# COMMONWEALTH OF MASSACHUSETTS Energy Facilities Siting Board

) )

) )

In the Matter of the Petition of
U.S. Generating Company for
Approval to Construct a Bulk Generating
Facility and Ancillary Facilities

EFSB 96-4

# FINAL DECISION ON COMPLIANCE

Jolette A. Westbrook Hearing Officer May 20, 1998

On the Decision: William Febiger APPEARANCES: Mary Beth Gentleman, Esquire Adam P. Kahn, Esquire Andrew M. Latimer, Esquire Foley, Hoag & Eliot LLP One Post Office Square Boston, Massachusetts 02109 FOR: U.S. Generating Company <u>Petitioner</u>

> Kathryn J. Reid, Esquire Massachusetts Electric Co. & New England Power Co. 25 Research Drive Westborough, Massachusetts 01582 FOR: Massachusetts Electric Co. & New England Power Co. Interested Person

Donna C. Sharkey, Esquire Rubin and Rudman 50 Rowes Wharf Boston, Massachusetts 02110-3319 FOR: Berkshire Power Development <u>Interested Person</u>

Dennis J. Duffy, Esquire Partridge, Snow & Hahn 180 South Main Street Providence, Rhode Island 02903 FOR: Dighton Power Associates Limited Partnership <u>Interested Person</u>

Mark W. Bartolomei, Esquire Attorney At Law 25 Camp Hill Drive Oxford, Massachusetts 01540 FOR: Ian MacFarlane Interested Person

# TABLE OF CONTENTS

I.	INTRODUCTION Page 1
II.	PROJECT VIABILITY Page 2
	A.Standard of ReviewPage 2B.ConstructionPage 2C.OperationsPage 4D.Fuel AcquisitionPage 4
III.	ENVIRONMENTAL CONDITIONS
	A. Standard of Review Page 6   B. Pre-Construction Directives Page 7   1. Noise Mitigation Program Page 7   2. Certificate on the FEIR Page 7   C. Other Conditions Page 8   1. Chapter 21G Water Withdrawal Permit Page 8   2. Conservation Permits Page 9   3. Notice of Visual Impact Mitigation Requirement Page 11   4. Traffic Mitigation Page 12
IV.	ADDITIONAL ISSUESPage 13A.Facility Layout ChangesPage 13B.Ammonia TankPage 14
V.	DECISION Page 15

The Energy Facilities Siting Board hereby APPROVES the Petition of U.S. Generating Company to construct a nominal net 360-megawatt natural gas-fired power generation and ancillary facilities in Charlton, Massachusetts.

#### I. <u>INTRODUCTION</u>

On November 3, 1997, the Energy Facilities Siting Board ("Siting Board") conditionally approved the petition of U.S. Generating Company ("USGen") to construct a nominal net 360-megawatt ("MW") natural gas-fired, combined-cycle electric power plant on approximately 15 acres of a 120-acre site located in the Town of Charlton, Massachusetts ("Town" or "Charlton"). <u>U.S. Generating Company Decision</u>, EFSB 96-4, 1 (1997) ("<u>USGen Decision</u>"). The proposed facility is scheduled to begin commercial operation in the year 2000. <u>Id.</u> In the <u>USGen Decision</u>, the Siting Board found that USGen had established that, upon compliance with three conditions, the proposed project is likely to be viable. <u>Id.</u> at 83-84, 86, 93. In addition, the Siting Board found that, with the implementation of certain conditions pertaining to  $CO_2$  mitigation, water resources, wetlands impacts, visual impacts, noise, traffic, and fogging and icing, the environmental impacts of the proposed facility at the primary site would be minimized, consistent with minimizing cost. <u>Id.</u> at 186-187.

On March 25, 1998, USGen submitted a compliance filing relative to these conditions and certain changes to the project as approved in the <u>USGen Decision</u> ("Compliance Filing"). On April 15, 1998, USGen provided supplemental information to its March 25, 1998 compliance filing ("Compliance Supplement"). Finally, on May 4, 1998, USGen provided a copy of its Order of Conditions from the Southbridge Conservation Commission ("Order of Conditions").<sup>1</sup> The Siting Board addresses the Company's compliance with the viability and environmental conditions and the changes in the project in the following sections.

