

# DEWEY & LEBOEUF

Dewey & LeBoeuf LLP  
125 West 55th Street  
New York, NY 10019-5389

tel +1 212 424 8515  
fax +1 212 424 8500  
ralessi@dl.com

September 22, 2008

## **VIA HAND DELIVERY AND FIRST-CLASS MAIL**

The Honorable Carlos M. Gutierrez  
Secretary of Commerce  
Herbert C. Hoover Building  
14<sup>th</sup> Street and Constitution Avenue, N.W.  
Washington, D.C. 20230

Re: Reply of Broadwater Energy LLC and Broadwater Pipeline LLC to New York State Department of State's Opposition to Broadwater's Second and Third Motions to Supplement the Decision Record

Dear Secretary Gutierrez:

This letter represents the reply of Broadwater Energy LLC and Broadwater Pipeline LLC (collectively, "Broadwater") to the New York State Department of State's ("NYSDOS") September 15, 2008 letter ("Opposition Letter") opposing in part Broadwater's September 4, 2008 Second Motion to Supplement the Decision Record and Broadwater's September 8, 2008 Third Motion to Supplement the Decision Record. The arguments presented in NYSDOS's Opposition Letter are based on a flawed application of the legal standard by which the Secretary will accept supplemental documents into the decision record. But more than that, NYSDOS's opposition contains demonstrably incorrect statements regarding the content of previous filings and the decision record in this matter. In the final analysis, all of the "Supplemental Documents" submitted by Broadwater should be included in the decision record because, as noted in more detail below, they clearly and objectively comprise "clarifying information submitted by a party to the proceeding related to information in the consolidated record compiled by the lead Federal permitting agency," and thus qualify as "supplemental information" under 15 C.F.R. § 930.127(i)(4). 15 C.F.R. § 930.130(a)(2)(ii)(B).<sup>1</sup>

---

<sup>1</sup> In addition to its objections to certain Supplemental Documents, NYSDOS includes unauthorized sur-reply arguments in its Opposition Letter. These arguments should be rejected.

**Supplemental Document V: Summary of Applicable Coastal Policies**

NYSDOS does not object to the inclusion of this document in the decision record.

**Supplemental Document VI: U.S. Coast Guard and U.S. Maritime Administration, Final Environmental Impact Statement for the Gulf Landing LLC Deepwater Port License Application, Appendix G: Ichthyoplankton Assessment Model Methodology and Results (Docket No. USCG-2004-16860)**

The decision record in this matter demonstrates beyond cavil that because the Broadwater Project's daily seawater intake would represent only 0.00016% of Long Island Sound's water volume, the Project's impact on the overall fishery population in Long Island Sound will be biologically insignificant and far outweighed by the benefits of the Project to the national interest. Unable to refute these scientifically verified conclusions, NYSDOS resorts to misleading expressions of raw data divorced from any biological context – the most oft-repeated being NYSDOS's assertion that the Project will entrain 274 million ichthyoplankton (including microscopic eggs and larvae).<sup>2</sup> To clarify and demonstrate that the relevant inquiry is not merely the number of individual ichthyoplankton entrained, but, more importantly, the effect of a project on the overall adult fishery population, Broadwater has submitted Supplemental Document VI as an example of federal regulators requiring that a project's entrainment/impingement impacts be expressed in terms of Age 1 or adult equivalents. In response, NYSDOS argues that by submitting Supplemental Document VI,

Broadwater is actually requesting that the Secretary substitute the modeling methodology used to determine potential ichthyoplankton entrainment/impingement impacts as calculated in the Broadwater project FEIS with the methodology used for the Gulf Landing Deepwater Port project in the Gulf of Mexico.<sup>3</sup>

Broadwater has requested no such thing. In reality, Supplemental Document VI bolsters the methodology and the conclusions contained in the FEIS. While the FEIS includes analysis of the types of raw data so myopically relied on by NYSDOS, the FEIS's *conclusions* with respect to the effect of the Broadwater Project on the Long Island Sound fishery population are (like Supplemental Document VI) expressed in terms of the Project's impacts on the Sound's adult fish populations:

---

<sup>2</sup> The Federal Energy Regulatory Commission's ("FERC") Final Environmental Impact Statement ("FEIS") for the Broadwater Project concluded that the "most valid estimate" of ichthyoplankton entrainment was 131.5 million – less than half NYSDOS's figure. FEIS § 3.3.2.2 (BW28937).

<sup>3</sup> Opposition Letter at 1-2.

