

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

CENTRAL MAINE POWER COMPANY and
PUBLIC SERVICE OF NEW HAMPSHIRE

Request for Certificate of Public Convenience and
Necessity for the Maine Power Reliability Program
Consisting of the Construction of Approximately
350 Miles of 345 kV and 115 kV Transmission
Lines ("MPRP")

Docket No. 2008-255

**EXCEPTIONS TO THE EXAMINERS' REPORT
GRIDSOLAR, LLC**

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Richard Silkman
Mark Isaacson

GRIDSOLAR, LLC
148 Middle St.
Suite 506
Portland, ME 04101
(207) 772-6190

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1. The Examiners' Report Provides No Basis for a Complete Reversal of the Findings of Fact and Conclusions of Law Determined by this Commission Less Than 12 Months Ago in its Orders in Docket 2008-159.

This Commission went to great effort in Docket No. 2008-156, the Commission's watershed proceeding in which it decided Maine should remain in ISO-New England, to address the flaws in the current regional transmission scheme that are creating extraordinary incentives to over-build transmission systems and runaway costs that are being imposed on Maine ratepayers and jeopardizing Maine's economic health and vitality. The Commission's Orders in Docket 2008-156 were issued less than one year ago and contain very powerful findings of fact and conclusions of law that should govern the central issue in this case – the socialization of transmission costs.¹ As GridSolar noted in its Brief, in that case the Commission found that there are several significant disadvantages of the socialized cost allocation methodology currently employed by ISO-NE. One in particular is that socializing the costs of transmission upgrades does not provide appropriate price signals and incentives to prospective users of the transmission system. For example, a buyer may be considering two alternative resources. The first may have relatively high generation costs but is located close to load being served and requires little or no additional investment in transmission. The second alternative has lower generation costs but is located remotely from load and requires significant transmission expenditures. The economically rational choice is to pick the alternative with the lower combined generation and transmission costs. However, if transmission costs are socialized, then the rational buyer would always choose the lower cost remote generation alternative since the additional transmission costs are not internalized into the price paid by the

¹ The findings of fact and conclusions of law in Docket 2008-156 have been fully incorporated by reference into the record in this case and previously discussed in GridSolar's principal brief. (*See* GridSolar Brief – Section 7.1)

buyer. Over time, this would lead to too much investment in transmission plant and greater total system costs.

The consequence of overinvestment in transmission plant was a core emphasis of the Commission's findings in Docket 2008-156. If the MPRP is built as proposed and current projections of transmission investment in the rest of New England are accurate, Maine ratepayers' transmission rates, in the short to medium term, would be lower under the current ISO-NE system. However, in the longer term, unless cost containment and cost allocation issues are addressed at ISO-NE, Maine's transmission costs could increase to, or exceed, the level projected for MISA in the Brattle Report.

The Commission's concerns over long term costs to Maine ratepayers reflect over a year of detailed analysis by the Commission, its Staff and various intervenor parties, including many of the parties in the current case. GridSolar has sought to apply the facts and law determined in Docket 2008-156 to this case not only because precedent is the fabric of a nation of laws, but also because the issues of transmission policy, ratemaking and prudent incentives in the two cases inextricably bind the cases to one another. For the Commission to reach inconsistent conclusions in the two cases would have serious implications and harm the regulatory process.

There has been no evidence submitted in the MPRP case that contradicts the Commission's earlier findings of fact and conclusions of law in Docket 2008-156. In fact, ISO-NE and CMP witnesses stated very clearly that neither could offer any guarantee that cost socialization would remain in place for the duration of the recovery period of the MPRP. Further, one of the Hearing Examiners, Mr. Cohen, indicated that the recovery of 92% of the MPRP costs from non-Maine ratepayers was an "unresolved question" and would depend on whether the Transmission Owners Agreements were reauthorized and the regulatory scheme in place in the future. (GridSolar Brief, at p. 66.)