<sup>&</sup>lt;sup>1</sup> The Compliance Filing, including all attachments, is hereby moved into evidence as Exhibit EFSB-CF, with exhibits A through L. The Compliance Supplement, including all attachments and maps, is hereby moved into evidence as Exhibit EFSB-CF(S), with exhibits 1 through 6. The Order of Conditions, including all attachments, is hereby moved into evidence as Exhibit EFSB-CF(S2).

#### II. <u>PROJECT VIABILITY</u>

#### A. <u>Standard of Review</u>

The Siting Board determines that a proposed NUG is likely to be a viable source of energy if (1) the project is reasonably likely to be financed and constructed so that the project will actually go into service as planned, and (2) the project is likely to operate and be a reliable, least-cost source of energy over the planned life of the proposed project. <u>Dighton Power</u> <u>Decision</u>, EFSB 96-3, at 24; <u>Berkshire Power Decision</u>, 4 DOMSB at 346.

In order to meet the first test of viability, the proponent must establish (1) that the project is financiable, and (2) that the project is likely to be constructed within the applicable time frame and will be capable of meeting performance objectives. In order to meet the second test of viability, the proponent must establish (1) that the project is likely to be operated and maintained in a manner consistent with appropriate performance objectives, and (2) that the proponent's fuel acquisition strategy reasonably ensures low-cost, reliable energy resources over the planned life of the proposed project. Dighton Power Decision,

# EFSB 96-3, at 24; <u>Berkshire Power Decision</u>, 4 DOMSB at 345.<sup>2</sup>

## B. <u>Construction</u>

With respect to USGen's construction strategy, the Siting Board considered whether the project is reasonable likely to be constructed and go into service as planned. <u>USGen Decision</u>, EFSB 96-4, at 75. In the underlying case, the Siting Board reviewed a sample engineering, procurement and construction contract ("EPC contract") that specified terms that the Company generally expected to include in any final EPC contract. <u>Id.</u> at 79. The sample EPC contract contained a set of binding terms and conditions for the engineering and construction of the proposed facility, including provisions for: (1) a fixed price with

<sup>&</sup>lt;sup>2</sup> In the <u>USGen Decision</u>, EFSB 96-4, at 74-75, we stated that we would open a Notice of Inquiry regarding viability to determine whether we would affirm our current standard of review or articulate a new one. We stated that in the interim, we would continue to apply our existing standard of review while remaining flexible as to the evidence required to meet that standard.

monthly progress payments to the contractor; (2) a guaranteed schedule; (3) liquidated damages for failure to achieve (a) substantial completion by the guaranteed completion date, or (b) operation guarantees; (4) bonuses for early completion and improved performance; (5) warranties; (6) insurance; and (7) performance and facilities testing. <u>Id.</u> at 80. The Siting Board also reviewed USGen's preliminary plans for interconnection with the New England Power Service Company ("NEPSCo") system, but noted that the Company had not entered into a signed interconnection agreement with NEPSCo that would enable the proposed facility to have transmission access to the region. Id. at 81-82. Consequently, the Siting Board found that, upon compliance with conditions that the Company provide the Siting Board with (1) a copy of a signed EPC contract between USGen and Bechtel Power Corporation ("BPC") or a comparable entity that would provide reasonable assurance that the project would perform as a low-cost, clean power producer, and (2) a copy of a signed interconnection agreement between the Company and NEPSCo providing the proposed project with access to the regional transmission system, the Company would have established that its proposed project is likely to be constructed within the applicable time frames and be capable of meeting performance objectives (Condition A). Id. at 83.