It is important to realize that, due to the high natural mortality rates in the first year of ichthyoplankton (greater than 99 percent), an incremental loss of 0.1 percent would not significantly impact the health of *the adult fish population*.<sup>4</sup>

The FEIS analysis continues to be valid and recognizes what NYSDOS will not: calculating raw entrainment ranges is only the first step in the analysis. The ultimate inquiry is whether the total number of ichthyoplankton entrained by the Broadwater Project will have a significant impact on the adult fish population in Long Island Sound. Although NYSDOS characterizes the FEIS's analysis as "inexplicable,"<sup>5</sup> NYSDOS has never come forward with any evidence contradicting the conclusion that the Project will have no significant impact on the Long Island Sound fishery population.

The analysis of the National Marine Fisheries Service ("NMFS") is consistent with the conclusions presented in the FEIS. In a February 19, 2008 letter to FERC regarding the FEIS, NMFS stated: "To avoid and minimize the adverse impacts, NMFS recommends pursuant to Section 305(b)(4)(A) of the [Magnuson-Stevens Fishery Conservation and Management Act] that FERC adopt the following [essential fish habitat] conservation recommendations."<sup>6</sup> NMFS's letter then recommends several measures to mitigate the Project's potential adverse impacts to the Long Island Sound fishery population.<sup>7</sup> In response to NMFS's recommendations, on February 29, 2008, Broadwater forwarded a letter to NMFS stating:

Broadwater appreciates the comments outlined in the [National Oceanic and Atmospheric Administration ("NOAA")]/NMFS correspondence that provide additional detail on the conclusions and recommendations that were published in the FEIS. The key measures noted by NOAA/NMFS are consistent with the approach Broadwater has taken to both project design and implementation to ensure that any potential environmental impacts are avoided, minimized, and mitigated. Therefore, Broadwater agrees to adopt and implement *all recommended mitigation measures* made by NOAA/NMFS during project construction and operation.<sup>8</sup>

In addition, several of NMFS's recommendations were incorporated as "Environmental Conditions for the Broadwater Project" in FERC's March 20, 2008 Approval Order.<sup>9</sup> Thus,

---

<sup>4</sup> FEIS § 3.3.2.2 (BW28938) (emphasis supplied).

<sup>5</sup> NYSDOS Principal Brief at 14.

<sup>6</sup> BW32867.

<sup>7</sup> BW32867-32872.

<sup>8</sup> BW32900 (emphasis supplied).

<sup>9</sup> BW33058-33059.

contrary to the impression NYSDOS seeks to create regarding the status of the Broadwater Project with NMFS, the concerns raised by NMFS have been successfully addressed.

In addition to misinterpreting the analysis and conclusions presented in the FEIS, NYSDOS's Opposition Letter also demonstrates a striking unfamiliarity with the consolidated record. For instance, NYSDOS claims:

Nor has Broadwater ever expressed *in the record* their anticipated ichthyoplankton impingement/entrainment rates as Age 1 or adult equivalents as does the Gulf Landing project.<sup>10</sup>

NYSDOS is incorrect. There are literally dozens of examples in the decision record from 2006, 2007 and 2008 of Broadwater expressing anticipated ichthyoplankton impingement/entrainment rates in terms of Age 1 or adult equivalents. See, e.g.:

- Broadwater Request for Leave to File Supplemental Comments on the Draft Environmental Impact Statement (February 26, 2007) (BW16125-16131) (“Broadwater entrainment estimates (124 million eggs and larvae) from the deep water of the central basin of Long Island Sound (*See* Table 2) were expressed in terms of one year old (fingerling) and adult (age at sexual maturity) equivalent fish. [] Based on the very low adult equivalent entrainment estimates and the small percentage (<1%) of the commercial fishery yield that could potentially be impacted by the entrainment and impingement at the Broadwater facility, significant impacts on the fishery area are not expected.”).
- Resource Report No. 3: Fish, Vegetation, and Wildlife (January 2006) (BW1574-1575, BW1595, BW1600-1601, BW1623) (“Atlantic menhaden and bay anchovy entrainment estimates are expressed in terms of Age 1 fish using the Equivalent Adult Model.”).
- Broadwater Response to FERC EIR re: Resource Report No. 3, Question 2 (February 16, 2006) (BW2838-2840) (“Entrainment estimates from Table 4 were expressed in terms of Age 1 fish using the Equivalent Adult Model.”).
- March 9, 2006 Letter Report from Normandeau Associates, Inc. summarizing the results of third ichthyoplankton sampling in the vicinity of the proposed Broadwater FSRU (attached as an exhibit to Broadwater's April 20, 2006 response to FERC Environmental Information Request [“EIR”] 9) (BW5864, BW5881) (“Entrainment estimates from Table 8 were expressed in terms of Age 1 fish using the Equivalent Adult Model.”).

---

<sup>10</sup> Opposition Letter at 2-3 (emphasis supplied).