Surprisingly, there was absolutely no acknowledgement of and not a single reference to this Commission's orders in Docket 2008-156 in the entire Examiners' Report. It is as if a year and a half study and the findings of fact and conclusions of law determined by this Commission, the pages of testimony and briefs submitted by GridSolar and other parties in this case related to this topic and the lengthy cross-examination of ISO-NE, CMP and Staff witnesses during hearings on this matter simply never happened.

When a court or regulatory body wholly disregards precedent that is less than one year old, as the Examiners' Report proposes, the overruling of the precedent requires both explicit acknowledgement and complete explanation. For justification of this reversal of course, the Commission must find that cost socialization is beneficial to Maine ratepayers in the short-term and over the full recovery period of the MPRP. It must find that the transmission cost allocation scheme in place today has a strong likelihood of being in place for the duration of recovery of the costs of the MPRP, so the costs will not be dumped on Maine ratepayers. It must find that, if Maine's transmission utilities do not execute a new Transmission Owners Agreement in 2012, or if they do and the terms of that new Agreement are different, then the current transmission cost allocation scheme will remain unchanged. It must find that the various new and revised transmission cost allocation schemes being adopted in other regions of the country or ordered into place by FERC will not extend to the ISO-NE Control Area and if they do, will not apply to MPRP cost recovery.

These are extraordinarily difficult findings to make; indeed, they cannot be made on this record. This is why less than one year ago, the Commission reached very different findings of fact and of conclusions of law, and why the Commission's orders in Docket 2008-156 are as they are. If the Commission cannot make the above findings based on the record in this case, then it should have the courage to state the alternative – that expediency and short-term

opportunity are overriding long-term consequences. And, having taken Maine down this path, the Commission must explain how it proposes to deal with the negative consequences so thoughtfully articulated in its findings of fact and conclusions of law in Docket 2008-156.

2. The Cost Comparison Between the MPRP and the NTAs in the Examiners' Report Has No Evidentiary Support in the Record.

The Examiners' Report concludes that the metric used in the NTA study to compare the NTA options to the MPRP does not provide a reliable basis for a decision in this case. (ER, at page 117.) Nevertheless, two pages later, the Examiners' Report relies on the same NTA study in presenting a table that shows that the cost of the best NTA is 51% of the total cost of the MPRP, which is more expensive to Maine ratepayers than the 8% share that would be allocated to Maine ratepayers under cost socialization. This table, however, is very misleading and unreliable for all of the reasons cited in the Examiners' Report – which are mostly related to the assumptions contained in the NTA study, but also because the NTA used in this table is designed to meet load levels and generation dispatch scenarios that the Examiners' Report dismisses as highly inflated and unreasonable. In fact, at the lower load levels the Staff determined are more reasonable, the analysis would show that the societal costs of the NTA are lower than the societal costs of the MPRP.

This is a fundamental error. The NTA used in this comparison was designed to meet peak load levels in the NTA study of 2,200 MW, which is 316 MW higher than the 90/10 Peak Load adopted by the Examiners' Report – see p. 67. In addition, since the NTAs are designed to address the CMP dispatch cases, and in particular D4, the starting level is approximately 250 MW below the peak load level that the CMP grid can reliably meet under the more reasonable Staff Needs Assessment. The combined effect of both of these errors is to add approximately

566 MW of generation equivalent (distributed generation capacity, conservation or demand-side management) to all NTAs, thereby driving the cost of these NTAs up significantly.

Since neither CMP nor LaCapra Associates performed any NTA study at load levels consistent with the findings in the Examiners' Report or without a dispatch case involving two generators being out simultaneously in a region² – again consistent with the findings in the Examiners' Report, any comparison made between the costs of the MPRP and the costs of the LaCapra NTAs (whether to New England as a whole or to Maine ratepayers alone) significantly overstates the cost of the NTAs. Accordingly, the NTA study that was performed cannot serve as a cost comparison standard for any purpose whatsoever.

3. The Record Contains Ample Evidence to Support a Finding by the Commission that the GridSolar Project Could Replace All or a Significant Portion of the MPRP.