In response to Condition A, USGen presented to the Siting Board a signed EPC contract between the Company and BPC. The signed EPC contract is similar to the sample EPC contract reviewed in the underlying case and contains similar binding terms and conditions for the engineering and construction of the proposed facility. The Company also presented to the Siting Board a signed interconnection agreement with NEPSCo. The interconnection agreement provides the project with access to the regional transmission system. Accordingly, the Siting Board finds that USGen has established that its proposed project is likely to be constructed within the applicable time frames and be capable of meeting performance objectives. Further, in conjunction with the finding as to the financiability of USGen's proposed project (see <u>USGen Decision</u>, EFSB 96-4, at 79), the Siting Board finds that USGen has established that its proposed project (see <u>USGen Decision</u>, EFSB 96-4, at 79), the Siting Board finds that USGen has established that its proposed project (see <u>USGen Decision</u>, EFSB 96-4, at 79), the Siting Board finds that USGen has established that its proposed project (see <u>USGen Decision</u>, EFSB 96-4, at 79), the Siting Board finds that USGen has established that its proposed project (see <u>USGen Decision</u>, EFSB 96-4, at 79), the Siting Board finds that USGen has established that its proposed project meets the Siting Board's first test of viability.

## C. <u>Operations</u>

With respect to operation of the proposed project, the Siting Board examined whether the proposed project is likely to be operated and maintained in a manner consistent with appropriate performance objectives. <u>Id.</u> at 85. Consistent with this objective, the Siting Board evaluated the ability of the project proponent or other reasonable entity to operate and maintain the facility in a manner which ensures a reliable energy supply. <u>Id.</u> at 84.

In the underlying case, the Company provided a sample O&M agreement for illustrative purposes to show the types of considerations the Company has included for comparable contracts in the past. <u>Id.</u> Further, the Siting Board accepted the experience of both the Company and U.S. Operating Service Company ("USOSC") in operating, maintaining, and managing comparable facilities as strong evidence that the Company would be able to negotiate an acceptable final O&M contract. <u>Id.</u> at 86. However, the Siting Board found that in order to establish that USGen's proposed project is likely to be operated and maintained in a manner consistent with appropriate performance objectives, USGen must provide a copy of a signed O&M agreement with USOSC or a comparable entity (Condition B). <u>Id.</u>

In response to this condition, USGen presented to the Siting Board a redacted version of a signed O&M contract between USGen and USOSC (Exh. EFSB-CF, exh.C). The O&M contract is substantially similar to the sample O&M agreement provided in the underlying case. Accordingly, the Siting Board finds that USGen has demonstrated that its proposed project is likely to be operated and maintained in a manner consistent with appropriate performance objectives.

#### D. Fuel Acquisition

In considering USGen's fuel acquisition strategy, the Siting Board considered whether USGen's strategy reasonably ensures low-cost, reliable energy resources over the planned life of the proposed project. <u>USGen Decision</u>, EFSB 96-4, at 86, 90. In the underlying case, the Company presented a fuel acquisition strategy that involved: (1) the intent to contract with USGen Fuel Services ("USGenFS"), an affiliated fuel supplier, for a 365 day firm natural gas

supply, subject to 30 days of recall, delivered to the facility off the Tennessee Gas Pipeline mainline; and (2) a specific back-up supply plan, including a three-day, on-site oil supply transported either by truck or pipeline, with the intent to contract for fuel oil from and the ability to switch to oil for limited operation. <u>Id.</u> at 90. Further, in the underlying case, the Siting Board took note of an executed precedent agreement between USGen and USGenFS that provides for a firm supply to be arranged by USGenFS. <u>Id.</u> at 91.

In determining that the Siting Board would not require USGen to enter into a firm transportation contract for the proposed project, the Siting Board: (1) acknowledged that there is a benefit to the flexible gas procurement approach contemplated for the proposed project; (2) considered the Company's experience procuring fuel for comparable facilities and USGenFS' experience delivering fuel to comparable facilities; and (3) recognized that USGenFS, by virtue of its size and scale in the marketplace, has an enhanced ability to supply gas on a long-term basis. <u>Id.</u> at 91-92. However, to allow the Siting Board to monitor developments affecting gas capacity in New England, which relate to USGen's expectations as to the reliability of its fuel supply strategy, the Siting Board required USGen, prior to the commencement of construction, to provide the Siting Board with an updated assessment which reasonably confirms the continued ability of USGenFS to transport gas to the proposed project (Condition C). <u>Id.</u> at 92.