- May 11, 2006 Letter Report from Normandeau Associates, Inc. summarizing the results of fourth ichthyoplankton sampling in the vicinity of the proposed Broadwater FSRU (attached as an exhibit to Broadwater's May 19, 2006 response to FERC EIR 2-8) (BW6435-6436, BW6456) ("Entrainment estimates from Table 9 were expressed in terms of Age 1 fish using the Equivalent Adult Model.").
- June 8, 2006 Letter Report from Normandeau Associates, Inc. summarizing the results of fifth ichthyoplankton sampling in the vicinity of the proposed Broadwater FSRU (BW7394-7395) ("Entrainment estimates from Table 9 were expressed in terms of Age 1 fish using the Equivalent Adult Model.").
- July 27, 2006 Letter Report from Normandeau Associates, Inc. summarizing the results of sixth ichthyoplankton sampling in the vicinity of the proposed Broadwater FSRU (BW7420-7421, BW7424, BW7440) ("Entrainment estimates from Table 9 were expressed in terms of Age 1 fish using the Equivalent Adult Model.").
- Broadwater Response to New York State Department of Environmental Conservation ("NYSDEC") Notice of Incomplete Application ("NOIA") #2 (April 8, 2008) (BW33405-33406, BW33424-33431) ("The age of equivalency can be any life stage of interest and is typically Age 1, Age of sexual maturity or Age of entry into fishery. [] NYSDEC routinely requests adult or Age 1 equivalents for entrainment evaluation at steam electric power stations for 316(b) requirements in order to better characterize raw entrainment numbers.").

Thus, not only is NYSDOS's assertion incorrect, but the record documents cited above demonstrate that Supplemental Document VI satisfies the regulatory definition of "supplemental information" because it is related to and clarifies information and documents already in the consolidated record related to entrainment and impingement impacts. See 15 C.F.R. § 930.130(a)(2)(ii)(B).

Finally, as part of its discussion of ichthyoplankton entrainment, NYSDOS inserts a completely irrelevant footnote that attempts to defend the Long Island Sound Coastal Management Program ("LISCMP") Policy 13.4 preemption argument posited in NYSDOS's Principal Brief.<sup>11</sup> This footnote is nothing more than an effort by NYSDOS to file an unauthorized sur-reply; this effort should be rejected.

---

<sup>11</sup> Opposition Letter at 3-4 (footnote 3).

**Supplemental Documents VII and VIII: October 27, 2005 Biological Fact Sheet – Cooling Water Intake Structure for the Northport Power Station; January 4, 2006 Final State Pollutant Discharge Elimination System (“SPDES”) Permit, Responsiveness Summary and Cover Letter for the KeySpan Generation – Northport Power Station**

NYSDOS objects to Supplemental Documents VII and VIII, which relate to ichthyoplankton entrainment levels at KeySpan’s Northport Power Station, because the “power station predates the implementation of the [LISCMP].”<sup>12</sup> The fact that the Northport Power Station was built prior to approval of the LISCMP is not relevant. Of actual relevance, as discussed below, is the fact that NYSDEC issued a SPDES permit for the Northport facility as recently as 2006.

Moreover, NYSDOS contention that the “relevance of Supplemental Documents VII and VIII is highly questionable”<sup>13</sup> is puzzling given that it was *NYSDOS* that raised ichthyoplankton entrainment at the Northport Power Station in the cumulative impacts section of its Principal Brief (NYSDOS never raised such cumulative impacts in its Objection, but instead raised them for the first time in its Principal Brief).<sup>14</sup> In any event, the relevance of Supplemental Documents VII and VIII is clear. NYSDOS’s entrainment argument relies almost exclusively on statements from a NYSDEC NOIA that the Project’s alleged entrainment of “approximately 274 million eggs and larvae per year” will “unavoidably cause a significant loss of fish eggs, larvae and adult fish in this region of Long Island Sound.”<sup>15</sup> Supplemental Documents VII and VIII demonstrate that NYSDEC approved a SPDES permit in 2006 that allows the Northport Power Station to entrain at least 3.2 *billion* Long Island Sound ichthyoplankton on an annual basis.<sup>16</sup> And the decision record already contains un-refuted information that the Northport Power Station “requires water intakes and discharges to and from more environmentally sensitive nearshore waters, while Broadwater will withdraw water from the central part of the Sound, away from these more sensitive nearshore environments.”<sup>17</sup> Because information on ichthyoplankton entrainment at the Northport Power Station is already in the decision record, Supplemental Documents VII and VIII provide “clarifying information [] related to information in the consolidated record.” 15 C.F.R. § 930.130(a)(2)(ii)(B).

---

<sup>12</sup> Opposition Letter at 4.

<sup>13</sup> Opposition Letter at 4.

<sup>14</sup> NYSDOS Principal Brief at 28.

