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April 6, 2018

Ms. Kavita Kale, Executive Secretary Michigan Public Service Commission 7109 W. Saginaw Hwy. Lansing, MI 48917

#### RE: MPSC Docket No. U-20151

Dear Ms. Kale:

Attached for filing in the above-referenced matter, please find the Complaint of Cypress Creek Renewables, LLC with the public version of attachments. Please be advised that the confidential attachments are being hand-delivered today for filing under seal.

If you have any questions with regard to the attached, please do not hesitate to contact me.

Very truly yours,

Fraser Trebilcock Davis & Dunlap, P.C.

Jennifer Ilte Hestor

Jennifer Utter Heston

JUH/ab Attachments

#### **STATE OF MICHIGAN**

#### **BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

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In the matter of the complaint of CYPRESS CREEK RENEWABLES, LLC against DTE ELECTRIC COMPANY for unjust, unreasonable and improper generation interconnection rates, charges and practices.

Case No. U-20151

#### COMPLAINT OF CYPRESS CREEK RENEWABLES, LLC

**NOW COMES** Cypress Creek Renewables, LLC ("Cypress Creek"), by and through its attorneys, Fraser, Trebilcock, Davis & Dunlap, P.C., and pursuant to Rule 439 of the Rules of Practice and Procedure before the Michigan Public Service Commission ("Commission"), R 792.10439 *et seq.*, hereby files this formal complaint against DTE Electric Company ("DTE") for unjust, inaccurate, and improper rates and charges and for unlawful and unreasonable acts and practices in the above-entitled action. This action is necessitated by DTE's ongoing and extensive violations of the Commission's Electric Interconnection and Net Metering Standards, R 460.601a *et seq.*, MCL 460.10e, and the Public Utility Regulatory Policies Act of 1978, Pub L No 95-617, 92 Stat 3117, 16 USC § 2601 *et seq.*, ("PURPA"), the effect of which is to impede the development of independent power production in DTE's service area. DTE's conduct thwarts the goals of PURPA and Michigan's energy policies. DTE's unlawful and unreasonable conduct should not be tolerated. In support of this complaint, Cypress Creek states as follows:

#### I. <u>PARTIES AND JURISDICTION</u>

1. Cypress Creek is a limited liability company whose principal place of business is at 3250 Ocean Park Blvd, Santa Monica, California 90405. Cypress Creek has extensive

experience developing and building solar sites throughout the United States. With more than 2.25 gigawatts of solar energy developed in more than a dozen states, Cypress Creek is one of the country's leading solar companies. Cypress Creek is committed to growing Michigan's energy infrastructure and solar workforce through a planned investment in the state of more than \$3 billion in low-cost, solar energy. Cypress Creek, through its affiliates, has approximately 775 MW of solar capacity under development in DTE's service area.

2. DTE is a public corporation organized under the laws of the State of Michigan, with its principal offices located at One Energy Plaza, Detroit, Michigan 48226. DTE is primarily engaged in public utility operations in Michigan. DTE provides electric service to the public in service areas located in Southeast Michigan, including the counties of Huron, Ingham, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, St. Clair, Sanilac, Tuscola, Washtenaw, and Wayne.

3. DTE's electric business in Michigan is subject to the Commission's jurisdiction pursuant to various provisions of 1909 PA 106, as amended, MCL 460.551 *et seq.*, 1919 PA 419, as amended, MCL 460.51 *et seq.*, 1939 PA 3, as amended, MCL 460.1, *et seq.*, 2000 PA 141, as amended, MCL 460.10, *et seq.*, and 2008 PA 295, as amended, MCL 460.1001, *et seq.* Under these statutory provisions, the Commission has the power and jurisdiction to regulate DTE's electric rates, terms and conditions of service in Michigan.

4. The Commission has jurisdiction over generation interconnections with Michigan's electric utilities. The Commission promulgated its Electric Interconnection and Net Metering Standards, R 460.601a *et seq.*, by authority conferred to the Commission by Section 6 of 1909 PA 106, MCL 460.556; Section 5 of 1919 PA 419, MCL 460.55; Sections 4, 6 and

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10e of 1939 PA 2, MCL 460.4, 460.6 and 460.10e, and Section 173 of 2008 PA 295, MCL 460.1173.

5. Pursuant to PURPA, the Michigan Legislature empowered the Commission to address the requirements under PURPA. See, e.g. MCL 460.6j, 460.6o, and 460.6v.

## II. <u>STATEMENT OF FACTS</u>

6. Congress enacted PURPA to achieve three primary goals: 1) to provide for increased energy conservation, increased efficiency in the use of facilities and resources by electric utilities, and equitable retail rates for electric customers; 2) to improve the wholesale distribution of electricity and the reliability of electric service; and 3) to provide for the greater use of domestic energy and renewable energy. 16 U.S.C. § 2601.

7. Among other things, PURPA encourages the creation of a market for power from non-utility generators by requiring utilities to buy power from certain qualifying facilities ("QFs") based on the utility's avoided costs. 18 CFR 292.303(a). PURPA's "must purchase" obligation applies to all electricity utilities, including DTE, unless the Federal Energy Regulatory Commission ("FERC") grants a waiver.<sup>1</sup>

8. Under PURPA, QFs have the right to to interconnect with the host utility. 18 CFR 292.303(c). The PURPA interconnection obligation requires each host electric utility, including DTE, to permit the QF to interconnect with its system provided the QF pays the utility an interconnection fee which is assessed on a non-discriminatory basis with respect to other customers with similar load characteristics. 18 CFR 292.306(a).

<sup>&</sup>lt;sup>1</sup> FERC granted DTE's request to terminate its obligation to enter into new power purchase obligations or contracts to purchase electric energy and capacity from QFs with a net capacity greater than 20 MW effective October 26, 2009. FERC Docket No. QM10-2-000 *et al.*, 131 FERC ¶ 61,039 (April 15, 2010).

9. Michigan's own energy policies promote local energy resources and encourage private investment in renewable energy. When passing Michigan's Clean and Renewable Energy and Energy Waste Reduction Act, 2017 PA 342, MCL 460.1001 *et seq.*, the Legislature made very clear the purpose of the Act. In MCL 460.1001(1)(2), the Legislature stated the following:

(2) The purpose of this act is to promote the development and use of clean and renewable energy resources and the reduction of energy waste through programs that will cost-effectively do all of the following:

(a) Diversify the resources used to reliably meet the energy needs of consumers in this state.

(b) Provide greater energy security through the use of indigenous energy resources available within the state.

(c) Encourage private investment in renewable energy and energy waste reduction.

(d) Coordinate with federal regulations to provide improved air quality and other benefits to energy consumers and citizens of this state.

(e) Remove unnecessary burdens on the appropriate use of solid waste as a clean energy source.

10. Thus, as determined by the Legislature, the public has an interest in increased

renewable energy development in the State and in promoting private investment in a diversity

of indigenous renewable energy and energy waste reduction resources.

11. Further, the law of the State of Michigan requires electric utilities to ensure that

merchant plants are connected to the transmission and distribution systems within their operational control.<sup>2</sup> When passing Michigan's Customer Choice and Electricity Reliability Act, 2000 PA 141, MCL 460.10 *et seq.*, the Legislature mandated certain generator

<sup>&</sup>lt;sup>2</sup> For purposes of Public Act 141 of 2000, a "'Merchant plant' means electric generating equipment and associated facilities with a capacity of more than 100 kilowatts located in this state that are not owned and operated by an electric utility." MCL 460.10g(1)(e).

interconnections and promulgated significant penalties for violations. MCL 460.10e states, in

total, the following:

(1) An electric utility shall take all necessary steps to ensure that merchant plants are connected to the transmission and distribution systems within their operational control. If the commission finds, after notice and hearing, that an electric utility has prevented or unduly delayed the ability of the plant to connect to the facilities of the utility, the commission shall order remedies designed to make whole the merchant plant, including, but not limited to, reasonable attorney fees. The commission may also order fines of not more than \$50,000.00 per day that the electric utility is in violation of this subsection.

(2) A merchant plant may sell its capacity to alternative electric suppliers, electric utilities, municipal electric utilities, retail customers, or other persons. A merchant plant making sales to retail customers is an alternative electric supplier and shall obtain a license under section 10a(2).

(3) The commission shall establish standards for the interconnection of merchant plants with the transmission and distribution systems of electric utilities. The standards shall not require an electric utility to interconnect with generating facilities with a capacity of less than 100 kilowatts for parallel operations. The standards shall be consistent with generally accepted industry practices and guidelines and shall be established to ensure the reliability of electric service and the safety of customers, utility employees, and the general public. The merchant plant will be responsible for all costs associated with the interconnection unless the commission has otherwise allocated the costs and provided for cost recovery.

(4) This section does not apply to interconnections or transactions that are subject to the jurisdiction of the federal energy regulatory commission.

12. Cypress Creek submitted its first two generator interconnection applications to

DTE on June 6, 2017. Between June 6, 2017 and March 6, 2018, Cypress Creek submitted through its affiliates a total of 141 generator interconnection applications to DTE totaling 775.5 MW of new solar generation capacity. A complete listing of Cypress Creek's generator

interconnection applications submitted to DTE through March 6, 2018 is attached as Attachment A.

13. Attachment A shows the status of each Cypress Creek generator interconnection application as of the date of filing this complaint. For each project, Attachment A reflects the following:

- a. DTE's interconnection application number
- b. The project name
- c. The size of the project
- d. The date the application was submitted by Cypress Creek and the date received by DTE
- e. The date DTE should have determined whether the application was complete
- f. The date DTE originally notified Cypress Creek whether the interconnection application was complete
- g. The date DTE reclassified complete applications as incomplete
- h. The date DTE should have completed its application review and notified the applicant of the results
- i. The date DTE notified Cypress Creek that DTE completed its application review
- j. Whether an engineering study is required, as determined by DTE
- k. If an engineering study was necessary, then DTE's engineering review charges

- 1. The date Cypress Creek notified DTE in writing to proceed with the engineering review
- m. The date Cypress Creek remitted payment to DTE for the engineering review
- n. The date DTE should have completed its engineering review
- o. The date DTE notified Cypress Creek the results of the engineering review.

14. Of the 141 applications submitted to DTE, Attachment A shows that DTE failed to provide notice to Cypress Creek that its application was complete within 10 working days for at least 111 applications.

15. On July 13, 2017, Cypress Creek contacted DTE to request preliminary technical information concerning its pending interconnection requests. See, Attachment B. For pending interconnection requests, Cypress Creek requested that DTE provide basic information related to the proposed interconnection, such as substation name and capacity; feeder name, voltage, and capacity; distance from point of interconnection to substation, etc. Such information is helpful to developers in assessing early in the interconnection process which interconnections are most viable and is routinely provided by other utilities, both in Michigan and in other markets. Culling less viable projects from the total number of proposed projects reduces the interconnection burden on utilities and reduces interconnection costs for developers. DTE did not provide any of the requested information.

16. On August 25, 2017, Cypress Creek refreshed its request for preliminary technical information concerning its pending interconnection requests. See, Attachment C. Again, DTE did not provide the requested information. 17. On September 29, 2017, Cypress Creek notified DTE to proceed with the engineering review of the first 10 projects, provided executed engineering review agreements, and remitted payment of the required fees. See, Attachment D.

18. On October 5, 2017, DTE contacted Cypress Creek and requested that Cypress Creek execute new, revised engineering agreements. See, Attachment E.

19. On November 1, 2017, DTE notified Cypress Creek that it had completed its application review with respect to all of Cypress Creek's interconnection applications pending at the time. See, Attachment F. As of November 1, 2017, Cypress Creek had submitted 93 interconnection applications.

20. With respect to those 93 projects, DTE determined that all 93 of the projects required an engineering review. DTE advised Cypress Creek that it would "grandfather" the first 10 projects and charge them only \$2,500 each for the engineering review. With respect to the remaining 83 projects, DTE informed Cypress Creek that it would be required to pay engineering review deposits of \$20,000 for projects greater than 550 kW but less than or equal to 2 MW, and deposits of \$30,000 for projects greater than 2 MW.

21. On November 15, 2017, Cypress Creek inquired about the status of the first 10 engineering reviews. See, Attachment G.

22. On December 6, 2017, Cypress Creek again requested that DTE provide preliminary technical information for certain of Cypress Creek's projects. See, Attachment H. Once again, DTE failed to provide the requested information.

23. On December 22, 2017, DTE provided four Affected System Notices with respect to the initial engineering reviews, but no technical details to support the notices. See, Attachment I. Each Affected System Notice indicates that DTE has determined that the Cypress

Creek project in question had an affected system condition present and that an Affected System Study would be required from International Transmission Company ("ITC"). The notices indicated that Cypress Creek would be responsible for the study and for facilitating its completion with ITC.

24. On December 22, 2017, Cypress Creek inquired about the status of the remaining engineering reviews. See, Attachment J.

25. On January 9, 2018, DTE provided five more Affected System Notices on the initial engineering reviews, but, again, no technical detail to support the notices. See, Attachment K.

26. On January 12, 2018, Cypress Creek again requested preliminary technical information for 10 of its projects. Still DTE refused to provide the requested information. See, Attachment L.

27. On January 16, 2018, Cypress Creek, which had not received Affected System Notices from Consumers Energy for similarly situated projects, requested information from DTE as to what triggered the Affected System Notices for nine out of the ten engineering reviews in progress. In a response dated January 18, 2018, DTE indicated that it would not release system information to developers. See, Attachment M.

28. On January 19, 2018, Cypress Creek met with representatives from DTE at the offices of the Michigan Public Service Commission to discuss Cypress Creek's concerns with DTE's interconnection processes. The meeting did not result in resolution of any of the problems Cypress Creek has been experiencing with DTE's interconnection process.

29. On January 30, 2018, DTE notified Cypress Creek that one of the projects for which DTE previously issued an Affected System Notice does not, in fact, create an affected system condition. See, Attachment N.

30. After meeting with ITC, in an e-mail dated January 31, 2018, Cypress Creek notified DTE that ITC had no outstanding concerns regarding the projects for which DTE had issued Affected System Notices. See, Attachment O.

31. In an e-mail dated February 5, 2018 (See, Attachment P), DTE notified Cypress Creek that engineering review costs for 9 out of 10 projects would no longer be the previously conveyed \$2,500 per study, but would be as follows:

Project Name	<b>Application Number</b>	Study Cost
Howe	DE17129 (DE02164)	\$32,295.00
Greenwood	DE-02391	\$32,610.00
Koylette	DE-02394	\$32,485.00
Jeddo	DE-02433	\$30,602.00
Haven Ridge	DE-02460	\$32,080.00
Yost	DE-02475	\$31,592.00
Glasgow	DE-02506	\$30,960.00
Mattison	DE-02507	\$31,492.00
Butler	DE-02533	\$30,745.00

32. In a responsive e-mail dated February 5, 2018, Cypress Creek requested an itemized breakdown of the alleged engineering review costs. Cypress Creek questioned the level of DTE's engineering review costs, but DTE refused to provide any cost detail in support of the engineering review charges. See, Attachment P.

33. DTE's revised engineering review charges are not consistent with and are significantly higher than engineering study charges assessed by other utilities.

34. DTE refused to provide Cypress Creek with the results of the engineering reviews unless and until Cypress Creek remitted payment for the revised charges. See, Attachment P.

35. On February 8, 2018, Cypress Creek remitted payment under protest to DTE in the amount of \$30,110 for the DE 02391 (Greenwood) engineering study report. When combined with a previous \$2,500 payment, Cypress Creek remitted a total payment of \$32,610 to DTE for the engineering review. See, Attachment P.

36. On February 16, 2018, DTE provided a copy of the Greenwood engineering study report. A copy of the report is attached at Attachment Q.

37. On February 22, 2018, Cypress Creek remitted payment to DTE in the amount of \$28,460 for the DE 02506 (Glasgow) engineering review study report. When combined with a previous \$2,500 payment, Cypress Creek remitted a total payment of \$30,960 to DTE for the engineering review. See, Attachment R.

 On February 27, 2018, DTE provided a copy of the Glasgow engineering study report. See, Attachment S.

39. On February 28, 2018, during a telephone conference between Cypress Creek and DTE to discuss the results of the Greenwood and Glasgow engineering studies, DTE indicated for the first time that the engineering results were preliminary and not complete engineering reviews. DTE advised Cypress Creek that additional funds would be required to complete additional aspects of DTE engineering review.

40. On March 1, 2018, 87 of Cypress Creek's interconnection applications previously marked as complete were reclassified by DTE as incomplete.