In response to Condition C, USGen provided the Siting Board with a natural gas supply assessment. This assessment outlined the status of gas supply projects which have a direct impact on supply availability to the proposed project (Exh. EFSB-CF(S) at 4-5). The Company also provided a list of new projects which have the potential to provide additional capacity and flexibility for buyers of gas supply in New England (Exh. EFSB-CF, exh. D). The Siting Board finds that USGen has provided an updated assessment of natural gas supply projects targeting New England which reasonably confirms the continued ability of USGenFS to transport gas to the proposed project. Accordingly, the Siting Board finds that USGen's fuel acquisition strategy reasonably ensures low-cost, reliable energy resources over the planned life of the proposed project. Consistent with the Siting Board's conditional finding in the <u>USGen Decision</u>, EFSB 96-4, at 93, the Siting Board here finds that USGen has complied with (1) the condition relative to the provision of a signed O&M contract, and (2) the condition relative to the provision of documentation that reasonably confirms the continued ability of USGenFS to transport gas to the proposed project. Accordingly, the Siting Board finds that USGen has established that its proposed project meets the Siting Board's second test of viability.

In conclusion, the Siting Board finds that USGen has established that its proposed project is likely to be a viable source of energy.

#### III. <u>ENVIRONMENTAL CONDITIONS</u>

In the <u>USGen Decision</u>, we set forth six environmental conditions to be complied with during construction and operation of the proposed facility. EFSB 96-4, at 189-191. Also, we directed the Company, prior to construction, to explain its noise mitigation approach and to provide a signed copy of its certificate on its Final Environmental Impact Report ("FEIR"). <u>Id.</u> Accordingly, in this section, we review the Company's compliance with pre-construction conditions, and the Company's progress on complying with other environmental conditions.

## A. <u>Standard of Review</u>

In implementing its statutory mandate to ensure a necessary energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost, the Siting Board requires project proponents to show that proposed facilities are sited at locations that minimize costs and environmental impacts, while ensuring a reliable energy supply. In order to determine whether such a showing is made, the Siting Board requires project proponents to demonstrate that the proposed site for the facility is superior to the noticed alternative on the basis of balancing cost, environmental impact and reliability of supply. Berkshire Power Decision, 4 DOMSB at 358; Silver City Decision, 3 DOMSB at 276; Berkshire Gas Company, 23 DOMSC 294, 324 (1991).

In the <u>USGen Decision</u>, the Siting Board found that, with the implementation of certain

conditions, the environmental impacts of the proposed facility at the primary site would be minimized consistent with minimizing cost. EFSB 96-4, at 186-187. The Siting Board also found that the Company's primary site is preferable to the alternative site with respect to minimizing environmental impacts consistent with minimizing cost. Id. at 187.

#### B. <u>Pre-Construction Directives</u>

#### 1. <u>Noise Mitigation Program</u>

In the <u>USGen Decision</u>, the Siting Board directed the Company to indicate, prior to construction, whether it plans to (a) incorporate noise reduction measures into a preconstruction facility design such that calculated  $L_{90}$  noise increases do not exceed 7.5 decibels, or (b) incorporate noise reduction measures in the proposed facility such that measured  $L_{90}$  noise increases do not exceed 6.0 decibels at residences (Condition H). <u>USGen Decision</u>, EFSB 96-4, at 157-158, 190-191.

The Company confirmed that it plans to proceed in accordance with the first option and will incorporate noise reduction measures into preconstruction facility design such that calculated  $L_{90}$  noise increases do not exceed 7.5 decibels (Exh. EFSB-CF at 8).