The Examiners' Report concludes that the GridSolar Project is “feasible and potentially beneficial” but that “the design and implementation of the systems, required operational changes and costs/benefits are not sufficiently known for a finding to be made that would allow the GridSolar project to replace the MPRP or any of its sub-components. Moreover, it is unlikely that these issues can become sufficiently known without actual field testing and experience.” (ER at page 122.) GridSolar respectfully disagrees.

GridSolar believes that the information contained in its multiple filings in this case provide a more than adequate record for the Commission to make findings with respect to each of the issues noted above. Indeed, the two major parties in this case – CMP and the OPA – have both acknowledged that the GridSolar Project will work and will provide comparable reliability benefits to those provided by the MPRP. If CMP and OPA can reach these

² Tr. Feb. 4, 2010 at pp. 8-9.

conclusions on the basis of the GridSolar filings, then surely the Commission can reach a conclusion.

Moreover, the Examiners' rationale for avoiding a decision on these points is contrary to the record. As noted in the GridSolar filings, each of the equipment components of the GridSolar Project is, today, fully operational on many electricity grids in the United States and is working as designed. These components include distributed solar generation, back-up engine-generators, electricity flow meters and communication systems. EnerNOC, among others, has demonstrated the ability to remotely start and stop distributed engine-generators and dispatch customer load in response to signals from a grid operator. ISO-NE, among other RTOs, has demonstrated an ability to perform reliability dispatch on a scale that is orders of magnitude larger than what has been proposed by GridSolar. It is simply not true that the design and installation of the systems and required operational changes are not known. Maine does not have to field test the operation and performance of equipment, monitoring and control systems and reliability dispatch protocols that are performing perfectly well in every utility (including CMP and BHE) in the country.

GridSolar also believes that the Examiners have sufficient information to evaluate the "costs/benefits" of the GridSolar Project. GridSolar developed and presented detailed operational models of how distributed solar generation would operate in Maine, the relationship between back-up generation, load response and distributed solar generation necessary to ensure reliability and the financial costs of the overall system. These models and costs were reviewed by the OPA expert and found to be reasonable. Mr. Fagan did not contend that the information provided was incomplete or that actual field testing was required before he could evaluate the costs/benefits of the GridSolar Project.

Similarly, CMP did not contend that the information provided was incomplete. Rather, it performed a thorough evaluation of the GridSolar Project and came to different conclusions about the costs and benefits of the GridSolar Project. As enumerated in the Examiners' Report, CMP asserts that GridSolar:

1. overstated the production from its PV facilities
2. significantly understated installed resource costs
3. overstated the value of RECs and energy revenues, as well as avoided T&D costs
4. used financial and tax-related assumptions that were not realistic

The Examiners' Report notes that "GridSolar disputes each of CMP's criticisms point-by-point, maintaining that its financial model and assumptions are sound." (ER, p. 122) Each of these issues that is in dispute is capable of being analyzed by the Commission as a finder of fact in this case. Estimating energy generation from PV systems is something the Commission must do as it evaluates any proposals brought forward under its authority to enter into long-term capacity contracts; evaluating the costs of equipment is a routine function of regulatory bodies engaged in cost-of-service regulation; estimating forward prices for RECs and energy is key to evaluating long-term contracts, as the Commission did in its approval of the Rollins Wind project contract; and determining the appropriate application of tax and accounting rules is a long-standing expertise of regulatory bodies. None of these issues of controversy between GridSolar and CMP requires "actual field testing" to resolve, any more than the complex transmission and substation solutions proposed by CMP require field testing.