41. As of the date of the filing of this complaint, out of the 141 interconnection applications submitted to DTE over the course of 9 months (June 2017 to March 2018), only 9 projects have made it to the engineering review phase of the interconnection process.

42. While making little progress on Cypress Creek's interconnection applications, DTE continues to seek approval to build its own new generation projects.

43. On June 30, 2017, DTE filed a Notice of Intent to File an Application for Approval of Certificates of Necessity ("CON") in MPSC Case No. U-18419 seeking authorization under MCL 460.6s for the addition of a 1,100 MW natural gas combined cycle generating facility to DTE's generating fleet.

44. On July 31, 2017, DTE filed its CON application. Paragraph 6 of DTE's application in MPSC Case No. U-18419 states the following:

Accompanying this Application designated as Exhibit A-4 is DTE Electric's 2017 IRP report and supporting testimony and exhibits, which comply with the above statutory and Commission Order The 2017 IRP report and supporting materials requirements. represent the results of extensive analysis of the capacity and energy needs of DTE Electric's customers over 23 years from 2017 through 2040, and evaluation of this most reasonable and prudent combination of resources to meet those need under an array of future scenarios and sensitivities. The results of this analysis show a substantial capacity and energy supply need beginning in 2022, primarily caused by the Company' projected retirements of River Rouge, St. Clair, and Trenton Channel power plants from 2020 to 2023. Due to the load and resource analysis indicating a significant gap between DTE Electric's demand and resources, it is prudent to plan to cover this shortfall. The retirement of these power plants will reduce the available installed capacity of DTE Electric's electrical supply resources, thereby resulting in a significant shortfall of electric generating capacity to meet electric load and reserves required by the Midcontinent Independent System Operator (MISO). (emphasis added)

45. While concurrently seeking approval of an 1,100 MW gas-fired generation

facility in MPSC Case No. U-18419 to fulfill DTE's projected capacity and energy need, on or

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about December 21, 2017, DTE sent Cypress Creek a notice stating that DTE does not have a need for any additional generating capacity, and, therefore, would not be purchasing capacity from QF projects at DTE's full avoided cost. A copy of DTE's notice is attached as Attachment T.

46. On February 16, 2018, DTE's representative, Mr. Timothy Bloch, appeared for cross-examination in DTE's CON case, MPSC Case No. U-18419, wherein DTE is seeking approval for an 1,100 MW natural gas plant. During cross-examination DTE's witness testified as follows:

- Q So if the Company asserts that it has no forecasted capacity need, its position is it need not pay capacity to QF projects?
- A Yes, that would be a fair characterization. We would continue our obligation to purchase from these QFs for energy, but if we have no need for capacity, we would not be paying for capacity is our position.<sup>3</sup>
- Q O.K. So with your previous understanding about when the Company makes capacity payments to QFs, this indicates that the Company would not consider itself obligated to make a capacity payment to a PURPA QF; is that correct?
- A At this point in time?
- Q Yes.

. . .

A That's - - that would be my understanding, yes.<sup>4</sup>

47. After sending its notice to QFs indicating that DTE does not have a capacity need and DTE's witness testifying that DTE does not consider itself obligated to make a capacity payment to QFs at this time, on March 5, 2018, DTE filed an application in MPSC

<sup>&</sup>lt;sup>3</sup> 8 Tr. 2380, ln 16-22, MPSC Case No. U-18419.

<sup>&</sup>lt;sup>4</sup> 8 Tr. 2382, ln. 24 – 2383, ln. 5, MPSC Case No. U-18419.

Case No. U-18111 requesting approval of a 168 MW Polaris Wind Park build and transfer contract.

48. On March 29, 2018, DTE filed its latest renewable energy plan in MPSC Case No. U-18232 wherein DTE requests authorization to proceed with approximately 1000 MW in new renewable capacity.

49. On information and belief, Cypress Creek alleges that DTE's unlawful and unreasonable acts and omissions with respect to Cypress Creek's efforts to advance its projects through DTE's interconnection process are part of a conscious attempt by DTE to frustrate QF development in its service territory so that DTE can meet its capacity needs through selfdeveloped projects, all in violation of state and federal law.

#### III. <u>CLAIM 1 – UNTIMELY COMPLETENESS REVIEW</u>

50. Rule 20 of the Commission's Electric Interconnection and Net Metering Standards, R. 460.620, prescribes the application and interconnection process for new generator interconnections.

51. Subsection (4) of Rule 20 states, "Within 10 working days of receiving a new or revised interconnection application, the electric utility shall notify the applicant whether the interconnection application is complete. If the application is incomplete, the electric utility shall advise the applicant of the deficiency." R. 460.620(4).

52. Between June 2017 and March 2018, Cypress Creek submitted 141 generator interconnection applications with DTE.

53. As reflected on Attachment A, DTE failed to provide Cypress Creek with the required notice that its applications were complete within 10 workings days with respect to at least 111 of those applications.

54. DTE failed to process at least 111 of Cypress Creek's interconnection applications within the requisite time frame resulting in at least 111 violations of the R. 460.620(4) of the Commission's Electric Interconnection and Net Metering Standards.

55. DTE's continued violation of R. 460.620(4) in the future will adversely affect the project development efforts of Cypress Creek and other renewable energy developers.

## IV. <u>CLAIM 2 – UNTIMELY AND UNJUSTIFIED REVERSAL OF</u> <u>COMPLETENESS DETERMINATIONS</u>

56. Subsection (4) of Rule 20 states, "Within 10 working days of receiving a new or revised interconnection application, the electric utility shall notify the applicant whether the interconnection application is complete. If the application is incomplete, the electric utility shall advise the applicant of the deficiency." R. 460.620(4).

57. On March 1, 2018, 70 of Cypress Creek's applications filed between August 17, 2017 and February 23, 2018 and previously indicated to be complete were spontaneously marked as incomplete in PowerClerk, DTE's interconnection tracking portal, well beyond the 10 working days in which DTE is to determine whether an application is complete.

58. DTE's failed to process 70 of Cypress Creek's interconnection applications within the requisite time frame resulting in 70 violations of the R. 460.620(4) of the Commission's Electric Interconnection and Net Metering Standards. Moreover, DTE has provided no justification of its reversal of the prior completeness determinations and Cypress Creek contends that there was and is none.

59. DTE's future unjustified reversal of prior completeness determination will violate R. 460.620(4) and adversely affect the project development efforts of Cypress Creek and other renewable energy developers.

## V. <u>CLAIM 3 – UNTIMELY APPLICATION REVIEW</u>

60. Subsection (5) of Rule 20 of the Commission's Electric Interconnection and Net

Metering Standards, R. 460.620(5), governs the time available for DTE to conduct its review

of an interconnection application.

61. Subsection (5) of Rule 20 states, as follows:

Within 10 working days of determining that an application is complete, the electric utility shall complete its application review. For category 1 projects or if the application review shows that an engineering review is not required, the interconnection process shall proceed to subrule (11) of this rule. If the electric utility determines that an engineering review is required, it shall notify the applicant of the need for and cost of that review except for projects that are exempt for engineering review costs under R 460.618. An applicant shall have 6 months in which to request, in writing, that the utility proceed with an engineering review at the cost indicated. The applicant shall provide any changes or updates to the application before the engineering review begins.

Thus, within 10 working days of determining an application is complete, the utility must complete its review of the interconnection application and, if an engineering review is required, it must notify the applicant of the need for and cost of that review unless exempted.

62. Thus, if an interconnection is complete when filed, DTE has 20 working days to determine if an engineering review is needed and notify the applicant. DTE has 10 working days to notify the applicant that the application is complete under R. 460.620(4) and 10 working days to complete its review to determine if an engineering study is needed and, if so, notify the applicant, under R 460.620(5), for a total of 20 working days.

63. As reflected on Attachment A, DTE failed to complete its application review of 111 of Cypress Creek's interconnection applications within 10 working days of determining that the application is complete. 64. DTE's failed to process 111 of Cypress Creek's interconnection applications within the requisite time frame resulting in 111 violations of the R. 460.620(5) of the Commission's Electric Interconnection and Net Metering Standards.

65. DTE's continued violation of R. 460.620(5) in the future will adversely affect the project development efforts of Cypress Creek and other renewable energy developers.

## VI. <u>CLAIM 4 – UNTIMELY COMPLETION OF CATEGORY 4 ENGINEERING</u> <u>REVIEW</u>

66. Subsection (6) of Rule 20 of the Commission's Electric Interconnection and Net Metering Standards, R. 460.620(6), governs the time period available to the utility to complete an engineering review for new generator interconnections.

67. For Category 4 projects, DTE must complete its engineering review and notify the applicant of the results with 25 working days of receiving the applicant's written notification to proceed with the engineering review and applicable payment. R 460.620(6)(c).

68. On September 29, 2017, Cypress Creek notified DTE of its decision to proceed with the engineering reviews for 10 interconnection applications and sent payments in the agreed upon amount of \$2,500 for each engineering review the same day. DTE received the payments for the initial 10 engineering reviews on October 3, 2017.

69. The 10 interconnection applications for which Cypress Creek instructed DTE to proceed with the engineering review at the \$2,500 cost DTE indicated are, as follows:

<b>Project Name</b>	<b>Application Number</b>
Howe	DE17129 (DE02164)
Greenwood	DE-02391
Koylette	DE-02394
Jeddo	DE-02433
Telegraph	DE-02439
Haven Ridge	DE-02460
Yost	DE-02475
Glasgow	DE-02506
Mattison	DE-02507
Butler	DE-02533

70. On February 5, 2018, DTE notified Cypress Creek that the engineering reviews

for 9 of the projects would no longer be \$2,500, but, instead, would be, as follows:

Project Name	<b>Application Number</b>	Study Cost
Howe	DE17129 (DE02164)	\$32,295.00
Greenwood	DE-02391	\$32,610.00
Koylette	DE-02394	\$32,485.00
Jeddo	DE-02433	\$30,602.00
Haven Ridge	DE-02460	\$32,080.00
Yost	DE-02475	\$31,592.00
Glasgow	DE-02506	\$30,960.00
Mattison	DE-02507	\$31,492.00
Butler	DE-02533	\$30,745.00

71. DTE refused to provide Cypress Creek with copies of the engineering reviews until Cypress Creek remitted additional payments.

72. On February 8, 2018, Cypress Creek remitted an additional payment of \$30,110 for the Greenwood (#DE 02391) engineering review under protest. The \$30,110 combined with the original \$2,500 payment sent in September 2017, equaled DTE's demanded \$32,610 for the Greenwood engineering review.

73. DTE provided Cypress Creek with a copy of what appeared to be the completed Greenwood engineering review on February 16, 2018.

74. On February 23, 2018, Cypress Creek remitted an additional payment of \$28,460 for the Glasgow (#DE 02506) engineering review under protest. The \$28,460 combined with the original \$2,500 payment sent in September 2017, equaled DTE's demanded \$30,960 for the Glasgow engineering review.

75. DTE provided Cypress Creek with a copy of what appeared to be the completed Glasgow engineering review on February 27, 2018.

76. On February 28, 2018, during a telephone conference with DTE to discuss the results of the engineering studies, DTE indicated that the engineering results were preliminary and not complete engineering reviews. DTE advised Cypress Creek that additional funds would be required to complete additional aspects of DTE engineering review. As of the date of this complaint, DTE has not provided a completed engineering review for any of Cypress Creek's 10 projects for which DTE was instructed to proceed with the engineering review and payments were remitted.

77. DTE failed to process 10 of Cypress Creek's interconnection applications within the requisite time frame for processing engineering reviews resulting in 10 violations of the R. 460.620(6)(c) of the Commission's Electric Interconnection and Net Metering Standards.

78. DTE's continued violation of R. 460.620(6) in the future will adversely affect the project development efforts of Cypress Creek and other renewable energy developers.

## VII. <u>CLAIM 5 – EXORBITANT CATEGORY 4 ENGINEERING STUDY</u> <u>CHARGES</u>

79. Rule 18 of the Commission's Electric Interconnection and Net Metering Standards, R. 460.618, prescribes the interconnection fees that a utility may assess.

80. For Category 4 projects, the Engineering Review fees are limited to "Actual or maximum approved by commission". R. 460.618(1).

81. Cypress Creek received from DTE engineering review fees in excess of \$30,000 each for 9 of Cypress Creek's Category 4 projects.

<b>Project Name</b>	<b>Application Number</b>	Study Cost
Howe	DE17129 (DE02164)	\$32,295.00
Greenwood	DE-02391	\$32,610.00
Koylette	DE-02394	\$32,485.00
Jeddo	DE-02433	\$30,602.00
Haven Ridge	DE-02460	\$32,080.00
Yost	DE-02475	\$31,592.00
Glasgow	DE-02506	\$30,960.00
Mattison	DE-02507	\$31,492.00
Butler	DE-02533	\$30,745.00

82. Cypress Creek sought clarification and verification of the alleged costs to no avail. DTE refused to provide an itemization of the alleged engineering study costs demonstrating that the charges are limited to DTE's actual costs for the studies.

83. DTE's engineering study costs are wildly inconsistent with similar charges for comparable studies performed by other utilities.

84. DTE's engineering studies are devoid of detail and lack substantive information routinely provided in engineering studies for less cost.

85. DTE's Category 4 engineering study charges are unjust and unreasonable in violation of the R. 460.618(1) of the Commission's Electric Interconnection and Net Metering Standards.

86. DTE's continued imposition of exorbitant and unjustified charges for engineering studies in the future will adversely affect the project development efforts of Cypress Creek and other renewable energy developers.

## VIII. CLAIM 6 - VIOLATION OF MCL 460.10e

87. The Commission's Electric Interconnection and Net Metering Standards were promulgated pursuant to MCL 460.10e. The time lines prescribed in the Commission's standards were designed to foster the orderly and efficient interconnection of merchant plants.

88. MCL 460.10e states, as follows:

An electric utility shall take all necessary steps to ensure that merchant plants are connected to the transmission and distribution systems within their operational control. If the commission finds, after notice and hearing, that an electric utility has prevented or unduly delayed the ability of the plant to connect to the facilities of the utility, the commission shall order remedies designed to make whole the merchant plant, including, but not limited to, reasonable attorney fees. The commission may also order fines of not more than \$50,000.00 per day that the electric utility is in violation of this subsection.

89. DTE is not taking all necessary steps to ensure that Cypress Creek's projects, which are merchant plants within the meaning of Public Act 141 of 2000, MCL 460.10 *et seq.*, are connected to DTE's distribution system. Instead, DTE is availing itself of every opportunity to impede Cypress Creek's efforts to develop new investment in clean, renewable generation while pursuing its own plans to develop new generation capacity.

90. DTE's ongoing and extensive violations of the Commission's time lines for processing interconnection applications under the Commission's Electric Interconnection and Net Metering Standards, unreasonable demands for studies and exorbitant costs for those studies, refusal to provide basic distribution system information, providing incomplete and inaccurate information, and refusal to provide copies of all necessary agreements, are preventing or unduly delaying Cypress Creek's generation projects in violation of MCL 460.10e.

#### IX. CLAIM 7 – VIOLATION OF PURPA INTERCONNECT OBLIGATION

91. QFs have the right under PURPA and FERC's regulations implementing PURPA to interconnect with the host utility unless the utility is exempted. 18 CFR 292.303(c)(1).

92. FERC's regulation, 18 CFR 292.303(c)(1), states, as follows:

Subject to paragraph (c)(2) of this section, any electric utility shall make such interconnection with any qualifying facility as many be necessary to accomplish purchases or sales under this subpart. The obligation to pay for any interconnection costs shall be determined in accordance with 292.306.

93. The PURPA interconnection obligation requires each host electric utility, including DTE, to permit the QF to interconnect with its system provided the QF pay the utility an interconnection fee which is assessed on a non-discriminatory basis with respect to other customers with similar load characteristics. 18 CFR 292.306(a).

94. DTE's ongoing and extensive violations of the Commission's time lines for processing interconnection applications under the Commission's Electric Interconnection and Net Metering Standards, unreasonable demands for engineering studies and exorbitant costs for those studies, refusal to provide basic distribution system information, providing incomplete and inaccurate information, and refusal to provide copies of all necessary agreements have the intention and effect of preventing Cypress Creek's generation projects from interconnecting with DTE's system, enabling DTE to avoid its obligation to purchase the output of those projects, and facilitating DTE's pursuit of self-owned generation, all in violation of PURPA's mandatory interconnection obligation.

## X. <u>DEMAND FOR A CONTESTED CASE</u>

95. Pursuant to Rule 441(1)(e) of the Commission's Rules of Practice and Procedure, R 792.10441(1)(e), Cypress Creek requests that the Commission issue notice for a

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pre-hearing conference and set this matter for a contested proceeding.