Accordingly, the Siting Board finds that the Company has complied with the pre-construction directive to notify the Siting Board of what noise reduction measures the Company will take in order to minimize noise impacts consistent with minimizing cost.

#### 2. <u>Certificate on the FEIR</u>

In the underlying case, the Company provided a copy of the Draft Environmental Impact Report ("DEIR") (MPP-4, att. 3). At the close of the record in this case, a certificate on the FEIR had not been issued. To ensure a complete record, the Siting Board directed the Company to provide, prior to construction, a signed copy of its certificate on its FEIR. <u>USGen</u> <u>Decision</u>, EFSB 96-4, at 189.

To comply with this directive, the Company provided a certificate from the Secretary of Environmental Affairs stating that USGen's proposed project adequately and properly complies with the Massachusetts Environmental Policy Act and with its implementing regulations (Exh. EFSB-CF exh. K). Accordingly, the Siting Board finds that the Company has complied with this pre-construction directive.

## C. <u>Other Conditions</u>

In addition to documenting its compliance with the above pre-construction directives, the Company provided information relative to its progress in complying with conditions regarding the 21G Water Withdrawal Permit (Condition E), conservation permits (Condition F), visual impacts (Condition G) and traffic impacts (Condition I).<sup>3</sup>

## 1. <u>Chapter 21G Water Withdrawal Permit</u>

Condition E required that the Company provide a copy of the Chapter 21G permit for the project, together with any attached conditions and an explanation of how all conditions will be met. <u>USGen Decision</u>, EFSB 96-4, at 132, 190.

The Company provided a copy of a 21G permit and a letter of transmittal from MDEP, and stated that the permit is now final (Exh. EFSB-CF at 4, exh. E). The 21G permit approves an effluent and river use plan consistent with that described in the <u>USGen Decision</u>, based on use of effluent from the Southbridge Wastewater Treatment Plant as the primary water supply for the project and on withdrawals from the American Optical Company ("AO") intake structure in Southbridge as a backup (<u>id.</u>). In its approval, MDEP found that diminishment of

<sup>&</sup>lt;sup>3</sup> The Siting Board has also required the Company: (1) to mitigate CO<sub>2</sub> emissions by providing CO<sub>2</sub> offsets through a donation of either \$370,000, to be paid in five annual installments of \$74,000 during the first five years of facility operation, or \$305,000 during the first year of facility operation to a cost-effective CO<sub>2</sub> offset program or programs to be selected upon consultation with Siting Board Staff (Condition D); and (2) to work with the Town of Charlton and the Massachusetts Highway Department ("MHD") to monitor fogging and icing in the vicinity of the proposed facility, and as necessary, to establish a plan with the identified local and state officials to ensure that any safety concerns are addressed (Condition J). <u>USGen Decision</u>, at EFSB 96-4, at 117-118, 189-190;169-170, 191. The Company did not submit specific information relative to these conditions.

flow in the Quinebaug River as a result of project withdrawals will have a minimal effect on downstream users, even without mitigation, and further found that project withdrawals will not result in significant impacts on aquatic habitats in the river except potentially under low flow conditions (<u>id.</u> at 5, exh. E).

In order to mitigate for potential environmental impacts at low flow, MDEP included permit conditions to require: (1) instantaneous, real-time monitoring of flow in the Quinebaug River at a new gauging station downstream from the AO intake, with telemetering of flow data to a location manned by the Company; and (2) augmentation of flow in the Quinebaug River whenever flow reaches or falls below 0.30 cubic feet per second per square mile of tributary area (<u>id.</u> at exhibit E). The permit also included conditions relating to submission of an operation plan for implementing augmentation, reporting requirements, and implementation of the Company's water conservation plan (<u>id.</u>).

The Company indicated that, consistent with the MDEP transmittal letter, any augmentation of flow will be accomplished through releases from the United States Army Corps of Engineers ("ACOE") East Brimfield Reservoir, subject to limitations and terms of an existing agreement between ACOE and AO (<u>id.</u> at 6). The Company provided a letter from ACOE indicating that no separate ACOE approval is required for AO to request reservoir releases on behalf of the Company (<u>id.</u> at exh. F).