<sup>15</sup> NYSDOS Principal Brief at 28.

<sup>16</sup> Supplemental Document VII (SD274); Supplemental Document VIII (SD279-306); see also Broadwater Reply Brief at 12.

<sup>17</sup> Broadwater response to FERC EIR 4-3 (April 30, 2007) (BW17779).

**Supplemental Document IX:** Figure 1 – Map of Atlantic Ocean South of Long Island

NYSDOS does not object to the inclusion of this document in the decision record.

**Supplemental Document X:** U. S. Army Corp of Engineers Coastal Engineering Manual, Chapter 2: Site Characterization - Part V (EM 1110-2-1100), June 1, 2006

Although NYSDOS cannot object to the inclusion of Supplemental Document X in the decision record (since NYSDOS cited to a different section of the same document in its Principal Brief), NYSDOS's two paragraph non-objection is another attempt to file an unauthorized sur-reply, which must be rejected.

Based on volumes of scientific and engineering data, Broadwater concluded that, as a result of prevailing metocean conditions, an FSRU sited in the Atlantic Ocean could not achieve the Project's primary objective of serving as a baseload supplier of 1 Bcf/d of natural gas to the target markets. The FEIS (prepared by FERC, the federal agency with subject matter expertise) came to an identical conclusion: "Siting an FSRU in [] the Atlantic Ocean [] would present greater technical difficulties during operation due to the more frequent severe weather conditions and sea states in those areas."<sup>18</sup> NYSDOS responded that Broadwater's analysis of metocean conditions in the Atlantic Ocean improperly employed a "worst-case scenario."<sup>19</sup> In reply, Broadwater relies on language in the U.S. Army Corp of Engineers Coastal Engineering Manual to demonstrate that consideration of a reasonable "worst-case scenario" is a best structural engineering practice when designing a 30-year project because recent or even possible one-time extreme events must be planned for to safeguard human safety and equipment against catastrophic failure. Accordingly, Supplemental Document X provides clarifying information related to information in the decision record.

Nevertheless, NYSDOS now responds with unauthorized sur-reply arguments unrelated to Supplemental Document X. NYSDOS claims that if employing a worst-case scenario is an appropriate structural engineering practice, then NYSDOS's worst-case projection of 274 million ichthyoplankton entrained by the Project should also be accepted (notwithstanding that the FEIS concluded that the "most valid estimate" of annual ichthyoplankton entrainment was 131.5 million).<sup>20</sup> As previously stated in Broadwater's Reply Brief, the stand-alone 274 million figure presented by NYSDOS is devoid of meaning without its proper context.<sup>21</sup> But, more fundamentally here, NYSDOS's argument, which is non-responsive to the structural engineering

---

<sup>18</sup> FEIS § 4.4.2.1 (BW29212).

<sup>19</sup> NYSDOS Principal Brief at 39.

<sup>20</sup> FEIS § 3.3.2.2 (BW28937).

<sup>21</sup> Broadwater Reply Brief at 12.

analysis and misdirects the point, ignores the basic fact that structural engineering and marine biology are two different areas of scientific inquiry. It is simplistic and incorrect to argue that because analysis of a worst-case scenario is appropriate in the context of structural engineering, then worst-case projections should be applied to unrelated fields of scientific analysis.

NYSDOS has proffered nothing to show that entrainment impacts should be analyzed by employing worst-case projections, and contrary information exists in the record. In addition, even assuming, *arguendo*, NYSDOS's exaggerated entrainment projections, the record demonstrates that the Project will not result in a biologically significant impact to the Long Island Sound fishery population. With respect to Supplemental Document X, NYSDOS cannot dispute that proper engineering practices require that a facility such as the Broadwater Project be designed and capable of operating under reasonable worst-case scenarios.

Likewise, NYSDOS's discussion of the Yoke Mooring System's ("YMS") capacity to withstand a Category 5 hurricane event is another misdirection by NYSDOS and thus beside the point. The primary concern is the metocean conditions that would be experienced in the Atlantic Ocean, which are more severe than those experienced in Long Island Sound. Accordingly, the structure, design and operation of the Project would have to be changed to address these conditions on a worst-case basis for the 30-year Project life. This has been acknowledged by NYSDOS in their suggestion (see NYSDOS Principal Brief and the Battelle Report page 9) to use strengthened IHI tanks on the FSRU. All things considered, the more extreme metocean conditions in the Atlantic Ocean would prevent the Project from achieving its primary objective of serving as a baseload supplier of 1 Bcf/d of natural gas to the target markets.