## XI. <u>CONCLUSION AND PRAYER FOR RELIEF</u>

Cypress Creek has sought to resolve the above-described issues with DTE for months without the assistance of the Commission. Because DTE's ongoing and extensive violations of the Commission's Electric Interconnection and Net Metering Standards, R 460.601a *et seq.*, MCL 460.10e, and PURPA impede the development of independent power production in DTE's service area, Cypress Creek is now forced to seek relief from the Commission. DTE's conduct thwarts Michigan's energy policies promoting the development of clean and renewable energy resources in this state. DTE's unlawful and unreasonable conduct should not be tolerated.

WHEREFORE, Cypress Creek respectfully requests that this Commission grant it the following relief:

- A. Find that DTE violated the Commission's prescribed time in R. 460.620(4) for determining that an interconnection application is complete with respect to at least 111 of Cypress Creek's interconnection applications;
- B. Find that DTE's subsequent reclassification of previously determined complete applications to incomplete applications violated the Commission's prescribed time in R. 460.620(4) for determining that an interconnection application is incomplete with respect to 70 of Cypress Creek's interconnection applications;
- C. Order DTE to, within 5 working days of the Commission's order in this proceeding, do all of the following; i) determine whether each of

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Cypress Creek's pending interconnection applications are complete, ii) notify Cypress Creek of DTE's determinations, and iii) advise Cypress Creek of any application deficiency;

- D. Order DTE not to reverse prior completeness determinations in the future without providing the interconnection customer with a detailed explanation of a legitimate basis for doing so;
- E. Find that DTE violated the Commission's prescribed time in
   R. 460.620(5) for completing DTE's application review with respect to
   87 of Cypress Creek's interconnection applications;
- F. With respect to each of Cypress Creek's pending complete interconnection applications, order DTE to do all of the following within 5 working days of the Commission's order in this proceeding;
  i) complete its application review ii) notify Cypress Creek of DTE's determination of whether an engineering review is required, and, if so, iii) advise Cypress Creek of the actual, reasonable cost for the engineering review;
- G. Find that DTE violated the Commission's prescribed time in
   R. 460.620(6) for completing its engineering review with respect to 10
   of Cypress Creek's interconnection applications;
- H. Order DTE to, within 5 working days of the Commission's order in this proceeding, do all of the following; i) complete its engineering review, and ii) provide Cypress Creek with complete copies of the completed engineering reviews;

- I. Find that DTE's Category 4 engineering study fees are unjust and unreasonable and not limited to DTE's actual, reasonable and prudent costs;
- J. Order DTE to limit Category 4 engineering study fees to either: i) DTE's actual, reasonable and prudent costs supported by detailed invoices or other cost justification provided to Cypress Creek within 10 days of the Commission's order in this proceeding, or ii) the maximum costs approved by the Commission;
- K. Pursuant to MCL 460.55, fine DTE not less than \$100 nor more than
   \$1,000 per violation of the Commission's Electric Interconnection and Net Metering Standards;
- Find that DTE has prevented or unduly delayed the ability of Cypress
   Creek's projects to interconnect to DTE's facilities in violation of
   MCL 460.10e and PURPA;
- M. Pursuant to MCL 460.10e, order remedies designed to make whole Cypress Creek, including but not limited to reasonable attorney fees;
- N. Pursuant to MCL 460.10e, fine DTE not more than \$50,000 per violation per day for preventing or unduly delaying the ability of Cypress Creek's projects to connect to DTE's facilities;
- O. Order DTE to comply with the Commission's Electric Interconnection and Net Metering Standards going forward;

- P. Pursuant to MCL 460.10c(e), order DTE to cease and desist preventing or unduly delaying the ability of Cypress Creek plants from connecting to DTE's facilities;
- Q. Commence a proceeding to establish maximum Commission-approved engineering review fees; distribution study fees, distribution system upgrade costs, and testing and inspection costs; and
- R. Grant such other and further relief as is deemed lawful and appropriate.

By:

Respectfully submitted,

**FRASER TREBILCOCK DAVIS & DUNLAP, P.C.** Attorneys for Cypress Creek Renewables, LLC

monfor little Histor

Date: April 6, 2018

Jennifer Utter Heston (P65202) Business Address: 124 W. Allegan, Ste 1000 Lansing, MI 48933 Telephone: (517) 482-5800 E-mail: jheston@fraserlawfirm.com

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	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(L)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
					Interconnectio		DTE Application			Interconnectio	Revised	Engineering	Engineering	Engineering			Engineering			
	Interconnection			Interconnection	n Application	Application	Completeness		Engineering	n Application	Interconnectio	Review	Review	Review	Engineering	Engineering	Review Invoice		Affected	Engineering
	Application Number	Project Name	MWac	Application Submittal Date	Submittal Received Date		Review Notice Received	Application Review Date	Review Required	Marked Incomplete	n Application Submitted		Request Amount	Payment Remitted	Review Invoice Received	e Review Invoice Amount	e Payment Remitted	Engineering Review Results	System Notice Provided	Review Results Received
1	DE17120	Ludwig	20			6/20/2017	11/1/2017	11/1/2017		meenpiete	Submitted	Sent Bate	\$ 30,000.00	nennted	necence	Junount	nenneed	nerien nesults	Trovided	necence
2		Drum	20			6/20/2017	11/1/2017	11/1/2017	Yes				\$ 30,000.00							
3		Yale	2			7/27/2017	11/1/2017	11/1/2017					\$ 20,000.00							
4		Woodson	1	1		7/27/2017	11/1/2017	11/1/2017					\$ 20,000.00							
	DE17128	Myrtle	1			7/27/2017	11/1/2017	11/1/2017				0/20/2017	\$ 20,000.00	40/2/201	2/0/2004			44/7/2047	42/22/2047	
6 7	DE17129 DE17130	Howe Millington	:			7/27/2017 7/27/2017	11/1/2017 11/1/2017	11/1/2017 11/1/2017				9/29/201/	\$ 2,500.00 \$ 20.000.00	10/3/2017	2/8/2018	8 \$ 32,295.00		11///201/	12/22/2017	/
	DE17130 DE17179	Dexter				8/11/2017	11/1/2017	11/1/2017					\$ 20,000.00							
9		Aitken		1 - 1 -		8/11/2017	11/1/2017	11/1/2017					\$ 20,000.00							
10	DE17181	Carpenter	:			8/11/2017	11/1/2017	11/1/2017					\$ 20,000.00							
	DE17182	Clarence	:			8/11/2017	11/1/2017	11/1/2017					\$ 20,000.00							
	DE17187	Anubis	1			8/18/2017	11/1/2017	11/1/2017					\$ 20,000.00							
	DE-02390	Castair	1	., , .		8/31/2017 8/31/2017	11/1/2017 11/1/2017	11/1/2017		3/1/2018		0/20/2017	\$ 20,000.00 \$ 2,500.00	10/2/2017	2/0/2010	e è 22.610.00	2/0/2010	11/7/2017	12/22/2017	2/10/2019
	DE-02391 DE-02392	Telecaster (Greenwood) Harbor				8/31/2017	11/1/2017	11/1/2017 11/1/2017		3/1/2018		9/29/201/	\$ 20,000.00		2/8/2010	8 \$ 32,610.00	2/8/2018	11/7/2017	12/22/2017	2/16/2018
	DE-02393	Robson				8/31/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02394	Koylette				8/31/2017	11/1/2017	11/1/2017		-, -,		9/29/2017	\$ 2,500.00	10/3/2017	2/8/2018	8 \$ 32,485.00		11/7/2017	1/9/2018	3
18	DE-02395	Lemon Drain	1	2 8/17/2017	8/17/2017	8/31/2017	11/1/2017	11/1/2017	Yes	3/1/2018			\$ 20,000.00							
	DE-02396	Macomb Orchard	1			8/31/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02397	Marlette	-	., , .		8/31/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02398 DE-02399	McIntyre Murphy Jako	1			8/31/2017 8/31/2017	11/1/2017 11/1/2017	11/1/2017 11/1/2017		3/1/2018 3/1/2018			\$ 20,000.00 \$ 20,000.00							
	DE-02399 DE-02400	Murphy Lake Newport				8/31/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02401	Potts				8/31/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02402	Ready	2			8/31/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
26	DE-02403	Sheridan Line	1	2 8/17/2017	8/17/2017	8/31/2017	11/1/2017	11/1/2017	Yes	3/1/2018			\$ 20,000.00							
	DE-02404	Slatestone	1			8/31/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02405 DE-02406	Stanley Walleve	:			8/31/2017 8/31/2017	11/1/2017 11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00 \$ 20.000.00							
	DE-02406 DE-02425	Burtch		., , .		9/6/2017	11/1/2017	11/1/2017 11/1/2017		3/1/2018 3/1/2018			\$ 20,000.00							
	DE-02425	Chief				9/6/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
32	DE-02427	Downington	1			9/6/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
33	DE-02428	Dunbar	1			9/6/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02429	Elly	1			9/6/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02430	Frenchline	1			9/6/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02431 DE-02432	Gorden Highbank Creek	:	., ., .		9/6/2017 9/6/2017	11/1/2017 11/1/2017	11/1/2017 11/1/2017		3/1/2018 3/1/2018			\$ 20,000.00 \$ 20,000.00							
	DE-02432 DE-02433	Jeddo				9/6/2017	11/1/2017	11/1/2017		5/1/2010		9/29/2017	\$ 2,500.00	10/3/2017	7 2/8/201	8 \$ 30.602.00		11/7/2017	12/22/2017	7
	DE-02434	Windom				9/6/2017	11/1/2017	11/1/2017		3/1/2018		5/25/2017	\$ 20,000.00	10/ 5/ 201/	2/0/201	5 \$ 50,002.00		11,7,2017	12/22/2017	
40	DE-02435	Lakeshore	:	2 8/23/2017	8/23/2017	9/6/2017	11/1/2017	11/1/2017	Yes	3/1/2018			\$ 20,000.00							
	DE-02436	Newark	2			9/6/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02437	Pipeline	-		-1 -1 -	9/6/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02438 DE-02439	Speaker	1			9/6/2017	11/1/2017 11/1/2017	11/1/2017		3/1/2018		0/20/2017	\$ 20,000.00					11/7/2017		
	DE-02439 DE-02447	Telegraph Crisler				9/6/2017 9/11/2017	11/1/2017	11/1/2017 11/1/2017		3/1/2018		9/29/2017	\$ 2,500.00 \$ 20.000.00	10/3/2017				11/7/2017		
	DE-02448	Wistert				9/11/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02449	Yardbird	:			9/11/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02450	Clearwater	:			9/11/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02451	Gagetown	1			9/11/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02452 DE-02453	Hellems Mushroom	:			9/11/2017 9/11/2017	11/1/2017 11/1/2017	11/1/2017 11/1/2017		3/1/2018 3/1/2018			\$ 20,000.00 \$ 20.000.00							
	DE-02453 DE-02454	Mussev				9/11/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
53		Antora				9/11/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
54	DE-02456	Knobbler	:	2 8/28/2017	8/28/2017	9/11/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02457	Squirrel	2			9/11/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02458	Valiant	-	,,		9/11/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02459 DE-02460	Wixson Haven Ridge	:			9/11/2017 9/11/2017	11/1/2017 11/1/2017	11/1/2017 11/1/2017		3/1/2018		0/20/2027	\$ 20,000.00 \$ 2,500.00		2/0/2001	8 \$ 32,080.00		11/7/2017	12/22/2017	
	DE-02460 DE-02461	Haven Ridge Cavell		,,		9/11/2017 9/11/2017	11/1/2017	11/1/2017		3/1/2018		9/29/201/	\$ 2,500.00	10/3/2017	2/8/2018	8 \$ 32,080.00		11///201/	12/22/201	/
	DE-02461 DE-02462	Engle				9/11/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02463	Funkstep				9/11/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02464	Hurds Corner	:	,,		9/11/2017	11/1/2017	11/1/2017	Yes	3/1/2018	1		\$ 20,000.00							
	DE-02465	Julia Pearl	:			9/11/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02466	Lakeport	1			9/11/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02467 DE-02468	Lowe Plank Maize	:		., ., .	9/11/2017	11/1/2017 11/1/2017	11/1/2017 11/1/2017		3/1/2018			\$ 20,000.00 \$ 20.000.00							
	DE-02468 DF-02469	Maize Pennington				9/11/2017 9/11/2017	11/1/2017	11/1/2017		3/1/2018 3/1/2018			\$ 20,000.00 \$ 20.000.00							
	DE-02409	Purdy	-	,,		9/11/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02471	Roach				9/11/2017	11/1/2017	11/1/2017		3/1/2018			\$ 20,000.00							
	DE-02472	Rockwood	2			9/11/2017	11/1/2017	11/1/2017		3/15/2018			\$ 20,000.00							