Accordingly, the Siting Board finds that the Company has complied with Condition E.

## 2. <u>Conservation Permits</u>

In the <u>USGen Decision</u>, the Siting Board noted that additional measures might be required to protect an on-site vernal pool containing marbled salamanders, a "threatened" species in Massachusetts, and that the water supply and wastewater return lines for the proposed project would traverse an area of estimated habitat for the wood turtle, a species of special concern in Massachusetts. <u>USGen Decision</u>, EFSB 96-4, at 133. With respect to the marbled salamanders, Condition F directed USGen to provide a copy of a conservation permit from NHESP with attached conditions and a detailed explanation of how all conditions would

be met. <u>Id.</u> at 133, 190. Condition F also directed USGen to provide a copy of an NHESP approval of a mitigation plan for impacts on wood turtle habitat, with an explanation of how any attached conditions would be met. <u>Id.</u> The Siting Board found that, with compliance with this condition, the impacts from water-related discharges and construction-related impacts of the proposed facility at the primary site would be minimized. <u>Id.</u> at 133.

To comply with Condition F, USGen provided the Siting Board with a copy of its final Conservation Permit from NHESP for protection of marbled salamanders (Exh. EFSB-CF, exh. H). The permit contains three conditions: (1) that USGen place 60.84 acres of land surrounding the marbled salamander vernal pool under a permanent Conservation Restriction to be held by the Charlton Conservation Commission; (2) that USGen fund a fiveyear study of marbled salamander movement patterns for a total of \$160,000; and (3) that USGen fund and create three experimental vernal pools, at a total cost of \$35,000 (<u>id.</u> at 1-2). Attached to the permit are a conservation plan detailing project design changes made to minimize impacts to mature forest habitat, a draft Conservation Restriction, and a prospectus for the five-year study (<u>id.</u>, att. A, B, and C). Accordingly, the Siting Board finds that the Company has complied with Condition F relative to the marbled salamander.

With respect to the wood turtle, USGen stated that it submitted a wood turtle mitigation plan to NHESP and the Southbridge Conservation Commission as part of its Notice of Intent under the Massachusetts Wetland Protection Act regulations (id. at 7). The Company explained that under 310 C.M.R. § 10.59, the Southbridge Conservation Commission must find that the project would not have any short or long term adverse effects on the habitat of the local population of the wood turtle as a precondition of issuing an Order of Conditions (id.). The Company also explained that the NHESP does not issue a separate approval, but that NHESP submitted comments relative to the Company's Notice of Intent and such comments routinely are entitled to deference by the Conservation Commission (id.; Exhs. EFSB-CF(S) at 5; EFSB-CF(S2)). Therefore, USGen argued that the Order of Conditions issued by the Southbridge Conservation Commission on May 1, 1998 constitutes approval of a mitigation plan for the wood turtle and satisfies the Siting Board's condition on this issue (Exhs. EFSB-CF(S) at 6;

#### EFSB-CF(S2) at 2).

To comply with Condition F, relative to the wood turtle, USGen submitted the May 1, 1998 Order of Conditions (Exh. EFSB-CF(S2)). The Order of Conditions lists 44 conditions that the Company must comply with, including five special conditions which address preservation of the wood turtle habitat (<u>id.</u> at 5-3D). For example, the Order of Conditions states that the Company "shall explore options to crossing Rouge Brook in a manner that would avoid both long-term and short-term construction impacts to [the] mapped wood turtle habitat" (<u>id.</u>). The Order of Conditions also states that "[f]ailure to comply with all conditions stated herein and with all related statutes and other regulatory matters, shall be deemed cause to revoke or modify" the Order of Conditions (Exh. EFSB-CF(S2) at 5-2). Further, the Company has provided written confirmation that it will comply with the Order of Conditions (<u>id.</u> at 2).