**Supplemental Document XI: Environmental Report in support of the Safe Harbor Energy Project Deepwater Port License Application May 2007, Topic Report Nine - Alternatives**

NYSDOS argues that Supplemental Document XI should not be included in the decision record because it "does not clarify any information in the consolidated record as the Safe Harbor Energy Project has chosen to use a completely differently facility design, and, therefore, is inapplicable to the Broadwater Project."<sup>22</sup> Given that NYSDOS has continually relied on data from the Safe Harbor project throughout this proceeding, NYSDOS's contention that Safe Harbor is "inapplicable to the Broadwater Project" is unsupported. NYSDOS's April 10, 2008 Objection references Safe Harbor at least five times.<sup>23</sup> Likewise, NYSDOS's Principal Brief repeatedly refers to Safe Harbor in support of its argument that metocean conditions in the Atlantic Ocean would not prohibit safe LNG carrier operations.<sup>24</sup> The consolidated record is

---

<sup>22</sup> Opposition Letter at 5.

<sup>23</sup> Objection at 61, 63, 67-68 (BW33795, BW33797, BW33801-33802).

<sup>24</sup> NYSDOS Principal Brief at 36, 45, 47.

replete with documents addressing Safe Harbor, including the 2932-page Safe Harbor LNG Deepwater Port License Application (BW38947-41428).<sup>25</sup>

NYSDOS relies on the proposed location of Safe Harbor in the Atlantic Ocean in an attempt to contradict the existence of an industry standard limiting safe LNG operations to metocean conditions of 2-meter wave heights or less. In response to NYSDOS's reliance on Safe Harbor, Broadwater introduced Supplemental Document XI to demonstrate that the proponents of Safe Harbor recognized that the prevailing metocean conditions in the Atlantic Ocean would limit LNG carrier operations absent extraordinary measures (such as building an artificial island – *i.e.*, the titular “safe harbor”).<sup>26</sup> Having relied heavily on Safe Harbor in previous filings, NYSDOS defies its own logic by arguing that Supplemental Document XI should be rejected because Safe Harbor is “a completely different project.”<sup>27</sup>

Finally, NYSDOS's contention that Safe Harbor's analysis is inapplicable to the Broadwater Project because Safe Harbor was considering the use of two FSRUs is incorrect. The Safe Harbor Report (Supplemental Document XI) analyzes FSRU operability in the Atlantic Ocean generally, without regard to the number of FSRUs required:

Also, there are concerns related to operations and constraints associated with the metocean wind and wave conditions resulting from storms in this part of the Atlantic Ocean that could significantly reduce operating time. FSRUs require ship-to-ship transfers that are sea-state dependent and limit cargo transfers to conditions when wave action is less than 2 meters. Wave conditions in excess of 2 meters occur up to 18 percent of the year (22 percent of the time between September and April).<sup>28</sup>

Being unable to operate for 18% of the year and 22% of the time between September and April (the winter heating season) is at odds with the Project's primary objective of serving as a baseload supplier of 1 Bcf/d of natural gas to the target markets. As such, Supplemental Document XI provides clarifying information related to information in the decision record because information on Safe Harbor is already in the decision record, NYSDOS has relied on

---

<sup>25</sup> See also, e.g., FEIS §§ 3.11, 4.3.2.1, 4.3.2.2, 4.4.1.3 (BW29159, BW29197-29198, BW29209); April 2006 Coastal Zone Consistency Determination at 58, 62, 80-82 (BW4800, BW4804, BW4822-4824); Comments of Attorney General Richard Blumenthal of Connecticut on the Draft Environmental Impact Statement at 43-44 (BW12867-12868); Broadwater Request for Leave to File Supplemental Comments on the Draft Environmental Impact Statement at 13-14 (February 26, 2007) (BW16086-16087).

<sup>26</sup> Broadwater Reply Brief at 24 (citing Supplemental Document XI [SD370-371]).

<sup>27</sup> Opposition Letter at 6.

<sup>28</sup> Safe Harbor Report at 9-16 (SD374).

this information so heavily in its previous filings, and the relevant metocean data directly reflects the Project's ability to satisfy its primary objective.

**Supplemental Document XII:** Det Norske Veritas, "Sloshing Analysis of LNG Membrane Tanks" June 2006

NYSDOS objection to the inclusion of Supplemental Document XII in the decision record is based on a variety of incorrect statements. NYSDOS incorrectly claims that by the instant motion "Broadwater presents documents for the first time on 'sloshing' as a basis for the Secretary to find that the Atlantic Ocean alternative sites are unavailable or unreasonable."<sup>29</sup> NYSDOS also wrongly accuses Broadwater of "sandbagging" because (according to NYSDOS) "[s]loshing was not addressed in Broadwater's Initial Brief" and sloshing was allegedly raised "for the first time in [Broadwater's] Reply Brief."<sup>30</sup> In reality, a full paragraph of Broadwater's Initial Brief expressly addresses sloshing:

The prevailing metocean conditions at the Atlantic Ocean locations of Alternatives 1 and 2 would significantly reduce the capability of LNG carriers to offload effectively and would also expose the carriers to sloshing damage. Sloshing, which occurs when partially filled LNG tanks are exposed to significant wave conditions, can result in substantial damage to LNG carrier tanks that requires the carriers to be taken out of service for repair. The majority of the world-wide LNG carrier fleet has not been designed to withstand sloshing effects because the carriers generally serve onshore LNG terminals that are typically situated in protected areas sheltered from open ocean conditions. As a result, the number of LNG carriers that would be available (or willing) to make deliveries to Alternatives 1 or 2 would be significantly reduced or would require Project-specific carriers.<sup>31</sup>

NYSDOS's related contention that Broadwater has never presented documents demonstrating the infeasibility of an Atlantic Ocean LNG terminal based on sloshing is also incorrect. The consolidated record contains literally dozens of documents filed by Broadwater that address sloshing vis-à-vis an Atlantic Ocean LNG terminal.<sup>32</sup>

---

<sup>29</sup> Opposition Letter at 7.

<sup>30</sup> Opposition Letter at 7.

<sup>31</sup> Broadwater Initial Brief at 43 (internal footnotes omitted).

<sup>32</sup> See, e.g., Broadwater response to NYSDOS Atlantic Alternatives Information Request A-5 (September 18, 2007) (BW24119-24122) (this entire document addresses sloshing); Broadwater Resource Report No. 11 § 11.3.3.1 (January 2006) (BW2568); Broadwater Resource Report No. 13 § 13.9.2.11 (January 2006) (BW6328); Broadwater presentation from Second Technical Data Meeting (May 2, 2007) (BW19161-19164); Broadwater

In addition, sloshing was the subject of protracted discussions between the parties. On December 6, 2007, NYSDOS forwarded a letter to Broadwater in which NYSDOS raised several questions “as a basis for further discussions” between the parties.<sup>33</sup> NYSDOS’s letter states:

Broadwater has communicated to DOS that sloshing would be a concern for an Atlantic based FSRU and that wave conditions could damage the LNG containment membranes. Please describe the data that you relied on to determine that sloshing would render the project infeasible. What wave height data did you rely on and did you examine wavelength data? In dialogue with DOS, Broadwater indicated that wavelength was a significant factor influencing sloshing. In addition, what data can you provide that demonstrates that storage tanks onboard an FSRU could not be sufficiently reinforced to account for any sloshing that may occur?<sup>34</sup>

Broadwater responded on December 18, 2007 by furnishing detailed answers to all of NYSDOS’s questions, including those addressing sloshing.<sup>35</sup> Indeed, the Objection itself directly contradicts NYSDOS’s contention that Broadwater is guilty of “sandbagging” with respect to the sloshing issue:

Broadwater has also raised the issue of potential FSRU and carrier storage tank damage from excessive sloshing of the LNG cargo in Atlantic Ocean conditions. [] At a May 2, 2007 meeting with DOS, Broadwater suggested that wave period, as well as height, could have an impact on sloshing. [] Broadwater’s concerns regarding the effects of sloshing pertain primarily to membrane type tanks. Alternative tank designs, including the Ishikawajima Heavy Industries Self-supporting Prismatic, Type B (ISI-SPB) tanks form an internal baffle that, given proper reinforcement at the bulkhead, minimizes sloshing.<sup>36</sup>

---

presentation from Third Technical Data Meeting (May 23, 2007) (BW19190); Broadwater presentation from Fourth Technical Data Meeting (June 13, 2007) (BW19206); Broadwater Additional Alternatives Analysis submitted to FERC (June 20, 2007) (BW18208); Response to Comments on Broadwater’s Petitions and Application for Easements Over New York State Lands (January 2008) (BW31066-31070); LIPA Report at 73 (BW31151).

<sup>33</sup> BW34054-34055.

<sup>34</sup> BW34055.

<sup>35</sup> BW34057-34061.

<sup>36</sup> Objection at 69 (BW33803).

Because information on sloshing is already in the consolidated record, Supplemental Document XII provides “clarifying information [] related to information in the consolidated record.” 15 C.F.R. § 930.130(a)(2)(ii)(B).

Finally, NYSDOS’s contention that Supplemental Document XII weakens Broadwater’s sloshing argument is once again an unauthorized sur-reply that should be rejected. Moreover, it is incorrect. The sloshing mitigative measure identified in Supplemental Document XII (§ 1.5.3 [SD442-443]) would generally require the construction of purpose-built and dedicated LNG carriers. Use of purpose-built carriers is contrary to the intended function of the Broadwater Project as a baseload facility, which necessitates accepting deliveries from the existing worldwide fleet of LNG carriers.<sup>37</sup> In addition, relying on a small, specialized fleet of atypical LNG carriers as a potential method to mitigate sloshing would still not alleviate the inability for LNG carriers to berth with the FSRU due to the severe metocean conditions and the limitations those conditions place on tugboat operations.