#### ATTACHMENT A Page 2 of 2

71	DE-02473	Snover	2	8/28/2017	8/28/2017	9/11/2017	11/1/2017	11/1/2017 Yes	3/1/2018	\$ 20,000.00						
	DE-02474	Vreeland	2	8/28/2017	8/28/2017	9/11/2017	11/1/2017	11/1/2017 Yes	3/15/2018	\$ 20,000.00						
73	DE-02475	Yost	2	8/28/2017	8/28/2017	9/11/2017	11/1/2017	11/1/2017 Yes	., .,	9/29/2017 \$ 2,500.00	10/3/2017	2/8/2018 \$ 31,592.00		11/7/2017	12/22/2017	
74	DE-02501	Ridge	2	9/6/2017	9/6/2017	9/20/2017	11/1/2017	11/1/2017 Yes	3/1/2018	\$ 20,000.00						
75	DE-02502	Nugent	2	9/6/2017	9/6/2017	9/20/2017	11/1/2017	11/1/2017 Yes	3/1/2018	\$ 20,000.00						
76	DE-02503	Runway	2	9/6/2017	9/6/2017	9/20/2017	11/1/2017	11/1/2017 Yes	3/1/2018	\$ 20,000.00						
	DE-02504	Van Dyke	2	9/6/2017	9/6/2017	9/20/2017	11/1/2017	11/1/2017 Yes	3/1/2018	\$ 20,000.00						
	DE-02505	Capac	2	9/6/2017	9/6/2017	9/20/2017	11/1/2017	11/1/2017 Yes	3/1/2018	\$ 20,000.00						
	DE-02506	Glasgow	2	9/6/2017	9/6/2017	9/20/2017	11/1/2017	11/1/2017 Yes		9/29/2017 \$ 2,500.00	10/3/2017	2/8/2018 \$ 30,960.00	2/23/2018	11/7/2017	1/9/2018	2/27/2018
	DE-02507 DE-02508	Mattison Carr	2	9/6/2017 9/6/2017	9/6/2017 9/6/2017	9/20/2017 9/20/2017	11/1/2017 11/1/2017	11/1/2017 Yes	3/1/2018	9/29/2017 \$ 2,500.00 \$ 20,000.00	10/3/2017	2/8/2018 \$ 31,492.00		11/7/2017	1/9/2018	
	DE-02509	North Gramer	2	9/6/2017	9/6/2017	9/20/2017	11/1/2017	11/1/2017 Yes 11/1/2017 Yes	3/1/2018	\$ 20,000.00						
	DE-02509 DE-02529	Teddy	2	9/14/2017	9/14/2017	9/20/2017 9/28/2017	11/1/2017	11/1/2017 Yes	3/1/2018	\$ 20,000.00						
	DE-02530	Finlay	2	9/14/2017	9/14/2017	9/28/2017	11/1/2017	11/1/2017 Yes	3/1/2018	\$ 20,000.00						
	DE-02531	Mouille	2	9/14/2017	9/14/2017	9/28/2017	11/1/2017	11/1/2017 Yes	3/1/2018	\$ 20,000.00						
	DE-02532	Blackburn	2	9/14/2017	9/14/2017	9/28/2017	11/1/2017	11/1/2017 Yes	3/1/2018	\$ 20,000.00						
87	DE-02533	Butler	2	9/14/2017	9/14/2017	9/28/2017	11/1/2017	11/1/2017 Yes		9/29/2017 \$ 2,500.00	10/3/2017	2/8/2018 \$ 30,745.00		11/7/2017	1/9/2018	
88	DE-02534	Fishell	2	9/14/2017	9/14/2017	9/28/2017	11/1/2017	11/1/2017 Yes	3/1/2018	\$ 20,000.00						
89	DE-02567	Sheed	2	9/30/2017	9/30/2017	10/13/2017	11/1/2017	11/1/2017 Yes	3/1/2018	\$ 20,000.00						
90	DE-02587	Fromage	2	10/11/2017	10/11/2017	10/25/2017	11/1/2017	11/1/2017 Yes	3/1/2018	\$ 20,000.00						
91	DE-02588	Saxophone	2	10/11/2017	10/11/2017	10/25/2017	11/1/2017	11/1/2017 Yes	3/1/2018	\$ 20,000.00						
92 93	DE-02590 DE-02591	Trumpet Lock	2	10/11/2017	10/11/2017	10/25/2017	11/1/2017	11/1/2017 Yes	3/1/2018	\$ 20,000.00						
93	DE-02591 DE-02684	Mandich	2	10/11/2017 11/12/2017	10/11/2017 11/12/2017	10/25/2017 11/24/2017	11/1/2017	11/1/2017 Yes	3/1/2018 3/1/2018	\$ 20,000.00						
	DE-02685	Verlander	20	11/12/2017	11/12/2017	11/24/2017			3/1/2018							
96	DE-02686	Gehringer	20		11/12/2017	11/24/2017			3/1/2018							
	DE-02687	Desmond	20		11/12/2017	11/24/2017			3/1/2018							
98	DE-02688	Hail	20		11/12/2017	11/24/2017			3/1/2018							
99	DE-02689	Rangeline	20	11/12/2017	11/12/2017	11/24/2017			3/15/2018							
	DE-02690	Hayward	20	11/12/2017	11/12/2017	11/24/2017			3/1/2018							
	DE-02750	Rundle	2	11/30/2017	11/30/2017	12/14/2017			3/1/2018							
	DE-02751	Braylon	2	11/30/2017	11/30/2017	12/14/2017			3/1/2018							
	DE-02752	Coon Creek	2	11/30/2017	11/30/2017	12/14/2017			3/1/2018							
	DE-02753 DE-02754	Trunk Wallace Branch	2	11/30/2017	11/30/2017	12/14/2017			3/1/2018							
	DE-02755	Fritz	2	11/30/2017 11/30/2017	11/30/2017 11/30/2017	12/14/2017 12/14/2017			3/1/2018 3/1/2018							
	DE-02733	Portent	20	12/22/2017	12/22/2017	1/5/2018			3/15/2018							
	DE-02811	Brown City	20	12/22/2017	12/22/2017	1/5/2018			3/1/2018							
	DE-02812	lago	20	12/22/2017	12/22/2017	1/5/2018			3/1/2018							
110	DE-02813	Feuer	2	12/22/2017	12/22/2017	1/5/2018			3/1/2018							
111	DE-02920	Bordman	17.5	2/9/2018	2/9/2018	2/23/2018			3/1/2018							
	DE-02968	Carsonville	10	3/1/2018	3/1/2018	3/15/2018										
	DE-02969	Angelo	15	3/1/2018	3/1/2018	3/15/2018										
	DE-02974	Crowe	10	3/2/2018	3/2/2018	3/16/2018										
	DE-02975	Clothier	10	3/2/2018 3/2/2018	3/2/2018	3/16/2018										
	DE-02976 DE-02977	Galbraith	15 20	3/2/2018 3/2/2018	3/2/2018 3/2/2018	3/16/2018 3/16/2018										
	DE-02978	Long Sherwood	15	3/2/2018	3/2/2018	3/16/2018										
	DE-02979	South Gramer	15	3/2/2018	3/2/2018	3/16/2018										
	DE-02980	Zing	20	3/2/2018	3/2/2018	3/16/2018										
	DE-02981	Beltrami	10	3/4/2018	3/4/2018	3/16/2018										
	DE-02982	Cottrell	10	3/4/2018	3/4/2018	3/16/2018										
	DE-02983	Dodge	10	3/4/2018	3/4/2018	3/16/2018										
	DE-02984	Elias	10	3/4/2018	3/4/2018	3/16/2018										
	DE-02985	Ford	10	3/4/2018	3/4/2018	3/16/2018										
	DE-02986 DE-02987	Hart	10 10	3/4/2018 3/4/2018	3/4/2018 3/4/2018	3/16/2018 3/16/2018										
	DE-02987 DE-02989	Judd Lively	10	3/5/2018	3/5/2018	3/19/2018										
	DE-02990	May	10	3/5/2018	3/5/2018	3/19/2018										
	DE-02990 DE-02991	Mineral	10	3/5/2018	3/5/2018	3/19/2018										
	DE-02992	Mort	10	3/5/2018	3/5/2018	3/19/2018										
	DE-02993	Nordhaus	10	3/5/2018	3/5/2018	3/19/2018										
	DE-02994	Peck	10	3/5/2018	3/5/2018	3/19/2018										
	DE-02995	Shook Drain	10	3/5/2018	3/5/2018	3/19/2018										
	DE-02996	Smiths Creek	10	3/5/2018	3/5/2018	3/19/2018										
	DE-02997	Stockholm	10	3/6/2018	3/6/2018	3/20/2018										
	DE-02999	Tanker	10	3/6/2018	3/6/2018	3/20/2018										
	DE-03000	Wales Ridge	10	3/6/2018	3/6/2018	3/20/2018										
	DE-03003 DE-03008	Wings Sanders	10 10	3/6/2018 3/6/2018	3/6/2018 3/6/2018	3/20/2018 3/20/2018										
	DE-03009	Paczki	10	3/6/2018	3/6/2018	3/20/2018										
1.11			10	5, 5, 2010	5, 5, 2010	5,20,2010										

From:	Chris Norqual
То:	john.connors@dteenergy.com; tia.stanley@dteenergy.com
Cc:	Casey May; Harsh Mehta
Subject:	RE: DTE Energy IX Applications - Howe, Millington, Myrtle, Woodson, and Yale (Cypress Creek Renewables)
Date:	Thursday, July 27, 2017 10:28:22 AM
Attachments:	IX Application Feedback Report.pdf
	image001.png

Hi John and Tia,

I received an extended out of office message from Kostas in response to my email below. We have a pressing request for some basic information about the 5 locations below, that I believe Kostas was working on for us a couple weeks back. Is this something that you might be able to help with? We're hoping to be in a position to proceed by early next week. Please let me know if it would be helpful to jump on the phone today or tomorrow, or if there is a better contact for our questions.

Thanks very much in advance for your help.

Sincerely, Chris Norqual

From: Chris Norqual
Sent: Wednesday, July 26, 2017 3:24 PM
To: 'Kostas.Tolios@dteenergy.com' <Kostas.Tolios@dteenergy.com>
Cc: Casey May <casey.may@ccrenew.com>; Harsh Mehta <harsh.mehta@ccrenew.com>
Subject: RE: DTE Energy IX Applications - Howe, Millington, Myrtle, Woodson, and Yale (Cypress Creek Renewables)
Importance: High

Hi Kostas,

Hope you are doing well. I wanted to touch base about our attached request for information, as noted below. Are you authorized to share this information with us, or is there another person in your organization we should be asking? Of course, our reason for asking for this type of information is because we will be sending \$20,000 payments very shortly and would like to have this basic information which is traditionally available in the "pre-application" stage before such significant investments.

If you have any thoughts or would like to discuss, Harsh and I are available all week. We'd be happy to visit your office early next week if you're available too. We're excited to move forward soon, thanks again for the help.

Best regards, Chris

## Chris Norqual Vice President - Utilities Cypress Creek Renewables 3250 Ocean Park Blvd, Suite 355 | Santa Monica, California 90405 | norqual@ccrenew.com

From: Harsh Mehta
Sent: Thursday, July 13, 2017 7:18 PM
To: Kostas.Tolios@dteenergy.com; interconnect@dteenergy.com
Cc: Casey May <casey.may@ccrenew.com>; Geoff Fallon <fallon@ccrenew.com>; John McQueeney
<john.mcqueeney@ccrenew.com>
Subject: DTE Energy IX Applications - Howe, Millington, Myrtle, Woodson, and Yale (Cypress Creek
Renewables)

Hello Kostas,

Please find the attached IX Application Feedback Form for DTE Energy's use in providing decisive information to developers on project viability. We understand that resources are limited and believe the attached form will reduce workload (number of distribution study requests) and additional costs for both DTE Energy and developers. We are requesting that the attached form be completed for each Interconnection Application submitted.

In addition, we are resubmitting the following applications:

Project	Size (MWac)					
Howe Solar, LLC	2					
Millington Solar, LLC	16					
Myrtle Solar, LLC	2					
Woodson Solar, LLC	2					
Yale Solar, LLC	2					

The attached project folders contain the following:

- 1. Interconnection Application (signed)
- 2. Proof of General Liability Insurance for \$1,000,000
- 3. Single Line Diagram (signed)
- 4. Site Plan for Interconnection
- 5. Inverter Spec Sheet
- 6. Inverter Reactive Power Compatibility Curves at 25C
- 7. Inverter UL Certificate
- 8. Scan of the Interconnection Application Fee

The checks for these projects have already been submitted to DTE Energy.

Please let me know if you would like to discuss our request or require any additional information.

Regards, Harsh

### Harsh Mehta

Utility Manager - Development Cypress Creek Renewables 3250 Ocean Park Blvd | Santa Monica, California 90405 | <u>harsh.mehta@ccrenew.com</u>

<u>marsh.menta@ccrenew.co</u>



# ATTACHMENT B (Redacted) Page 4 of 4 Interconnection Application Feedback Report

# Date:

Project Name:

Queue Number:

Substation Name:

Substation Capacity:

Substation Transformer Sizing:

Feeder Name:

Feeder Voltage:

Feeder Capacity:

Distance from Point of Interconnection to Substation:

Phase Available:

Radial or Network Feed:

Limiting Conductor Rating:

Capacity ahead in Queue on Substation:

Capacity ahead in Queue on Feeder:

From:	Harsh Mehta
To:	Geoff Fallon; Casey May; Daniel Edelstein; Dewey Klurfield
Cc:	Chris Norqual
Subject:	FW: Follow Up
Date:	Friday, August 25, 2017 4:02:00 PM
Attachments:	IX Application Feedback Report.pdf
	image001.png

MI Team,

Kostas from DTE finally reached out and confirmed that they have seen our applications and will begin reviewing them. I gave him a high level overview of our strategy and goal of securing queue position but he did not provide anything concrete here

The applications are through PowerClerk now with assigned application numbers which is a step forward, but it sounds like their internal processes are still in the works.

I will follow up with an update after our call next week.

Thanks, Harsh

From: Harsh Mehta
Sent: Friday, August 25, 2017 3:46 PM
To: 'Kostas Tolios' <kostas.tolios@dteenergy.com>
Cc: Chris Norqual <norqual@ccrenew.com>
Subject: Follow Up

Hi Kostas,

Thanks for the call today.

Please find the attached IX Application Feedback Form attached. This information would be very helpful to us in determining which projects to move forward with an Engineering Review or Distribution Study. If the data comes back unfavorable, both DTE and developers can save time and resources by not moving unfeasible projects forward.

I look forward to discussing our latest interconnection applications in more detail next week.

Regards, Harsh

#### Harsh Mehta

Utility Manager - Development Cypress Creek Renewables 3250 Ocean Park Blvd | Santa Monica, California 90405 | harsh.mehta@ccrenew.com

ATTACHMENT C (Redacted) Page 2 of 2



From:	Harsh Mehta
To:	"Kostas Tolios"; "INTERCONNECT Account"
Cc:	Chris Norqual; Casey May; Geoff Fallon
Subject:	Engineering Review Agreements x 10
Date:	Friday, September 29, 2017 4:10:00 PM
Attachments:	image001.png
	Howe Engineering Review Agreement Executed .09.28.17.pdf Greenwood Engineering Review Agreement Executed .09.28.17.pdf Koylette_Engineering Review Agreement Executed .09.28.17.pdf Jeddo Engineering Review Agreement Executed .09.28.17.pdf Haven Ridge Engineering Review Agreement Executed .09.28.17.pdf Haven Ridge Engineering Review Agreement Executed .09.28.17.pdf Glasgow_Engineering Review Agreement Executed .09.28.17.pdf Glasgow_Engineering Review Agreement Executed .09.28.17.pdf Mattison_Engineering Review Agreement Executed .09.28.17.pdf Mattison_Engineering Review Agreement Executed .09.28.17.pdf Mattison_Engineering Review Agreement Executed .09.28.17.pdf Mattison_Engineering Review Agreement Executed .09.28.17.pdf

Good afternoon Kostas,

Please find the attached Engineering Review Agreements executed by Cypress Creek Renewables, LLC for the following projects:

Project Name	Application Number	MWac	MWdc	County	Site Address	Application Submitted
Howe	DE17129	2	3	Monroe		7/13/2017
Greenwood	DE-02391	2	3	St. Clair		8/17/2017
Koylette	DE-02394	2	3	Sanilac		8/17/2017
Telegraph	DE-02439	2	3	Monroe		8/23/2017
Jeddo	DE-02433	2	3	St. Clair		8/23/2017
Haven Ridge	DE-02460	2	3	Macomb		8/28/2017
Yost	DE-02475	2	3	St. Clair		8/28/2017
Glasgow	DE-02506	2	3	Sanilac		9/6/2017
Mattison	DE-02507	2	3	Sanilac		9/6/2017
Butler	DE-02533	2	3	Sanilac		9/14/2017

The Engineering Review fees of \$2,500 are scheduled to arrive on October 4, 2017 and can be tracked via UPS here: 1Z095YV30191692963

Please let me know if any additional information is required to move these forward.

Thanks, Harsh

#### Harsh Mehta

Utility Manager - Development Cypress Creek Renewables 3250 Ocean Park Blvd | Santa Monica, California 90405 | harsh.mehta@ccrenew.com



From:	Harsh Mehta
To:	<u>"Kostas Tolios"</u>
Cc:	Chris Norqual
Subject:	RE: New revised Eng Review Agreement
Date:	Monday, October 09, 2017 12:02:00 PM
Attachments:	EngineeringReviewAgreement 10032017.docx
	image003.png
	image001.png

Hi Kostas,

We have some questions on the Engineering Review Agreement you provided. Do you have availability this week to discuss?

Some times that would work well for us are:

10/9 @ 4pm ET 10/10 @ 10am ET, 4:30pm ET 10/11 @ 1pm – 2pm, 2:30pm – 4pm ET

Thanks, Harsh

## Harsh Mehta Utility Manager - Development Cypress Creek Renewables 3250 Ocean Park Blvd | Santa Monica, California 90405 | harsh.mehta@ccrenew.com



From: Kostas Tolios [mailto:kostas.tolios@dteenergy.com]
Sent: Thursday, October 05, 2017 3:43 PM
To: Harsh Mehta <harsh.mehta@ccrenew.com>
Subject: New revised Eng Review Agreement

Hi Harsh,

Please sign and return the new revised E Review agreements. Thanks

Kostas

Kostas Tolios

POWER SYSTEMS TECHNOLOGIES Distributed Resources

490 SB One Energy Plaza Detroit, Mi 48226



From:	Kostas Tolios
То:	Harsh Mehta
Subject:	Cypress Creek Renewables, LLC: Application Review Completed
Date:	Wednesday, November 01, 2017 3:54:37 PM
Attachments:	image004.png
	Engineering Study Agreement v3.docx
Importance:	High

Harsh,

Your Interconnection applications have been received and the preliminary engineering review for each application has been completed.

The next step in the Interconnection Process will be to complete, sign and return the enclosed Engineering Study agreement and send a check with the associated charges for each application.

This action will place your project in the Engineering Interconnection Study queue(Ten 10 applications currently under Engineering Review that DTE collected \$2,500.00 are grandfathered with the previous agreement and the total charges will be trued up at the end of the Engineering Study).

Please let me know if you have any questions.

Thanks

Kostas

Kostas Tolios

POWER SYSTEMS TECHNOLOGIES Distributed Resources

490 SB One Energy Plaza Detroit, Mi 48226



# DTE

# Electric [Project] Engineering Review Agreement for Generator Interconnection To DTE Electric's Distribution System

WHEREAS, proposals to construct or upgrade a project which will be operated in parallel with and interconnected with The DTE Energy Electric Company's (hereinafter "DTE Electric") electric system (hereinafter "DTE Electric Distribution System") must be reviewed by DTE Electric to determine how it will impact the DTE Electric Distribution System and DTE Electric's customers.