- 4. The Examiners' Report Does Not Consider the Showing Made by GridSolar That, at the Lower Levels of Need Based on the Load Forecast and Dispatch Cases Found by the Examiners to be Reasonable, the GridSolar Project Is a Lower Cost Alternative to Maine Ratepayers Even When the Costs of the MPRP Are Socialized.**

As noted above in Section 2, the Examiners' Report does not evaluate the costs or benefits of the NTAs identified in the CMP/LaCapra Associates NTA study based upon the load levels and dispatch scenarios the Examiners' Report finds to be reasonable. The GridSolar Project anticipated and corrected for the major revisions recommended by the Examiners' Report. In its Surrebuttal Filing dated February 2, 2010, GridSolar utilized the CMP analysis performed for GridSolar on September 1, 2009³ and a lower load forecast based on GridSolar's determination of future peak load levels over the 10-year study period through 2020. The former document was based on the Staff Needs Assessment⁴ and incorporated reasonable dispatch scenarios that are consistent with the findings and recommendations in the Examiners' Report.⁵

Under these conditions, and including the value of avoiding non-bulk power transmission and distribution investments over this 10-year study period, GridSolar demonstrates that the costs of the GridSolar Project to Maine ratepayers are lower than the costs of the MPRP, even when the costs of the MPRP are socialized. (GridSolar Surrebuttal Testimony, at pp 50-53.) This is a very important conclusion that requires a detailed and serious response by the Commission. There is no such response in the Examiners' Report, even though the Staff Bench Analysis stated very clearly that "Proper resource planning should not place a preference for transmission over generation. Rather, the least cost solution should be preferred." (at p. 21),

³ GridSolar Requested Threshold Load Analysis (September 1, 2009).

⁴ Staff Requested Needs Analysis (May 29, 2009) and Staff Requested Transmission Alternatives Assessment (September 1, 2009).

⁵ The GridSolar load forecasts are actually higher than those recommended in the Examiners' Report, but were lowered slightly by GridSolar's inclusion of additional energy conservation achievable over this 10-year period in addition to what CMP has built into its load forecast.

Summary

The Examiners' Report concludes that GridSolar has made a "*prima facie* case" for the GridSolar Project. This case includes a determination that the GridSolar Project will meet all applicable grid reliability standards and requirements. This case also includes a determination that, at the peak load levels and generation availability scenarios found by the Examiners' Report to be reasonable, the GridSolar Project will cost Maine ratepayers less than the MPRP, even assuming socialization of the MPRP. Further, the case includes specific evidence that the GridSolar Project will create far less environmental damage than the MPRP, will create more employment opportunity for Maine workers than the MPRP, will promote Maine's energy policy objectives as enumerated in the various sections of Maine law and, unlike the MPRP, will not leave Maine ratepayers with millions of dollars of cost liabilities should peak loads not grow as rapidly as forecasted. Finally, in sharp contrast to the MPRP, the case for the GridSolar Project does not rest solely on the manner in which transmission costs are allocated in New England and does not, therefore, require the Commission to whistle into the darkness as it walks past its historic findings of fact and of conclusions of law that this allocation mechanism is detrimental to Maine's interests and will cost Maine ratepayers more over the longer-term. Once again, these historic findings cast serious doubt about the wisdom of a conclusion that the financial benefits of transmission socialization will indeed endure and if they do, whether there will even be a benefit. Certainly, ISO-NE, CMP and Examiner Cohen were unable to offer any such assurances. If the Commission has reached a contrary conclusion, it should and must say so. If it has not, it cannot accept an Examiners' Report constructed on the unstated and false assumption that the Commission never reached the conclusions it reached in the ISO New England case.

Additionally, the Commission cannot ignore the robust evidence in the record supporting the GridSolar Project as a viable, cost-effective alternative to the MPRP, yet still fulfill its statutory obligations to find a “public need” for the MPRP under 35-A M.R.S. § 3132(6) and under Chapter 330(9). The Legislature has directed that the Commission must issue “specific findings” determining that there are no alternatives to construction of the transmission line (e.g., conservation, distributed generation or load management) that would strike a better balance, including considerations for public health and safety and historic and recreational values. The Commission’s own rules likewise require it to find that “The proposed transmission line must be reasonable compared to other alternatives ...” Neither of these findings has been made in the Examiners’ Report with respect to the GridSolar Project. To issue a CPCN for the MPRP without analysis and findings on these critical issues would be unlawful. More than that, it would be a great disservice to Maine ratepayers.