**Supplemental Document XIII: Article Entitled “ExxonMobil Shifts Import Focus To US Northeast”**

While NYSDOS does not object to the inclusion of Supplemental Document XIII,<sup>38</sup> which addresses the BlueOcean LNG project, in the decision record, NYSDOS continues its unauthorized sur-reply, which should be rejected. In addition, NYSDOS does not explain why documents relating to Safe Harbor are objectionable because they pertain to “a completely different project,”<sup>39</sup> while documents relating to BlueOcean (also “a completely different project”) are apparently acceptable.

Moreover, NYSDOS’s Opposition Letter mischaracterizes Broadwater’s position with respect to BlueOcean. Broadwater has never disputed that the proponents of BlueOcean are attempting to site their facility in the Atlantic Ocean. Rather, Broadwater submits Supplemental Document XIII to demonstrate that BlueOcean is in the earliest stages of the design process; as noted in Broadwater’s Reply Brief, Supplemental Document XIII states: “A lot more study work is required, and it will take at least a year before the company is even ready to file its permit applications.”<sup>40</sup> Based on the nascent status of BlueOcean, NYSDOS’s continual reliance on that project as contradicting the LNG industry standard limiting safe carrier operations to wave

---

<sup>37</sup> Broadwater Reply Brief at 24.

<sup>38</sup> NYSDOS expresses concern that Supplemental Document XIII is undated. Based on the internet address for this document supplied in footnote 162 of Broadwater’s Reply Brief ([www.poten.com/lngoptions/022008.pdf](http://www.poten.com/lngoptions/022008.pdf)), it appears this document was published on February 20, 2008.

<sup>39</sup> Opposition Letter at 6.

<sup>40</sup> Supplemental Document XIII (SD486).

heights of 2 meters or less is speculative. NYSDOS offers only a Powerpoint presentation indicating BlueOcean's future plans to site an LNG terminal in the Atlantic Ocean. This presentation does not present any operational criteria such as berthing limitations. For all these reasons, the unauthorized sur-reply arguments of NYSDOS should be rejected.

**Supplemental Documents XIV and XV:** Buchner, B., P. Dierx and O. Waals. June 2005. The Behaviour of Tugs in Waves Assisting LNG Carriers During Berthing Along Offshore LNG Terminals. Proceedings of OMAE 2005, 24<sup>th</sup> International Conference on Offshore Mechanics and Artic Engineering, Halkidiki, Greece; Draft Report "Operational and Training Guidelines" dated June 12, 2007, prepared by Marin

NYSDOS objects to the inclusion of Supplemental Documents XIV and XV in the decision record because the "FEIS makes absolutely no reference to the behavior of tugboats as a limiting factor for locating the FSRU at either Atlantic Ocean alternative location."<sup>41</sup> It is unclear why NYSDOS perseverates on the content of the FEIS since the Secretary may accept supplemental information into the decision record that clarifies information contained anywhere in the *consolidated record*, not simply information contained in the FEIS. 15 C.F.R. § 930.130(a)(2)(ii)(B). There is a significant amount of information in the consolidated record addressing restrictions on tugboat operability in severe metocean conditions.<sup>42</sup> Because Supplemental Documents XIV and XV provide further clarifying information regarding tugboat operability, they should be accepted into the decision record.

**Supplemental Document XVI:** Excelerate Northeast Gateway Energy Bridge FEIS/FEIR

NYSDOS objects to the inclusion of Supplemental Document XVI in the decision record because it relates to "an entirely different LNG project, the Excelerate Northwest Gateway Energy Bridge."<sup>43</sup> As noted above, however, NYSDOS has freely cited to materials relating to other, "entirely different" LNG projects – *e.g.*, Safe Harbor and BlueOcean.

Broadwater relies on Supplemental Documents XVI as evidence of an industry standard limiting side-by-side unloading of LNG carriers at FSRU ports to a maximum wave height of 6.5 feet (2 meters).<sup>44</sup> NYSDOS has placed the existence of this industry standard squarely at issue in this appeal. Because there is no dispute that the consolidated record contains volumes of

---

<sup>41</sup> Opposition Letter at 9.

<sup>42</sup> See, e.g., Coast Guard Waterways Suitability Report ("WSR") § 4.6.1.3 (BW7716-7717) (section is entitled "Assist Tugs"); Broadwater Resource Report No. 11 § 11.4.2.2 (January 2006) (BW2592-2596) (section is entitled "Tugboat Support Consideration"); Broadwater presentation to NYSDOS: "Assessment of Alternatives Relative to Long Island Sound" (April 12, 2007) (BW19130-19135).