WH	EREAS, DTE Electric received from("Project
Developer") a	[MW/kW] generator interconnection application and information concerning Project
Developer's project	t ("Interconnection Request") for a generator of type
interconnecting at _	location. With DTE Electric Application
queue number	

WHEREAS DTE Electric has determined that an engineering review is necessary to determine the suitability of the interconnection equipment including but not limited to, any safety and reliability complications arising from equipment saturation, multiple technologies, other exiting generation, and proximity to synchronous motor loads.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein set forth, DTE Electric and Project Developer agree to enter into this Agreement and agree as follows:

1. Project Developer has requested and DTE Electric has agreed to prepare or cause to be prepared an engineering review consistent with DTE Electric's procedures and Good Utility Practice<sup>1</sup> based on information provided by Project Developer ("Engineering Review")

<sup>&</sup>lt;sup>1 1</sup> "Good Utility Practice" shall mean any of 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 the light of the 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 the accepted practices, methods, or acts generally accepted in the region.

- 2. DTE Electric will charge Project Developer for the Actual Costs<sup>2</sup> to perform the Engineering Review. Project Developer shall pay DTE Electric the Engineering Review Deposit immediately upon execution of this Agreement. The Engineering Review Deposit is based on the size of the project as shown below:
  - a. Projects less than or equal to 550 kW = \$2,500.00
  - b. Projects greater than 550kW but less than or equal to 2 MW = \$20,000.00
  - c. Projects greater than 2MW = \$30,000.00
- 3. Project Developer shall have 3 months from \_\_\_\_\_\_(mm/dd/yyyy) ("Engineering Review Date") which is the date that DTE Electric determined that Engineering Review is necessary in which to return an executed copy of this Agreement along with the Engineering Review Deposit. Project Developer shall provide any changes or updates to the Interconnection request with its executed copy of this Agreement. A new Interconnection Request and Interconnection Application fee are required if the signed Engineering Review Agreement and Engineering Review Deposit are not received within three (3) months from the Engineering Review Date. The old application will be withdrawn from the application queue.
- 4. Completion of the engineering study may change a project's position in the application queue. If a project developer pays the study fee and completes the study, while another project developer does not, then the project with the completed study will move forward in the process and the study queue. If the project with the lower application queue number pays their study deposit before the project with the higher application queue number's study is complete, the project with the lower application queue number in the application queue number will proceed first, and retain their position in the application queue.
- 5. Projects that do not have study fees paid within 90 days of determination of the requirement for a study will be placed in inactive status. Once their study deposit is paid they will be returned to the active study queue with a priority based on the date of payment of the study fee.
- 6. Should DTE Electric ask for additional information from the Project Developer, the study will be suspended while waiting for the information needed to continue. Any suspension of the study will have a day for day impact on the completion of the study.
- 7. DTE Electric will use commercially reasonable efforts to complete the Engineering Review upon receipt of the signed Engineering Review Agreement and Engineering Review Deposit.
- 8. DTE Electric will use reasonable efforts to inform Affected System<sup>3</sup> operators. It is the Project Developers responsibility to initiate any actions with the Affected System operators. DTE Electric

<sup>&</sup>lt;sup>2 2</sup> "Actual Costs" includes but is not limited to DTE Electricity's direct labor costs, contracted services, consulting, overheads, travel expenses, and benefits.

<sup>&</sup>lt;sup>3</sup> "Affected System" shall mean an electric transmission or distribution system other than DTE Electric Distribution System that may be affected by the Interconnection Request.

will make commercially reasonable efforts to coordinate any studies of the Interconnection Request with any Affected System operators. The Project Developer shall be solely responsible for any studies and fees required by any Affected System operator. DTE Electric shall have no liability for any impact of the Interconnection Request on any Affected System or for any delays associated with any Affected System operator. DTE Electric will not be responsible for any delays while waiting for the Affected System operator.

- 9. DTE Electric will update project status in Power Clerk periodically.
- 10. Upon completion of the Engineering Review, DTE Electric shall provide Project Developer the actual costs incurred to complete the review. DTE Electric will reconcile the Engineering Review Deposit with the actual costs. If the actual costs exceed the Engineering Review Deposit, Project Developer shall pay the difference within forty-five (45) calendar days from the invoice date. If the Engineering Review Deposit is more than the Actual Costs, DTE Electric shall refund the difference within forty-five (45) calendar days of the date of the invoice or the date of reconciliation, whichever is later. If payment in full is not received within forty-five (45) days, interest will accrue on all unpaid amounts at the rate of 2% per month.
- 11. If the project is withdrawn during the study period by the Project Developer, the Project Developer will be responsible for paying all costs incurred to the point of project withdrawal. DTE Electric will make commercially reasonable to stop the study when formally notified of the withdrawal of a project that is in the study phase. Project Developer is not entitled to any report if the project is withdrawn.
- 12. Upon receipt of payment in full of all Actual Costs for a completed engineering review. DTE Electric will provide the Engineering Review Findings and an estimated cost for the distribution study, if necessary. If system upgrades are required, DTE Electric will provide a list of potential categories of required system upgrades that may be required to accommodate the interconnection with DTE Electric Distribution System.
- 13. Based on the Engineering Review Findings, if Project Developer elects to go forward with the Interconnection Request to interconnect to DTE Electric's system, Project Developer shall enter into separate agreements to address additional requirements.
- 14. Any notice or request made to or by either party regarding this Agreement shall be made to the representative of the other party, or its designated agent, as indicated below.
- 15. This Agreement is the complete agreement of DTE Electric and Project Developer concerning the subject matter hereof and supersedes any prior or contemporaneous agreements or understandings whether oral or written.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their respective authorized officials.

DTE Electric	Project Developer
By:	By:
(Signature)	(Signature)
(Typewritten or Printed Name)	(Typewritten or Printed Name)
Title	Title
Date	Date

From:Harsh MehtaTo:"Kostas Tolios"; "Chad D Morris"Subject:DTE Follow Up QuestionsDate:Wednesday, November 15, 2017 10:57:00 AMAttachments:image001.png

Hi Kostas and Chad,

Just wanted to follow up on a few items from our call on Monday:

- 1. What is the turnaround time for Engineering Reviews? When can the results for the first 10 be expected?
- 2. Can we request some preliminary information during the two hour technical consultation regarding substation and line capacity before submitting and interconnection application?
- 3. Would you have an idea of what the true cost of these first 10 Engineering Reviews will be?

Thanks, Harsh

Harsh Mehta Utility Manager - Development Cypress Creek Renewables 3250 Ocean Park Blvd | Santa Monica, California 90405 | harsh.mehta@ccrenew.com



From:	MI. Utility
То:	"Kostas Tolios"
Cc:	Chris Norqual; Geoff Fallon; Daniel Edelstein; Dewey Klurfield; "Chad D Morris"
Subject:	DTE Technical Data Requests x 10
Date:	Wednesday, December 06, 2017 5:38:00 PM
Attachments:	image001.png
	Castair_Technical Data Form.pdf
	Drum_Technical Data Form.pdf
	Fritz_Technical Data Form.pdf
	Kramer Technical Data Form.pdf
	Mandich Technical Data Form.pdf
	Roach Technical Data Form.pdf
	Sheridan Lane Technical Data Form.pdf
	Wixson Technical Data Form.pdf
	Yardbird Technical Data Form.pdf
	Potts_Technical Data Form.pdf

Hi Kostas,

As discussed, in lieu of the two hour technical consultation, we are requesting the preliminary technical data in the attached forms for the following 10 projects:

Project Name	Application Number	MWac	MWdc	Site Address	Application Submitted
Castair	DE-02390	2	2.8		8/17/2017
Drum	DE17121	20	28		6/6/2017
Fritz	DE-02755	2	2.8		11/30/2017
Kramer	DE-02530	2	2.8		9/14/2017
Mandich	DE-02684	2	2.8		11/12/2017
Roach	DE-02471	2	2.8		8/28/2017
Sheridan Line	DE-02403	2	2.8		8/17/2017
Wixson	DE-02459	2	2.8		8/28/2017
Yardbird	DE-02449	2	2.8		8/28/2017
Potts	DE-02401	2	2.8		8/17/2017

This information will be very helpful in determining which projects to move forward to an Engineering Review. This data will help eliminate nonviable projects from the queue and free up time and resources for both DTE and CCR.

Please let me know if I can provide any additional information to kick these off and thank you for your help!

Regards, Harsh

#### Harsh Mehta

Utility Manager - Development Cypress Creek Renewables 3250 Ocean Park Blvd | Santa Monica, California 90405 | harsh.mehta@ccrenew.com



From:	Chad D Morris
То:	MI.Utility@ccrenew.com
Cc:	Chad D Morris
Subject:	Affected System Notices
Date:	Friday, December 22, 2017 3:09:45 PM
Attachments:	Affected System Notice DE02391.pdf
	Affected System Notice DE02475.pdf
	Affected System Notice DE02460.pdf
	Affected System Notice DE02433.pdf

Harsh,

Please see the attached Affected System Notices. Paper copies will be mailed out to you next week.

Regards, Chad Morris Principal Engineer DO – Engineering Technology

# DTE Electric DE-02391 (Greenwood Solar, LLC) Notice: Affected System Study Required for Generator Interconnection to DTE Electric's Distribution System

DTE Electric Company (hereinafter "DTE Electric") received from Cypress Creek Renewables. LLC ("Project Developer") submitted by agent Harsh Mehta; harsh.mehta@ccrenew.com a 2,000 kW generator interconnection application and information concerning Project Developer's project ("Interconnection Request") for a <u>Category 4</u> project for a system of type Inverter with generator type Solar PV proposing to interconnect at location POI: with DE-02391 project number assigned by DTE Electric on 8/17/2017.

DTE Electric has determined during the study of <u>DE-02391</u> that an affected system condition is present and hereby notifies Project Developer that an Affected System Study is required by International Transmission Company ("Affected System"). The Affected System Study must be completed before the Interconnection Request for DE-02391 can proceed.

DTE Electric notified the Affected System(s) on <u>12/21/2017</u>. However, the Project Developer is responsible for the Affected System Study and facilitating completion of Affected System Study, including, but not limited to, providing necessary generator-related information, all communications, deposits/fees, project delays, and any other impacts to the Interconnection Request that are required or result from the Affected System Study.

Project Developer is responsible to ensure the Affected System(s) submits a copy of the completed study(s) to DTE Electric. Thereafter, DTE Electric shall proceed with the interconnection process.

By

(Signature) Richard

(Typewritten or Printed Name)

Mahoy Engineeny Technology Title Date: 12121 2017

CC: Affected System

**ITC Interconnection Liaison** 

# **DTE Electric** DE-02460 (Haven Ridge, LLC) Notice: Affected System Study Required for Generator Interconnection to DTE Electric's Distribution System

DTE Electric Company (hereinafter "DTE Electric") received from Cypress Creek Renewables, LLC ("Project Developer") submitted by agent Harsh Mehta; harsh.mehta@ccrenew.com a 2,000 kW generator interconnection application and information concerning Project Developer's project ("Interconnection Request") for a Category 4 project for a system of type Inverter with generator type Solar PV proposing to interconnect at location POI: \_\_\_\_\_\_ with DE-02460 project number assigned by DTE Electric on 8/28/2017.

DTE Electric has determined during the study of DE-02460 that an affected system condition is present and hereby notifies Project Developer that an Affected System Study is required by International Transmission Company ("Affected System"). The Affected System Study must be completed before the Interconnection Request for DE-02460 can proceed,

DTE Electric notified the Affected System(s) on 12/21/2017. However, the Project Developer is responsible for the Affected System Study and facilitating completion of Affected System Study, including, but not limited to, providing necessary generator-related information, all communications, deposits/fees, project delays, and any other impacts to the Interconnection Request that are required or result from the Affected System Study.

Project Developer is responsible to ensure the Affected System(s) submits a copy of the completed study(s) to DTE Electric. Thereafter, DTE Electric shall proceed with the interconnection process.

By

(Typewritten or Printed Name)

1212112012 Title

Date:

CC: Affected System

**ITC Interconnection Liaison** 

#### DTE Electric

DE-02475 (Yost Solar, LLC) Notice: Affected System Study Required for Generator Interconnection to DTE Electric's Distribution System

DTE Electric has determined during the study of <u>DE-02475</u> that an affected system condition is present and hereby notifies Project Developer that an Affected System Study is required by <u>International</u> <u>Transmission Company</u> ("Affected System"). The Affected System Study must be completed before the Interconnection Request for <u>DE-02475</u> can proceed.

DTE Electric notified the Affected System(s) on <u>12/21/2017</u>. However, the Project Developer is responsible for the Affected System Study and facilitating completion of Affected System Study, including, but not limited to, providing necessary generator-related information, all communications, deposits/fees, project delays, and any other impacts to the Interconnection Request that are required or result from the Affected System Study.

Project Developer is responsible to ensure the Affected System(s) submits a copy of the completed study(s) to DTE Electric. Thereafter, DTE Electric shall proceed with the interconnection process.

By

(Signature)

(Typewritten or Printed Name)

Man Title

Date:

CC: Affected System ITC Interconnection Liaison

## DTE Electric

DE-02433 (Jeddo Solar, LLC) Notice: Affected System Study Required for Generator Interconnection to DTE Electric's Distribution System

DTE Electric Company (hereinafter "DTE Electric") received from Cypress Creek Renewables, LLC ("Project Developer") submitted by agent Harsh Mehta: harsh.mehta@ccrenew.com a 2,000 kW generator interconnection application and information concerning Project Developer's project ("Interconnection Request") for a Category 4 project for a system of type Inverter with generator type Solar PV proposing to interconnect at with <u>DE-02433</u> project number assigned by DTE Electric on <u>8/23/2017</u>. location POI:

DTE Electric has determined during the study of DE-02433 that an affected system condition is present and hereby notifies Project Developer that an Affected System Study is required by International Transmission Company ("Affected System"). The Affected System Study must be completed before the Interconnection Request for <u>DE-02433</u> can proceed.

DTE Electric notified the Affected System(s) on 12/21/2017. However, the Project Developer is responsible for the Affected System Study and facilitating completion of Affected System Study, including, but not limited to, providing necessary generator-related information, all communications, deposits/fees, project delays, and any other impacts to the Interconnection Request that are required or result from the Affected System Study.

Project Developer is responsible to ensure the Affected System(s) submits a copy of the completed study(s) to DTE Electric. Thereafter, DTE Electric shall proceed with the interconnection process.

By

(Signature) Reduck Nucl

(Typewritten or Printed Name)

Manny of Engineering Title Date: 12,21,2015

CC: Affected System **ITC** Interconnection Liaison From:Chad D MorrisTo:MI.Utility@ccrenew.comSubject:RE: Affected System NoticesDate:Friday, December 22, 2017 4:05:36 PMAttachments:image002.png

The remaining 5 Engineering Reviews are close to completion/final review.

From: MI.Utility@ccrenew.com [mailto:mi.utility@ccrenew.com]
Sent: Friday, December 22, 2017 4:23 PM
To: Chad D Morris <chad.morris@dteenergy.com>
Cc: MI.Utility@ccrenew.com
Subject: [EXTERNAL] RE: Affected System Notices

Chad,

What is the status of the remaining 5 Engineering Reviews? These should have been provided by now.

Thanks, Harsh

#### Harsh Mehta

Utility Manager - Development Cypress Creek Renewables 3250 Ocean Park Blvd | Santa Monica, California 90405 | <u>harsh.mehta@ccrenew.com</u>



From: Chad D Morris [mailto:chad.morris@dteenergy.com]
Sent: Friday, December 22, 2017 3:09 PM
To: MI.Utility@ccrenew.com
Cc: Chad D Morris <<u>chad.morris@dteenergy.com</u>>
Subject: Affected System Notices

Harsh,

Please see the attached Affected System Notices. Paper copies will be mailed out to you next week.

Regards, Chad Morris Principal Engineer DO – Engineering Technology

From:	Chad D Morris
To:	MI.Utility@ccrenew.com
Cc:	Chad D Morris
Subject:	Affected System Notices
Date:	Tuesday, January 09, 2018 11:30:12 AM
Attachments:	Affected System Notice DE02164.pdf
	Affected System Notice DE02394.pdf
	Affected System Notice DE02506.pdf
	Affected System Notice DE02507.pdf
	Affected System Notice DE02533.pdf

Hi Harsh,

Please see the attached Affected System Notices. Paper copies will be mailed out to you this week.

