform the Interconnection Requester of such necessity, the estimated cost and time of completion of such stability analysis. If the Interconnection Requester elects not to cause GMP to undertake a stability analysis, then GMP may inform the Public Service Board that GMP can no longer affirm that the Project meets the requirements of 30 V.S.A. § 248(b)(3) or 30 V.S.A. § 219. If the Interconnection Requester elects to proceed with the Project, then the Interconnection Requester shall prepay the estimated cost of the stability analysis, of which the terms and conditions of Section 5.0 shall apply, and GMP shall cause to be performed a stability analysis.
- 6.0 If, after the System Impact Study is completed, it is determined that a Facilities Study is required and the Interconnection Requester elects to proceed with the Project, then the Interconnection Requester and GMP shall enter into an agreement for the performance of a Facilities Study.
- 7.0 Confidentiality and non-disclosure. The Parties acknowledge that during the course of this Agreement it will be necessary or desirable for the Parties to disclose information that they consider confidential or proprietary. To protect the confidentiality of each Party's information, the Parties shall execute a Nondisclosure Agreement and shall be bound by its terms and conditions.
- 8.0 Representations. Interconnection Requester acknowledges that the information provided to GMP will be relied upon for services provided herein, and agrees that, to the extent the information provided to GMP is not accurate or not complete, the services performed by GMP may not be accurate or may not be complete. Furthermore, GMP's representations encompass its Electric System only, and not the Project of the Interconnection Requester.
- 9.0 Standard of Performance. GMP shall perform its obligations under this Agreement in accordance with Good Utility Practice.
- 10.0 Indemnification. To the fullest extent permitted by law, the Interconnection Requester shall hold harmless, defend (as directed) and indemnify GMP, its directors, officers, employees, agents, invites, affiliates, subsidiaries, contractors, successors and assigns of, from and against any and all claims, liabilities, penalties, forfeitures, suits, settlements, judgments, awards, and the costs and expenses incident thereto (including the cost of defense, investigation, appeal and reasonable attorney's fees), for any and all loss,

violation, damage, or injury to person or property of whatever type or nature which shall be caused by, arise out of, the provision of services hereunder except that the Interconnection Requester shall not be obligated to provide indemnification for any losses that are caused by the willful misconduct, gross negligence, or breach of this Agreement by GMP.

- 11.0 Miscellaneous. This Agreement shall inure to the benefit of and shall bind the successors of the Parties but shall not be assignable without the written consent of the Parties. In the event that any one of the provisions contained in this Agreement should be found to be invalid, illegal or unenforceable in any respect by a court of competent jurisdiction, the validity, legality or enforceability of the remaining provisions contained in this Agreement shall not in any way be affected or impaired by such a finding. No waiver of any provisions of this Agreement shall be valid unless the same is in writing and signed by the Party against whom such waiver is sought to be enforced. A waiver or consent given by either Party on any one occasion is effective only in that instance and will not be construed as a bar to or waiver of any right on any other occasion. This Agreement contains the entire agreement of the Parties, supersedes any and all prior agreements, written or oral, between them relating to the subject matter hereof, and may not be amended unless agreed to in writing by each Party. This Agreement shall be governed by and interpreted in accordance with the laws of the State of Vermont (without regard to its conflict of laws provisions). This Agreement has been entered into for the benefit of the Parties and nothing in this Agreement nor any action taken hereunder shall be construed or interpreted to create any obligation, duty, liability or standard of care or rights to any person not a Party to this 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.

**GREEN MOUNTAIN POWER
CORPORATION**

By: Kim L Jones
Authorized Signature
Name: Kim L Jones
Title: Manager T+D Planning

Date: Aug 8, 2013

Address:
2152 Post Road
Rutland, VT 05701
Attn: _____

INTERCONNECTION REQUESTER

By: Timothy H. Young
Authorized Signature
Name: TIMOTHY H. YOUNG
Title: NICE PRESIDENT

Date: JULY 24, 2013

Address:
222 SOUTH 8TH ST. SUITE 1600
MINNEAPOLIS, MN 55402