The Siting Board accepts that issuance of an Order of Conditions by the Southbridge Conservation Commission satisfies Condition F relative to the wood turtle, since the NHESP does not issue a separate approval and the Order of Conditions addresses the concerns raised by the Siting Board in the <u>USGen Decision</u>. Accordingly, the Siting Board finds that the Company has complied with Condition F.

#### 3. <u>Notice of Visual Impact Mitigation Requirement</u>

Condition G required the Company to develop and implement an off-site shrub and tree plantings or window awnings plan. In this regard, the Siting Board stated that the Company: (1) shall provide shrub and tree plantings or window awnings on private property, only with the permission of the property owner, and along public ways, only with the permission of the appropriate municipal officials; (2) shall provide written notice of this requirement to public officials in Charlton and to all affected property owners prior to the commencement of construction; (3) may limit requests from local residents and town officials for mitigation measures to a specified period ending no less than six months after initial operation of the plant; (4) shall complete all such mitigation measures within one year after completion of construction, or if based on a request after commencement of construction, within one year after such request; and (5) shall be responsible for the reasonable maintenance or replacement plantings as necessary to ensure that health plantings become established. In addition, the Siting Board directed USGen to make available to affected Harrington Road residents the option of at least one strategically placed planting of 20 feet or more as may be practical and appropriate to the setting, in lieu of a row of several smaller plantings. <u>USGen Decision</u>, EFSB 96-4, at 140, 190.

The Company provided the text of a letter and attachment to be used for purposes of notifying property owners and officials concerning the requirement for off-site visual impact mitigation (Exhs. EFSB-CF at exh. I; EFSB-CF(S) at exh. 6). The Company stated that, after acceptance of its pre-construction compliance filing by the Siting Board but prior to beginning construction, it will send the notice to all property owners within one mile of the facility and to all residents on Harrington Road. In addition, the Company will send the notice to the Charlton Board of Selectmen, with a request that the notice be posted in Charlton Town Hall.

Accordingly, the Siting Board finds that the Company has developed an acceptable letter for notifying property owners and officials concerning the Company's required off-site visual mitigation.

#### 4. <u>Traffic Mitigation</u>

Condition I required USGen to develop and implement a traffic mitigation plan which includes the scheduling of the delivery of fuel oil, materials, and equipment to avoid peak daily travel periods, or route modifications or other appropriate measures, excluding capital improvements, to minimize traffic-related impacts along likely access routes to the site including Route 20 and Route 169. <u>USGen Decision</u>, EFSB 96-4, at 164, 191. Further, the Siting Board directed the Company to consult with the towns of Auburn, Oxford, Sturbridge, and Charlton. <u>Id.</u>

The Company indicated that it has consulted with officials of the towns of Auburn, Oxford, Sturbridge and Charlton, and provided a summary of the consultation with notes from its meeting with each town (Exh. EFSB-CF at 8, exh. J). The Company also provided a description of its "general approach" for managing traffic impacts with respect to the four towns based on its consultation (Exh. EFSB-CF(S) at 1-2).

As part of its general approach for traffic mitigation, the Company has committed to: (1) develop and issue specific delivery instructions with purchase orders, including such matters as routing, delivery hours and on-site check-in location; (2) in cooperation with the EPC contractor, specifically coordinate with Town Engineer or Highway Department designees concerning oversized or heavy loads; (3) install temporary gravelled areas to assist with removal of mud from tires before vehicles depart from the site onto Route 169; and (4) hold additional meetings with Town of Charlton officials to further address delivery schedules of major equipment and provide a forum for discussing ongoing traffic management matters (<u>id.</u>).

Accordingly, the Siting Board finds that the Company has made appropriate progress relative to the development and implementation of its general approach for traffic mitigation.

## IV. ADDITIONAL ISSUES

The Siting Board requires that project proponents notify the Siting Board of any changes other than minor variations to the proposal as presented to the Siting Board, so that it may decide whether to inquire further into such issues. <u>USGen Decision</u>, at 191-192. In addition to the compliance issues addressed above, USGen also provided the Siting Board with information concerning two changes to the project as described in the <u>USGen Decision</u>: (1) changes to the facility layout for the project, and (2) the use of a fixed roof tank, rather than a floating roof tank, to store aqueous ammonia.