Regards, Chad Morris Principal Engineer DO – Engineering Technology

From:	MI.Utility@ccrenew.com
To:	Kostas Tolios; Chad D Morris
Cc:	Geoff Fallon; Daniel Edelstein; Dewey Klurfield
Subject:	FW: DTE Technical Data Requests x 10
Date:	Friday, January 12, 2018 7:43:00 AM
Attachments:	image001.png
	Castair Technical Data Form.pdf
	Drum_Technical Data Form.pdf
	Fritz_Technical Data Form.pdf
	Kramer Technical Data Form.pdf
	Mandich Technical Data Form.pdf
	Roach Technical Data Form.pdf
	Sheridan Lane Technical Data Form.pdf
	Wixson Technical Data Form.pdf
	Yardbird Technical Data Form.pdf
	Potts Technical Data Form.pdf

Hi Kostas and Chad,

Can I please follow up on this request for preliminary technical data for the following projects:

Project Name	Application Number	MWac	MWdc	Site Address	Application Submitted
Castair	DE-02390	2	2.8		8/17/2017
Drum	DE17121	20	28		6/6/2017
Fritz	DE-02755	2	2.8		11/30/2017
Kramer	DE-02530	2	2.8		9/14/2017
Mandich	DE-02684	2	2.8		11/12/2017
Roach	DE-02471	2	2.8		8/28/2017
Sheridan Line	DE-02403	2	2.8		8/17/2017
Wixson	DE-02459	2	2.8		8/28/2017
Yardbird	DE-02449	2	2.8		8/28/2017
Potts	DE-02401	2	2.8		8/17/2017

Thanks,

Harsh

#### From: MI.Utility

Sent: Wednesday, December 06, 2017 5:39 PM

To: 'Kostas Tolios' <kostas.tolios@dteenergy.com>

**Cc:** Chris Norqual <norqual@ccrenew.com>; Geoff Fallon <fallon@ccrenew.com>; Daniel Edelstein <edelstein@ccrenew.com>; Dewey Klurfield <dewey.klurfield@ccrenew.com>; 'Chad D Morris' <chad.morris@dteenergy.com>

**Subject:** DTE Technical Data Requests x 10

Hi Kostas,

As discussed, in lieu of the two hour technical consultation, we are requesting the preliminary technical data in the attached forms for the following 10 projects:

Project Name	Application Number	MWac	MWdc	Site Address	Application Submitted
Castair	DE-02390	2	2.8		8/17/2017
Drum	DE17121	20	28	-	6/6/2017
Fritz	DE-02755	2	2.8		11/30/2017
Kramer	DE-02530	2	2.8		9/14/2017
Mandich	DE-02684	2	2.8		11/12/2017
Roach	DE-02471	2	2.8		8/28/2017
Sheridan Line	DE-02403	2	2.8		8/17/2017
Wixson	DE-02459	2	2.8		8/28/2017
Yardbird	DE-02449	2	2.8		8/28/2017
Potts	DE-02401	2	2.8		8/17/2017

This information will be very helpful in determining which projects to move forward to an Engineering Review. This data will help eliminate nonviable projects from the queue and free up time and resources for both DTE and CCR.

Please let me know if I can provide any additional information to kick these off and thank you for your help!

Regards, Harsh

Harsh Mehta Utility Manager - Development Cypress Creek Renewables 3250 Ocean Park Blvd | Santa Monica, California 90405 | harsh.mehta@ccrenew.com



From:	INTERCONNECT_STUDY
To:	Harsh Mehta
Cc:	Chris Norqual; Luke O"Dea; Geoff Fallon; Daniel Edelstein; Dewey Klurfield; MI.Utility@ccrenew.com
Subject:	RE: Cypress Creek - Affected System Notifications
Date:	Thursday, January 18, 2018 11:06:44 AM
Attachments:	image003.png

Harsh,

DTE does not release system information to customers or developers. With the projects, the circuits would experience reverse powerflow to ITC equipment during normal daylight system conditions which was a criteria identified by the ITC to trigger the affected system notice. DTE is not affiliated with ITC.

In regards to Telegraph, the area has been under study for reliability improvements over the last year to improve reliability for existing rate payers, at the end of the year the specific improvements were determined. We are assessing the impact to your project.

From: Harsh Mehta [mailto:harsh.mehta@ccrenew.com]
Sent: Tuesday, January 16, 2018 4:49 PM
To: Chad D Morris <chad.morris@dteenergy.com>
Cc: Chris Norqual <norqual@ccrenew.com>; Luke O'Dea <luke.odea@ccrenew.com>; Geoff Fallon <fallon@ccrenew.com>; Daniel Edelstein
<edelstein@ccrenew.com>; Dewey Klurfield <dewey.klurfield@ccrenew.com>; MI.Utility@ccrenew.com; Kostas Tolios
<kostas.tolios@dteenergy.com>
Subject: [EXTERNAL] Cypress Creek - Affected System Notifications
Importance: High
Good afternoon Chad,

Can you please provide some technical guidance on what triggered the affected system notices for 9 of our Engineering Reviews prior to Friday's meeting?

Can you also confirm DTE Energy's relationship with the International Transmission Company ("Affected System"). What voltages does the International Transmission Company manage?

Project Name	Application Number	MWac	MWdc	County	Site Address	Application Submitted
Howe	DE17129	2	3	Monroe		7/13/2017
Greenwood	DE-02391	2	3	St. Clair		8/17/2017
Koylette	DE-02394	2	3	Sanilac		8/17/2017
Telegraph	DE-02439	2	3	Monroe		8/23/2017
Jeddo	DE-02433	2	3	St. Clair		8/23/2017
Haven Ridge	DE-02460	2	3	Macomb		8/28/2017
Yost	DE-02475	2	3	St. Clair		8/28/2017
Glasgow	DE-02506	2	3	Sanilac		9/6/2017
Mattison	DE-02507	2	3	Sanilac		9/6/2017
Butler	DE-02533	2	3	Sanilac		9/14/2017

Also, did Telegraph Solar pass the affected system screen? We did not receive a notice for this project.

Thanks, Harsh

Harsh Mehta

Utility Manager - Development Cypress Creek Renewables 3250 Ocean Park Blvd | Santa Monica, California 90405 | harsh.mehta@ccrenew.com



Hello,

After additional review, it has been determined that DE-02460 does not create an affected system condition. Please ignore the Affected system Notice previously sent for DE-02460.

DTE Interconnect Team

From:	INTERCONNECT_STUDY
To:	Harsh Mehta
Cc:	Chris Norqual; Luke O"Dea; Casey May; Geoff Fallon; Daniel Edelstein; Dewey Klurfield; MI.Utility@ccrenew.com
Subject:	RE: Cypress Creek - ITC Follow Up
Date:	Monday, February 05, 2018 8:53:03 AM
Attachments:	image002.png

Cypress Creek,

The ITC left a voicemail with DTE on the afternoon of Friday, February 2 informing DTE that the ITC did not require any modifications to accommodate the proposed interconnections identified by DTE as Affected Systems. These interconnections include the jobs listed below. Costs for each of the nine jobs are also listed. DTE is currently working to provide invoices to Cypress Creek. Cypress Creek will receive the Engineering Review results as soon as invoices are sent Cypress Creek and DTE receives payment from Cypress Creek.

Project Name	Application Number	Study Cost
Howe	DE17129 (DE02164)	\$32,295.00
Greenwood	DE-02391	\$32,610.00
Koylette	DE-02394	\$32,485.00
Jeddo	DE-02433	\$30,602.00
Haven Ridge	DE-02460	\$32,080.00
Yost	DE-02475	\$31,592.00
Glasgow	DE-02506	\$30,960.00
Mattison	DE-02507	\$31,492.00
Butler	DE-02533	\$30,745.00

Regards,

DTE Interconnect Team

From: Harsh Mehta [mailto:harsh.mehta@ccrenew.com]

Sent: Wednesday, January 31, 2018 7:18 PM

**To:** INTERCONNECT\_STUDY <interconnect\_study@dteenergy.com>

**Cc:** Chris Norqual <norqual@ccrenew.com>; Luke O'Dea <luke.odea@ccrenew.com>; Casey May <casey.may@ccrenew.com>; Geoff Fallon <fallon@ccrenew.com>; Daniel Edelstein <cdelstein@ccrenew.com>; Dewey Klurfield

<dewey.klurfield@ccrenew.com>; MI.Utility@ccrenew.com

Subject: [EXTERNAL] Cypress Creek - ITC Follow Up

Importance: High

DTE Energy,

After speaking with Michael Hamlin at the ITC, he has no further concerns at this time and will be sending notification to release the affected system notices for the 9 projects listed below:

Project Name	Application Number	MWac	County	Site Address	Application Submitted
Howe	DE17129	2	Monroe		7/13/2017
Greenwood	DE-02391	2	St. Clair		8/17/2017
Koylette	DE-02394	2	Sanilac	453	8/17/2017
Jeddo	DE-02433	2	St. Clair		8/23/2017
Haven Ridge	DE-02460	2	Macomb		8/28/2017
Yost	DE-02475	2	St. Clair		8/28/2017
Glasgow	DE-02506	2	Sanilac		9/6/2017
Mattison	DE-02507	2	Sanilac		9/6/2017
Butler	DE-02533	2	Sanilac		9/14/2017

Can we please request the Engineering Review results for our 10 projects currently in study or dates when they will be provided?

If necessary, please provide invoices for any remaining balances with details on the actual costs incurred for the study.

Best Regards,

Harsh

Harsh Mehta Utility Manager - Development Cypress Creek Renewables 3250 Ocean Park Blvd | Santa Monica, California 90405 | harsh.mehta@ccrenew.com



Page 1 of 6

From:	INTERCONNECT_STUDY
To:	Chris Norqual; INTERCONNECT_STUDY
Cc:	Luke O"Dea: Casey May; Geoff Fallon; Daniel Edelstein; Dewey Klurfield; MI.Utility@ccrenew.com; Harsh Mehta; Baldwinj2@michigan.gov
Subject:	RE: Cypress Creek - ITC Follow Up
Date:	Friday, February 16, 2018 2:50:24 PM
Attachments:	image002.png
	image003.png
	image004.png
	image005.png
	image006.png
	image007.png
	DE02391 Engineering Review Report.pdf

Cypress Creek,

Please see the attached engineering review for DE-02391 (Greenwood).

Best Regards, DTE Interconnect Team

From: Chris Norqual [mailto:norqual@ccrenew.com]
Sent: Friday, February 16, 2018 10:22 AM
To: INTERCONNECT\_STUDY <interconnect\_study@dteenergy.com>
Cc: Luke O'Dea <luke.odea@ccrenew.com>; Casey May <casey.may@ccrenew.com>; Geoff Fallon <fallon@ccrenew.com>; Daniel
Edelstein <edelstein@ccrenew.com>; Dewey Klurfield <dewey.klurfield@ccrenew.com>; MI.Utility@ccrenew.com; Harsh Mehta
<harsh.mehta@ccrenew.com>; Baldwinj2@michigan.gov
Subject: [EXTERNAL] RE: Cypress Creek - ITC Follow Up
Importance: High

DTE,

I'd like to respectfully ask if you have already deposited the check for \$30,110 (below), and if you are merely waiting for it to clear, or does it still need to be deposited? We'd like to receive the Greenwood study results that have been paid for in full; and we are willing to help in any way. I can arrange a wire in place of this check today if that would allow you to release the results sooner. Your response before 3pm EST today would be greatly appreciated so that we have time to put a wire together, if the check has not been deposited yet.

Regardless, we expect the results of this study immediately since it is now well beyond the due date per the allowable time in the generator interconnection rules.

Best regards,

Chris Norqual

Сург	ess Creek Renewables Development, LLC	Wells Fargo Bank	005877
3250 Ste 3	Ocean Park Blvd		Date: 02/06/2018
	a Monica, CA 90405		
Pay	Thirty Thousand One Hundred Ten Dollars		\$30,110.00
Pay to the	DTE Energy		
Order of	Interconnection Coordinator		
	One Energy Plaza, SB 490 Detroit, MI 48226		
	United States		
			Not valid after 180 days

From: Chris Norqual

Sent: Wednesday, February 14, 2018 12:22 PM

To: 'INTERCONNECT\_STUDY' < interconnect\_study@dteenergy.com>

**Cc:** Luke O'Dea <<u>luke.odea@ccrenew.com</u>>; Casey May <<u>casey.may@ccrenew.com</u>>; Geoff Fallon <<u>fallon@ccrenew.com</u>>; Daniel Edelstein <<u>edelstein@ccrenew.com</u>>; Dewey Klurfield <<u>dewey.klurfield@ccrenew.com</u>>; <u>MI.Utility@ccrenew.com</u>; Harsh Mehta <<u>harsh.mehta@ccrenew.com</u>>; <u>Baldwinj2@michigan.gov</u>

Subject: RE: Cypress Creek - ITC Follow Up

Importance: High

To DTE,

As a follow up to yesterday's email, can you please let us know the specifics of cashing the check for the balance in the attached Greenwood invoice, which arrived at your office over one week ago?

Since we have paid in full (\$32,610), we believe it to be unreasonable to withhold Greenwood's Engineering Review results. Can you please send us the report as soon as possible?

My apologies for the wire instructions request in yesterday's email, I found them on the invoices and we'll use this method going forward to avoid any confusion or delay in checks clearing at the bank.

Thank you,

Chris Norqual

From: Chris Norqual

Sent: Tuesday, February 13, 2018 7:48 AM

To: 'INTERCONNECT\_STUDY' < interconnect\_study@dteenergy.com>

**Cc:** Luke O'Dea <<u>luke.odea@ccrenew.com</u>>; Casey May <<u>casey.may@ccrenew.com</u>>; Geoff Fallon <<u>fallon@ccrenew.com</u>>; Daniel Edelstein <<u>edelstein@ccrenew.com</u>>; Dewey Klurfield <<u>dewey.klurfield@ccrenew.com</u>>; MI.Utility@ccrenew.com; Harsh Mehta <<u>harsh.mehta@ccrenew.com</u>>

Subject: RE: Cypress Creek - ITC Follow Up

DTE,

Please provide details about the status of the check we sent for Greenwood. Has DTE already processed it to be cashed? If you are experiencing any sort of trouble at the bank with the check, please let me know immediately and we'll send a wire today. The overnight package containing the check was received by DTE early last week, and therefore I believe it reasonable to expect the study results by the end of day today, one week after the check arrived.

I also kindly request that you provide wire instructions so that future payments can be deposited directly into DTE's account and there will be no unnecessary delay in providing study results due to waiting for checks to clear.

Thank you,

#### **Chris Norqual**

Vice President - Utilities Cypress Creek Renewables 3250 Ocean Park Blvd, Suite 355 | Santa Monica, California 90405



norqual@ccrenew.com

From: INTERCONNECT\_STUDY [mailto:interconnect\_study@dteenergy.com]
Sent: Tuesday, February 13, 2018 5:58 AM

To: INTERCONNECT\_STUDY <<u>interconnect\_study@dteenergy.com</u>>; Harsh Mehta <<u>harsh.mehta@ccrenew.com</u>>

Cc: Chris Norqual <<u>norqual@ccrenew.com</u>>; Luke O'Dea <<u>luke.odea@ccrenew.com</u>>; Casey May <<u>casey.may@ccrenew.com</u>>; Geoff Fallon <<u>fallon@ccrenew.com</u>>; Daniel Edelstein <<u>edelstein@ccrenew.com</u>>; Dewey Klurfield <<u>dewey.klurfield@ccrenew.com</u>>; MI.Utility@ccrenew.com

Subject: RE: Cypress Creek - ITC Follow Up

Cypress Creek,

Please see the attached invoices that have been revised to reflect Cypress Creek's \$2,500.00 deposit for each study. Invoice 90262736 pertains to Greenwood and will be considered paid once the check has been cleared.

Regards,, DTE Interconnect Team

#### From: INTERCONNECT\_STUDY

Sent: Thursday, February 08, 2018 5:24 PM To: Harsh Mehta <<u>harsh.mehta@ccrenew.com</u>>; INTERCONNECT\_STUDY <<u>interconnect\_study@dteenergy.com</u>> Cc: Chris Norqual <<u>norqual@ccrenew.com</u>>; Luke O'Dea <<u>luke.odea@ccrenew.com</u>>; Casey May <<u>casey.may@ccrenew.com</u>>; Geoff Fallon <<u>fallon@ccrenew.com</u>>; Daniel Edelstein <<u>edelstein@ccrenew.com</u>>; Dewey Klurfield <<u>dewey.klurfield@ccrenew.com</u>>; MI.Utility@ccrenew.com Subject: FW: Cypress Creek - ITC Follow Up

Cypress Creek,

Thank you. DTE will process Cypress Creek's payment for interconnection project DE-02391, and send the study out once the check is cleared. Updated invoices will also be sent reflecting the deposits for the other 8 projects.