<sup>43</sup> Opposition Letter at 10.

<sup>44</sup> Broadwater Reply Brief at 25.

information addressing metocean restrictions on LNG operations, Supplemental Document XVI should be admitted to the decision record because it provides “clarifying information [] related to information in the consolidated record.” 15 C.F.R. § 930.130(a)(2)(ii)(B).

Finally, NYSDOS’s contention that Supplemental Document XVI is comprised of “the opinions and evaluations completed by a company seeking to employ its own chosen design at an offshore ocean location” is incorrect. Supplemental Document XVI is an FEIS prepared by the United States Coast Guard, the federal agency with subject matter expertise in offshore LNG permitting and operations, and not by a private company as NYSDOS suggests.<sup>45</sup>

**Supplemental Document XVII:** Excelerate Energy Presentation “LNG Ship-To-Ship Transfer” at the LNG Transshipping Conference in Houston on January 25, 2007

NYSDOS objects to the inclusion of Supplemental Document XVII because analysis of the metocean conditions necessary to effectuate a ship-to-ship transfers of LNG using an Energy Bridge Regasification Vessel (“EBRV”) is “completely irrelevant” to the Broadwater Project, which will employ an FSRU. NYSDOS is technically misinformed. Metocean restrictions on ship-to-ship transfers of LNG using an EBRV are directly applicable to the Broadwater Project because, from an engineering standpoint, an EBRV and an FSRU employ similar operations, and both must consider the manner in which metocean conditions impact ship-to-ship transfers. Supplemental Document XVII provides industry evidence on the operational parameters of ship-to-ship LNG transfers from the only company that has performed such a transfer in a commercial context.

**Supplemental Document XVIII:** FERC Order Denying Rehearing, *Broadwater Energy LLC*, 124 FERC ¶ 61,225 (2008)

NYSDOS objects to the inclusion of Supplemental Document XVIII in the decision record because FERC’s Order is “nonfinal” inasmuch as NYSDOS apparently intends to submit a motion for rehearing. The Secretary may accept supplemental information into the decision record that clarifies information contained in the consolidated record. 15 C.F.R. § 930.130(a)(2)(ii)(B). FERC’s Order Denying Rehearing is clearly relevant to and clarifies FERC’s earlier unanimous Approval Order (BW33021-33073). The fact that NYSDOS may elect to file further challenges to FERC’s Order is immaterial to whether Supplemental Document XVIII satisfies the “clarifying” standard for supplemental materials under 15 C.F.R. § 930.130(a)(2)(ii)(B). The alleged “nonfinal” status of FERC’s Order is also irrelevant given that NYSDOS has supplemented the decision record with three NYSDEC NOIAs that cannot be

---

<sup>45</sup> Supplemental Document XVI (SD515). The regulations governing this appeal require the Secretary to “accord greater weight to those Federal agencies whose comments are within the subject area of their technical expertise.” 15 C.F.R. § 930.128(c)(1).

The Honorable Carlos M. Gutierrez

September 22, 2008

Page 15 of 15

regarded as containing any final conclusions with respect to the coastal effects of the Broadwater Project.

Based on the foregoing, Broadwater respectfully requests that the Secretary accept the Supplemental Documents into the decision record in this matter.

Very truly yours,



Robert J. Alessi

cc: New York Secretary of State Lorraine Cortés-Vázquez  
Susan L. Watson, Esq.  
Joel La Bissonniere, Esq.

## CERTIFICATE OF SERVICE

I hereby certify that the foregoing Reply of Broadwater Energy LLC and Broadwater Pipeline LLC to New York State Department of State's Opposition to Broadwater's Second and Third Motions to Supplement the Decision Record was served this 22nd day of September 2008, by first-class mail unless otherwise indicated, on the following persons at the addresses listed below.

Joel La Bissonniere  
Assistant General Counsel for Ocean Services  
1305 East West Highway  
Room 6111 SSMC4  
Silver Spring, MD 20910  
(1 Copy by Mail; 2 Copies by Overnight  
Courier)

Hon. Lorraine Cortes-Vazquez  
Secretary of State  
State of New York Department of State  
99 Washington Avenue  
Albany, NY 12231-0001

Susan Watson  
General Counsel  
State of New York Department of State  
99 Washington Avenue  
Albany, NY 12231-0001

Robert Snook  
Assistant Attorney General  
55 Elm Street  
P.O. Box 120  
Hartford, Connecticut 06141-0120



Brett A. Snyder  
Dewey & LeBoeuf LLP  
1101 New York Avenue NW, Suite 1100  
Washington, DC 20005-4213