#### A. <u>Facility Layout Changes</u>

USGen indicated that it had altered the facility layout to accommodate a multiple shaft configuration, rather than the single shaft configuration originally proposed (Exh. EFSB-CF at 8). The Company explained that in a single shaft configuration, both the steam turbine and the combustion turbine are connected to a single generator, while in a multiple shaft configuration,

Page 14

the steam turbine and combustion turbines each have a dedicated generator; however, the total output of the steam and combustion turbines remains the same (<u>id</u>.). The Company indicated that it decided to use the multiple shaft configuration because Westinghouse is much further along in the design of that configuration; use of the single shaft configuration could have delayed the project by six months to one year (<u>id</u>. at 9).

USGen also noted that it made minor modifications to the original plant layout to protect the habitat of the marbled salamander (<u>id.</u>).

USGen indicated that the layout changes necessitated by the use of the multiple shaft configuration would have no impact on the noise, water consumption, or air emissions of the proposed project (<u>id.</u> at 8). The Company also indicated that the design change would not impact marbled salamander habitat, and provided maps showing the site plan as previously designed, and as currently proposed (Exh. EFSB-CF(S) at 2, exhs. 1, 2, and 3).

The Siting Board has reviewed the information provided by USGen regarding the proposed changes in facility layout, and finds that they are minor and will not affect the environmental impacts of the proposed project as discussed in the <u>USGen Decision</u>, with the exception of impacts to the marbled salamander. The Siting Board also finds that the new facility layout will reduce impacts on the habitat of the marbled salamander. Accordingly, the Siting Board finds that the changes in the layout of the proposed facility do not require further inquiry.

## B. <u>Ammonia Tank</u>

USGen noted that, in previous filings, it had erroneously indicated that a floating roof tank would be used for ammonia storage (Exh. EFSB-CF at 9). The Company indicated that its intent always had been to use a fixed roof tank, which vents ammonia vapors back to the tanker truck during filling, rather than a floating roof tank (<u>id.</u>). The Company stated that the fixed roof tank provides a more reliable, leak-tight enclosure than a floating roof tank, and that the two types of tanks are equally safe for plant personnel and the public (Exh. EFSB-CF(S) at 3). The Company also noted that the fixed roof tank is similar in design

to tanks used at other USGen facilities (Exh. EFSB-CF at 9).

The Siting Board finds that the use of a fixed roof, rather than a floating roof, tank for the storage of aqueous ammonia should not degrade the safety of the proposed project. Accordingly, the Siting Board finds that the change from a floating roof to a fixed roof tank does not require further inquiry.

## V. <u>DECISION</u>

In the <u>USGen Decision</u>, the Siting Board found that upon compliance with the conditions set forth therein, the construction of the proposed generating facility is consistent with providing a necessary energy supply to the Commonwealth with a minimum impact on the environment at the lowest possible cost. EFSB 96-4, at 188.

Here, the Siting Board has found that USGen has demonstrated that its proposed project is likely to be a viable source of energy. Further, the Siting Board has found that the Company has complied with all pre-construction conditions and, therefore, USGen is authorized to commence construction of its proposed facility. In addition, USGen has fully complied with Condition E concerning the Chapter 21G Water Withdrawal Permit and Condition F concerning the conservation permits. Therefore, we find that with the implementation of Conditions D, G, H, I and J concerning the issues of CO<sub>2</sub> mitigation, visual mitigation, noise mitigation, traffic mitigation and safety, respectively, the proposed facility will provide a necessary energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost.

In addition, consistent with the Siting Board's directive to USGen to inform the Siting Board of any changes to USGen's proposed project, other than minor variations, USGen has informed the Siting Board of two such changes. The Siting Board has found that neither of these changes requires further inquiry. EFSB 96-4

Page 16

Hearing Officer

Dated this 20th day of May, 1998