Regards, DTE Interconnect Team

From: Harsh Mehta [mailto:harsh.mehta@ccrenew.com]
Sent: Thursday, February 08, 2018 4:21 PM
To: INTERCONNECT\_STUDY <interconnect\_study@dteenergy.com>
Cc: Chris Norqual <norqual@ccrenew.com>; Luke O'Dea <luke.odea@ccrenew.com>; Casey May <casey.may@ccrenew.com>;
Geoff Fallon <fallon@ccrenew.com>; Daniel Edelstein <edelstein@ccrenew.com>; Dewey Klurfield
<dewey.klurfield@ccrenew.com>; MI.Utility@ccrenew.com
Subject: [EXTERNAL] RE: Cypress Creek - ITC Follow Up

DTE Interconnect Team,

This payment of \$30,100.00 is the balance due after subtracting our initial deposit of \$2,500 that was submitted to DTE on September 29, 2017 and was cashed by DTE on October 25, 2017.

As the invoice has been paid in full, please provide the Engineering Review results as soon as possible.

Regards, Harsh

#### Harsh Mehta

Utility Manager - Development Cypress Creek Renewables 3250 Ocean Park Blvd | Santa Monica, California 90405 | <u>harsh.mehta@ccrenew.com</u>



From: INTERCONNECT\_STUDY [mailto:interconnect\_study@dteenergy.com]
Sent: Thursday, February 08, 2018 3:02 PM

To: Chris Norqual <<u>norqual@ccrenew.com</u>>; INTERCONNECT\_STUDY <<u>interconnect\_study@dteenergy.com</u>>

**Cc:** Luke O'Dea <<u>luke.odea@ccrenew.com</u>>; Casey May <<u>casey.may@ccrenew.com</u>>; Geoff Fallon <<u>fallon@ccrenew.com</u>>; Daniel Edelstein <<u>edelstein@ccrenew.com</u>>; Dewey Klurfield <<u>dewey.klurfield@ccrenew.com</u>>; <u>MI.Utility@ccrenew.com</u>; Harsh Mehta

Page 4 of 6

<<u>harsh.mehta@ccrenew.com</u>>

Subject: RE: Cypress Creek - ITC Follow Up

Cypress Creek,

Please see the attached invoices for the projects and costs emailed to you on February 5. DTE received a check in the amount of \$30,110.00 for interconnection project # DE-02391 this afternoon. This payment will be treated as partial payment until DTE receives the total invoiced amount of \$32,610.00. Please submit the remaining payment for DE-02391 and payments for the additional 8 studies. Reports will be sent to Cypress Creek once payments for the amounts provided in the attached invoices has been received.

Regards, DTE Interconnect Team

From: Chris Norqual [mailto:norqual@ccrenew.com] Sent: Thursday, February 08, 2018 11:19 AM

**To:** INTERCONNECT\_STUDY <<u>interconnect\_study@dteenergy.com</u>>

**Cc:** Luke O'Dea <<u>luke.odea@ccrenew.com</u>>; Casey May <<u>casey.may@ccrenew.com</u>>; Geoff Fallon <<u>fallon@ccrenew.com</u>>; Daniel Edelstein <<u>edelstein@ccrenew.com</u>>; Dewey Klurfield <<u>dewey.klurfield@ccrenew.com</u>>; <u>MI.Utility@ccrenew.com</u>; Harsh Mehta <<u>harsh.mehta@ccrenew.com</u>>

Subject: [EXTERNAL] RE: Cypress Creek - ITC Follow Up

DTE:

A payment in the amount of \$30,110.00 was sent to you for the engineering study in connection with the Greenwood project, DTE generator interconnection # DE-02391. As you know, we have expressed our concerns to you regarding the level of payment demanded by DTE for the study. At this time, Cypress Creek does not have sufficient information to determine if the required payment is reasonable in light of the work performed or limited to DTE's actual cost for the study, as required under the Michigan Public Service Commission's generator interconnection rules. As such, in making this payment under protest, Cypress Creek reserves its rights, including the right to claim reimbursement from DTE, for any unjust or unreasonable costs assessed.

Please confirm receipt of this check which was sent to the attention of the Interconnection Coordinator. Additionally, we request the engineering study report for Greenwood as soon as possible.

Best regards,

#### **Chris Norqual**

Vice President - Utilities Cypress Creek Renewables 3250 Ocean Park Blvd, Suite 355 | Santa Monica, California 90405



norqual@ccrenew.com

From: Harsh Mehta

Sent: Monday, February 05, 2018 5:06 PM

To: INTERCONNECT\_STUDY < interconnect\_study@dteenergy.com >

**Cc:** Chris Norqual <<u>norqual@ccrenew.com</u>>; Luke O'Dea <<u>luke.odea@ccrenew.com</u>>; Casey May <<u>casey.may@ccrenew.com</u>>; Geoff Fallon <<u>fallon@ccrenew.com</u>>; Daniel Edelstein <<u>edelstein@ccrenew.com</u>>; Dewey Klurfield <<u>dewey.klurfield@ccrenew.com</u>>; MI.Utility@ccrenew.com

Subject: RE: Cypress Creek - ITC Follow Up

DTE Interconnect Team,

Can we please request the invoice for Greenwood (DE-02391) be sent first with an itemized breakdown of numbers of hours spent

#### Page 5 of 6

on the Engineering Review? We are planning to mail the payment for the Greenwood balance tomorrow.

Thanks, Harsh

Harsh Mehta Utility Manager - Development Cypress Creek Renewables 3250 Ocean Park Blvd | Santa Monica, California 90405 | harsh.mehta@ccrenew.com



From: INTERCONNECT\_STUDY [mailto:interconnect\_study@dteenergy.com]
Sent: Monday, February 05, 2018 8:53 AM
To: Harsh Mehta <<u>harsh.mehta@ccrenew.com</u>>
Cc: Chris Norqual <<u>norqual@ccrenew.com</u>>; Luke O'Dea <<u>luke.odea@ccrenew.com</u>>; Casey May <<u>casey.may@ccrenew.com</u>>;
Geoff Fallon <<u>fallon@ccrenew.com</u>>; Daniel Edelstein <<u>edelstein@ccrenew.com</u>>; Dewey Klurfield
<<u>dewey.klurfield@ccrenew.com</u>>; MI.Utility@ccrenew.com
Subject: RE: Cypress Creek - ITC Follow Up

Cypress Creek,

The ITC left a voicemail with DTE on the afternoon of Friday, February 2 informing DTE that the ITC did not require any modifications to accommodate the proposed interconnections identified by DTE as Affected Systems. These interconnections include the jobs listed below. Costs for each of the nine jobs are also listed. DTE is currently working to provide invoices to Cypress Creek. Cypress Creek will receive the Engineering Review results as soon as invoices are sent Cypress Creek and DTE receives payment from Cypress Creek.

Project Name	Application Number	Study Cost
Howe	DE17129 (DE02164)	\$32,295.00
Greenwood	DE-02391	\$32,610.00
Koylette	DE-02394	\$32,485.00
Jeddo	DE-02433	\$30,602.00
Haven Ridge	DE-02460	\$32,080.00
Yost	DE-02475	\$31,592.00
Glasgow	DE-02506	\$30,960.00
Mattison	DE-02507	\$31,492.00
Butler	DE-02533	\$30,745.00

Regards, DTE Interconnect Team

From: Harsh Mehta [mailto:harsh.mehta@ccrenew.com] Sent: Wednesday, January 31, 2018 7:18 PM

To: INTERCONNECT\_STUDY < interconnect\_study@dteenergy.com >

**Cc:** Chris Norqual <<u>norqual@ccrenew.com</u>>; Luke O'Dea <<u>luke.odea@ccrenew.com</u>>; Casey May <<u>casey.may@ccrenew.com</u>>; Geoff Fallon <<u>fallon@ccrenew.com</u>>; Daniel Edelstein <<u>edelstein@ccrenew.com</u>>; Dewey Klurfield

<<u>dewey.klurfield@ccrenew.com</u>>; <u>MI.Utility@ccrenew.com</u>

Subject: [EXTERNAL] Cypress Creek - ITC Follow Up Importance: High After speaking with Michael Hamlin at the ITC, he has no further concerns at this time and will be sending notification to release the affected system notices for the 9 projects listed below:

Project Name	Application Number	MWac	County	Site Address	Application Submitted
Howe	DE17129	2	Monroe		7/13/2017
Greenwood	DE-02391	2	St. Clair		8/17/2017
Koylette	DE-02394	2	Sanilac		8/17/2017
Jeddo	DE-02433	2	St. Clair		8/23/2017
Haven Ridge	DE-02460	2	Macomb		8/28/2017
Yost	DE-02475	2	St. Clair		8/28/2017
Glasgow	DE-02506	2	Sanilac		9/6/2017
Mattison	DE-02507	2	Sanilac		9/6/2017
Butler	DE-02533	2	Sanilac		9/14/2017

Can we please request the Engineering Review results for our 10 projects currently in study or dates when they will be provided?

If necessary, please provide invoices for any remaining balances with details on the actual costs incurred for the study.

Best Regards, Harsh

#### Harsh Mehta

Utility Manager - Development Cypress Creek Renewables 3250 Ocean Park Blvd | Santa Monica, California 90405 | harsh.mehta@ccrenew.com



# Distribution Generation Interconnection Study for DE - 02391

Revision 0 Date Released: 2/16/18

# 1.0 STUDY SUMMARY

# 1.1 Project information

Project Developer	Cypress Creek Renewables
Project Name (optional)	Greenwood
Project Size (kW)	2,000 kWac / 3,000 kWdc
Project Size (kVA)	2,200 kVA
Category (1 to 5)	4
Phase (Three Phase/Single Phase)	Three-Phase
Generation & Fuel type (e.g. Solar PV)	Solar-PV
Interconnecting location (descriptive	3-Phase 13.2 kV line downstream of the
e.g. NE Corner of intersection of Hill	
and Dale Roads on the 13.2kV line)	
DTE Application queue number	DE-02391
Application Date (mm/dd/yyyy)	08/17/2017
Interconnecting at a voltage of (kV)	13.2 kV
Street Address	
County	Lenawee
City, State, Zip Code	Clinton, MI, 49236
GPS Coordinates (Lat, Long – decimal)	
Project is in DTE service territory	Yes
Size and number of generation units	9,082 Canadian Solar CS6X330P PV Modules
	(or equivalent)
	1 SMA SC 2200-US Inverter
Connection (Delta, Grd Wye, Imp Grd)	Yg on 13.2 kV side
Net DC output (kVA)	3000
Net AC output (kVA)	2000
Reactive Capability ( $\pm$ kVAR or $\pm$ pf)	
Aux Load (kW & pf)	5 kWac (0.25% Net AC output)
AC Collector System	Yes
DC Collector System	No

# 1.2 Additional Project Information

Additional project information based on generation and fuel type (Delete tables that are not relevant to the review).

Solar Photovoltaic (PV) / Wind Turbine	Solar Photovoltaic (PV)
Туре 4	
PV panels / Wind Turbine (quantity, size, and	9,082 Canadian Solar CS6X330P PV
manufacturer)	Modules
	(or equivalent)
Inverter (quantity, size, manufacturer, model	1 SMA SC 2200-US Inverter
and version)	
Control mode (power factor, voltage, etc.)	Power Factor or Voltage
Frequency response	Yes
Voltage response	Yes
Nominal DC input voltage	Not provided (Max system voltage is 1000 V)
Nominal AC output voltage	385 V
Other	

This document is a summary of the Engineering Review completed for the project listed above. Site

specific equipment information (Delete tables that are not relevant to the review):

Equipment	Quantity	Manufacturer's Model
Transformer	1	2-Winding Transformer 13.2/0.385 kV, Yg/Y,
		2000 kVA, Imp = 6.0%
Breaker	0	
Recloser	2	Not provided. One is utility recloser and another
		one is solar farm owner's recloser
Air break switch	1	System Disconnect GOAB Switch
Switchgear	0	
Relay	1	SEL 651-R
Other Protection Devices	Varied	Expulsion and Partial-Range Current Limiting
		(PRCL) Fuses
Communication Equipment	1	DTE DER Protection/Integration Package

<b>Other Questions</b>		
Schedulable	Yes No	No
Seasonal	Yes No	No
Bidding into MISO	Yes No	No
Cogeneration	Yes No	No

rojeet Sizing that the developer apprea for				
Project Size	DC	AC		
kW	3,000	2,000		
kWh				
kVAR				

## Project Sizing that the developer applied for:

# 1.3 Summary of Study

The following specific studies were completed as part of this engineering review (Additional Studies may be performed by ITC/MISO/DTE as part of an affected systems study or as part of the Distribution Study. Those studies may impact the final cost of the project):

Study	Complete (Yes/No)			
Affected System – ITC/MISO	Yes			
Reverse Power Flow	Yes			
Load Flow	Yes			
Short Circuit	Yes			
Voltage flicker	Yes			
Harmonics review				
Protection review	Yes			

Based on the outcome of the studies above, the following special studies are required to be performed during the Distribution Study:

Study	Required (Yes/No)			
Transient Stability	Yes			
Harmonics	Yes			
Protection Coordination	Yes			
Electro-magnetic	No			
Sub-transmission	No			
Transmission	Yes			

This project affects the following systems:

<u>X</u> ITC – DTE Notified ITC on (MM/DD/YYYY) <u>12/21/2017</u>

\_\_\_\_\_ MISO – DTE Notified MISO on (MM/DD/YYYY) \_\_\_\_\_\_

Identified violations or issues require mitigation or system upgrade from the studies (yes means that a violation or issue exists in this area):

Item	Before	After	Percent Change
Thermal Overload (Yes/No)	Yes	Yes	0.157
Under-voltage (Yes/No)	Yes	Yes	0.54
Over-voltage (Yes/No)	Yes	Yes	0.133
Reverse Power Flow to substation (Yes/No)	Yes	Yes	
Maximum reverse power flow level to the	131	1853	1722
substation (kW)			
Exceed fault current duty (Yes/No)	No	No	
Voltage flicker issue (Yes/No)	No	Yes	0.5
Harmonics issue (Yes/No)			
Protection issue (Yes/No)	Yes	Yes	

# 1.4 Recommendation / System Upgrade

The following portions of the DTE Electric system require upgrades to support this interconnection ("X" indicates that work is required in this area):

- $\Box$  Substation Rebuild/New Substation
- $\Box$  Substation Transformer
- $\Box$  Substation Breakers
- $\boxtimes$  Substation SCADA/Communications
- $\boxtimes$  Substation Other
- $\Box$  Sub-Transmission Circuit New
- $\Box$  Sub-Transmission Conductor Upgrade
- □ Sub-Transmission Voltage Change
- $\Box$  Sub-Transmission Device Replacement/Addition
- $\Box$  Sub-Transmission Protection Changes
- $\Box$  Sub-Transmission Other
- $\Box$  Distribution Circuit New
- □ Distribution Conductor Upgrade
- □ Distribution Voltage Change
- ⊠ Distribution Device Replacement/Addition
- $\boxtimes$  Distribution Protection Changes
- $\boxtimes$  Distribution Other
- $\boxtimes$  Line Extension
- $\boxtimes$  Interconnection Protective Device Installation
- $\boxtimes$  Interconnection Communications and Controls Installation
- $\boxtimes$  Interconnection Meters

The following items have been reported to DTE by ITC and/or MISO and will need to be completed by the project developer before DTE can commission their portion of the project. DTE is not responsible for these items:

- □ ITC Mandated Equipment\*
- □ ITC Mandated Communications/Controls\*
- □ MISO Mandated Equipment\*
- □ MISO Mandated Communications/Controls\*
- (\* NOTE: Separate Agreements with MISO and ITC will be required to complete these items)

## 1.5 Special Studies Needed

Based on the completed studies and reviews in the Engineering Review, the following additional studies are required to be done during the distribution study:

Special Study	Transient Stability Study	Harmonics Study	Protection Coordination Study	Electro- magnetic Study	Sub- Transmission Study	Transmission Study
Required? (Y/N)	Yes	Yes	Yes	No	No	Yes
Completed (MM/DD/YYYY)	Click or tap to enter a date.	Click or tap to enter a date.	Click or tap to enter a date.	Click or tap to enter a date.	Click or tap to enter a date.	Click or tap to enter a date.

[NOTE: Until these studies are completed, DTE cannot ascertain costs. The results of these studies may modify the results listed above.]

# 1.5.1 Reasons for Special Studies

## Transient Stability Study was triggered by:

- Reverse power flow to sub-transmission system (From Load Flow Study)
- □ Existing generator(s) near point of common coupling (From System Review)
- $\Box$  Stiffness Ratio is low (< 2.4) (From Short Circuit Study)
- $\Box$  Stability issues in this area identified

#### Harmonics Study was triggered by:

- □ Harmonic generation from this proposed DER exceed level identified in IEEE Std 1547TM
- $\Box$  Total Voltage Harmonic Distortion THD (V) > 5% (From Harmonics Review)
- $\Box$  Total Current Demand Distortion TDD (I) > 5% (From Harmonics Review)
- □ Individual Current Harmonic Distortion > Limit shown in IEEE Std 519 TM (From Harmonics Review)
- □ Short Circuit Contribution Ratio (SCCR) is high ( $\geq 0.5$ )
- DER is inverter based with output greater than 80% of the minimal load on the circuit
- $\Box$  DER is inverter based and there are multiple inverter based DERs on the same circuit with a
- cumulative output of all these DER is greater than 80% of the minimal load on the circuit.
- $\Box$  Additional capacitor banks were identified as system upgrade (From Load Flow Study)

# **Protections Coordination was triggered by:**

- □ Protection issue identified (From Protection Review)
- Reverse power flow to sub-transmission system (From Load Flow Study)
- □ Exceed fault current duty after generator interconnection (From Short Circuit Study)

# Electro Magnetic Study was triggered by:

□ Any concern for resonance condition (From Short Circuit Study)

# Sub-transmission Study was triggered by:

- □ Reverse power flow to sub-transmission system (From Load Flow Study)
- $\Box$  Reliability (load flow and stability) issues in this area on sub-transmission system
- $\Box$  Power factor

# Transmission Study (affected system) was triggered by:

- Reverse power flow to transmission system (From Load Flow Study)
- $\Box$  Reliability (load flow and stability) issues in this area on transmission system
- $\Box$  Power factor

# 1.6 Non-binding Improvement Estimate

This estimate is non-binding, it is based on historical information for similar work that DTE has performed over the last 5 years and is parametric in nature. It does not include local cost adders or special considerations (e.g. crossing a federal highway, railroad, waterway, work hour restrictions, etc.). It does not include rights of way, wetlands, or soil conditions in the estimate. It does not include permitting or inspections, nor local government meetings. It also does not include work rules or other work related special conditions. Weather is not factored into the estimate. The final estimate may be higher or lower than the numbers provided here. The numbers are based on the impacts indicated in section 1.4, and no attempt to do any engineering or design work has been done.

If there are affected systems for this project, they have NOT been included in this estimate, and additional engineer review work will have to be completed once ITC (and/or MISO) has provided their results. If this project has an affected system additional work and fees will apply, that work will take additional time once the results are provided to DTE and the developer by ITC/MISO. Project developer is directly responsible for any ITC and/or MISO costs. Special studies (see section 1.6 below) are also not included in this estimate – and the results of those studies may impact this estimate. The developer is responsible for paying all costs of special studies listed in section 1.6.

The numbers are purely budgetary in nature. During the Distribution Study the numbers will be refined to provide an engineering estimate.

Ball park estimate for this project for improvement of DTE facilities is between \$839,000 and \$1,175,000. This estimate does not include any ITC or MISO facilities upgrades or requirements.

From:	INTERCONNECT_STUDY
To:	MI.Utility@ccrenew.com; INTERCONNECT_STUDY
Cc:	Chris Norqual; Luke O"Dea; Casey May; Geoff Fallon; Daniel Edelstein; Dewey Klurfield; Baldwinj2@michigan.gov; Harsh
	Mehta
Subject:	RE: Glasgow (DE-02506) - Engineering Review
Date:	Tuesday, February 27, 2018 2:07:27 PM
Attachments:	image005.png
	DE02506 Engineering Review Report pdf

Cypress Creek,

Thank you for your payment. Please see the attached engineering review report for DE-02506 (Glasgow).

#### DTE Interconnect Team

From: Harsh Mehta [mailto:harsh.mehta@ccrenew.com]
Sent: Friday, February 23, 2018 5:25 PM
To: INTERCONNECT\_STUDY <interconnect\_study@dteenergy.com>
Cc: Chris Norqual <norqual@ccrenew.com>; Luke O'Dea <luke.odea@ccrenew.com>; Casey May
<casey.may@ccrenew.com>; Geoff Fallon <fallon@ccrenew.com>; Daniel Edelstein
<edelstein@ccrenew.com>; Dewey Klurfield <dewey.klurfield@ccrenew.com>; Baldwinj2@michigan.gov
Subject: [EXTERNAL] Glasgow (DE-02506) - Engineering Review

DTE Interconnect Team,

Please see the wire confirmation for the Glasgow (DE-02506) invoice below. Can we please request the Engineering Review report?

2/23/2018

Completed Payments



**Payment Information** 

Fed Ref # ( Payment ID 1518 Type Wire Name DTE Electric Company

Debit Account

Debit Account Development Acct # USD

#### Beneficiary

Beneficiary DTE Electric Company United States of America (US) Acct # Notification interconnect\_study@dteenergy.com

#### **Payment Details**

Debit Currency USD - United States Dollar

Credit Currency USD - United States Dollar

Amount 28,460.00 USD

Value Date 02/23/2018

Cutoff time 05:30 pm ET

#### References

Originator to Beneficiary Information OBI Glasgow MI-DTE-00631 Beneficiary Bank JPMorgan Chase Bank, National Association 875 SAW MILL RIVER RD ARDSLEY 10502 United States of America (US) ABA # (

Modified 02/22/2018 05:28 pm ET by MCBEA237

Originator CYPRESS CREEK RENEWABLES DEVELOPMEN 3250 OCEAN PARK BLVD SANTA MONICA CA 904053208 United States of America (US)

Payment References ID or Acct #

https://gpow.weilsfargo.com/gpow/Payments/CompletedPayments.do

Thanks, Harsh

Harsh Mehta Utility Manager - Development Cypress Creek Renewables 3250 Ocean Park Blvd | Santa Monica, California 90405

harsh.mehta@ccrenew.com



# Distribution Generation Interconnection Study for DE-02506

Revision 0 Date Released: 2/27/18

# 1.0 STUDY SUMMARY

# 1.1 Project information

Project Developer	Cypress Creek Renewables
Project Name (optional)	Glasgow
Project Size (kW)	2,000 kWac / 3000 kWdc
Project Size (KVA)	2,200
Category (1 to 5)	4
Phase (Three Phase/Single Phase)	Three-Phase
Generation & Fuel type (e.g. Solar PV)	Solar PV
Interconnecting location (descriptive	3-Phase 13.2 kV line at the intersection of
e.g. NE Corner of intersection of Hill	
and Dale Roads on the 13.2kV line)	
DTE Application queue number	DE-02506
Application Date (mm/dd/yyyy)	09/06/2017
Interconnecting at a voltage of (kV)	13.2 kV
Street Address	
County	Sanilac
City, State, Zip Code	Marlette, MI 48453
GPS Coordinates (Lat, Long – decimal)	
Project is in DTE service territory	Yes
Size and number of generation units	9,082 Canadian Solar CS6X330P PV Modules
	(or equivalent)
	1 SMA SC 2200-US Inverter
Connection (Delta, Grd Wye, Imp Grd)	Yg on 13.2 kV side
Net DC output (kWdc)	3,000
Net AC output (kVA)	2,000
Reactive Capability ( $\pm$ kVAR or $\pm$ pf)	
Aux Load (kW & pf)	5 kWac (0.25% Net AC output)
AC Collector System	Yes
DC Collector System	No

# 1.2 Additional Project Information

Additional project information based on generation and fuel type (Delete tables that are not relevant to the review).

Solar Photovoltaic (PV) / Wind Turbine	Solar Photovoltaic (PV)
Type 4	
PV panels / Wind Turbine (quantity, size, and	9,082 Canadian Solar CS6X330P PV
manufacturer)	Modules
	(or equivalent)
Inverter (quantity, size, manufacturer, model	1 SMA SC 2200-US Inverter
and version)	
Control mode (power factor, voltage, etc.)	Power Factor or Voltage
Frequency response	Yes
Voltage response	Yes
Nominal DC input voltage	Not provided (Max system voltage is 1000 V)
Nominal AC output voltage	385 V
Other	

This document is a summary of the Engineering Review completed for the project listed above. Site specific equipment information (Delete tables that are not relevant to the review):

<b>Equipment</b> Quantity		Manufacturer's Model		
Transformer	1	2-Winding Transformer 13.2/0.385 kV, Yg/Y,		
		2,000 kVA, Imp = 6.0%		
Breaker	0			
Recloser	2	Not provided. One is utility recloser and another		
		one is solar farm owner's recloser		
Air break switch	1	System Disconnect GOAB Switch		
Switchgear	0			
Relay	1	SEL 651-R		
Other Protection Devices	Varied	Expulsion and Partial-Range Current Limiting		
		(PRCL) Fuses		
Communication Equipment	1	DTE DER Protection/Integration Package		

Other Questions			
Schedulable	Yes	No	No
Seasonal	Yes	No	No
Bidding into MISO	Yes	No	No
Cogeneration	Yes	No	No

# **Project Sizing that the developer applied for:**

Project Size	DC	AC
kW	3,000	2,000
kWh		
kVAR		

# 1.3 Summary of Study

The following specific studies were completed as part of this engineering review (Additional Studies may be performed by ITC/MISO/DTE as part of an affected systems study or as part of the Distribution Study. Those studies may impact the final cost of the project):

Study	Complete (Yes/No)
Affected System – ITC/MISO	Yes
Reverse Power Flow	Yes
Load Flow	Yes
Short Circuit	Yes
Voltage flicker	Yes
Harmonics review	
Protection review	Yes

Based on the outcome of the studies above, the following special studies are required to be performed during the Distribution Study:

Study	Required (Yes/No)		
Transient Stability	Yes		
Harmonics	Yes		
Protection Coordination	Yes		
Electro-magnetic	No		
Sub-transmission	Yes		
Transmission	Yes		

This project affects the following systems:

<u>X</u> ITC – DTE Notified ITC on (MM/DD/YYYY) <u>1/4/2018</u>

\_\_\_\_\_ MISO – DTE Notified MISO on (MM/DD/YYYY) \_\_\_\_\_\_

Identified violations or issues require mitigation or system upgrade from the studies (yes means that a violation or issue exists in this area):

Item	Before	After	Percent Change
Thermal Overload (Yes/No)	Yes	Yes	0.04
Under-voltage (Yes/No)	Yes	Yes	0
Over-voltage (Yes/No)	Yes	Yes	2.01
Reverse Power Flow to substation (Yes/No)	No	Yes	
Maximum reverse power flow level to the substation (kW)	No	Yes	378 kW
Exceed fault current duty (Yes/No)	Yes	Yes	2.07
Voltage flicker issue (Yes/No)	No	Yes	2.1
Harmonics issue (Yes/No)	No		
Protection issue (Yes/No)	No	Yes	

# 1.4 Recommendation / System Upgrade

The following portions of the DTE Electric system require upgrades to support this interconnection ("X" indicates that work is required in this area):

- □Substation Rebuild/New Substation
- □ Substation Transformer
- □ Substation Breakers
- Substation SCADA/Communications
- Substation Other
- □ Sub-Transmission Circuit New
- $\Box$  Sub-Transmission Conductor Upgrade
- □ Sub-Transmission Voltage Change
- □ Sub-Transmission Device Replacement/Addition
- □ Sub-Transmission Protection Changes
- $\Box$  Sub-Transmission Other
- $\Box$  Distribution Circuit New
- □ Distribution Conductor Upgrade
- □ Distribution Voltage Change
- □ Distribution Device Replacement/Addition
- $\boxtimes$  Distribution Protection Changes
- $\boxtimes$  Distribution Other
- $\boxtimes$  Line Extension
- Interconnection Protective Device Installation
- $\boxtimes$  Interconnection Communications and Controls Installation

# ⊠ Interconnection Meters

The following items have been reported to DTE by ITC and/or MISO and will need to be completed by the project developer before DTE can commission their portion of the project. DTE is not responsible for these items:

- □ ITC Mandated Equipment\*
- □ ITC Mandated Communications/Controls\*
- □ MISO Mandated Equipment\*
- □ MISO Mandated Communications/Controls\*

(\* NOTE: Separate Agreements with MISO and ITC will be required to complete these items)

# 1.5 Special Studies Needed

Based on the completed studies and reviews in the Engineering Review, the following additional studies are required to be done during the distribution study:

Special Study	Transient Stability Study	Harmonics Study	Protection Coordination Study	Electro- magnetic Study	Sub- Transmission Study	Transmission Study
Required? (Y/N)	Yes	Yes	Yes	No	Yes	Yes
Completed (MM/DD/YYYY)	Click or tap to enter a date.	Click or tap to enter a date.	Click or tap to enter a date.	Click or tap to enter a date.	Click or tap to enter a date.	Click or tap to enter a date.

[NOTE: Until these studies are completed, DTE cannot ascertain costs. The results of these studies may modify the results listed above.]

# 1.5.1 Reasons for Special Studies

#### Transient Stability Study was triggered by:

- Reverse power flow to sub-transmission system (From Load Flow Study)
- □ Existing generator(s) near point of common coupling (From System Review)
- □ Stiffness Ratio is low (< 2.4) (From Short Circuit Study)
- □ Stability issues in this area identified

# Harmonics Study was triggered by:

- □ Harmonic generation from this proposed DER exceed level identified in IEEE Std 1547TM
- $\Box$  Total Voltage Harmonic Distortion THD (V) > 5% (From Harmonics Review)
- $\Box$  Total Current Demand Distortion TDD (I) > 5% (From Harmonics Review)
- □ Individual Current Harmonic Distortion > Limit shown in IEEE Std 519 TM (From Harmonics Review)
- $\Box$  Short Circuit Contribution Ratio (SCCR) is high ( $\geq 0.5$ )
- DER is inverter based with output greater than 80% of the minimal load on the circuit
- DER is inverter based and there are multiple inverter based DERs on the same circuit with a cumulative output of all
- these DER is greater than 80% of the minimal load on the circuit.
- □ Additional capacitor banks were identified as system upgrade (From Load Flow Study)

#### **Protections Coordination was triggered by:**

- □ Protection issue identified (From Protection Review)
- Reverse power flow to sub-transmission system (From Load Flow Study)
- □ Exceed fault current duty after generator interconnection (From Short Circuit Study)

#### Electro Magnetic Study was triggered by:

 $\Box$  Any concern for resonance condition (From Short Circuit Study)

#### Sub-transmission Study was triggered by:

- Reverse power flow to sub-transmission system (From Load Flow Study)
- $\Box$  Reliability (load flow and stability) issues in this area on sub-transmission system
- $\Box$  Power factor

#### Transmission Study (affected system) was triggered by:

- □ Reverse power flow to transmission system (From Load Flow Study)
- $\Box$  Reliability (load flow and stability) issues in this area on transmission system
- $\Box$  Power factor

# 1.6 Non-binding Improvement Estimate

This estimate is non-binding, it is based on historical information for similar work that DTE has performed over the last 5 years and is parametric in nature. It does not include local cost adders or special considerations (e.g. crossing a federal highway, railroad, waterway, work hour restrictions, etc.). It does not include rights of way, wetlands, or soil conditions in the estimate. It does not include permitting or inspections, nor local government meetings. It also does not include work rules or other work related special conditions. Weather is not factored into the estimate. The final estimate may be higher or lower than the numbers provided here. The numbers are based on the impacts indicated in section 1.4, and no attempt to do any engineering or design work has been done.

If there are affected systems for this project, they have NOT been included in this estimate, and additional engineer review work will have to be completed once ITC (and/or MISO) has provided their results. If this project has an affected system additional work and fees will apply, that work will take additional time once the results are provided to DTE and the developer by ITC/MISO. Project developer is directly responsible for any ITC and/or MISO costs. Special studies (see section 1.6 below) are also not included in this estimate – and the results of those studies may impact this estimate. The developer is responsible for paying all costs of special studies listed in section 1.6.

The numbers are purely budgetary in nature. During the Distribution Study the numbers will be refined to provide an engineering estimate.

Ball park estimate for this project for improvement of DTE facilities is between <u>\$807,000</u> and <u>\$1,130,000</u>. This estimate does not include any ITC or MISO facilities upgrades or requirements.



# PURPA Qualifying Facility Notification

This letter is to inform you that if you intend your project to be a PURPA Qualifying Facility, please see DTE Electric Rider No. 6 and note that Standard Offers are for projects less than 100kW. Consistent with the current Company tariff, the terms and conditions for a Power Purchase Agreement (PPA) for any facility greater than 100kW would be negotiated. Furthermore, any PPA that we negotiate in connection with a PURPA qualifying facility will be negotiated consistent with all PURPA rules, including the one-mile rule. The Company presently forecasts that it has no additional capacity needs in the next 10 years.