200612215135 Received FERC OSEC 12/21/2006 09:02:00 PM Docket# CP06-54-000, ET AL.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

BROADWATER ENERGY, LLC	Docket Nos.	CP06-54-000
BROAWATER PIPELINE LLC		CP06-55-000
BROADWATER ENERGY LIQUIFIED NATURAL GAS PROJECT		CP06-56-000

NOTICE OF SUBMISSION
COMMENT/PROTEST

1. Pursuant to Rule 211, Tamara Fowls and Sarosh Wahla, third year students at the University of Connecticut School of Law (collectively hereinafter "Student at the University of Connecticut School of Law" or "Law Students"), respectfully submit to the Federal Energy Regulatory Commission (hereinafter "FERC" or "Commission") the attached Comment/Protest. 18 CFR § 385.211(a)(1). The filing of a protest does not make the protestant a party to the proceedings. 18 CFR § 385.211(a)(2).

2. As this Comment/Protest is not explicitly directed against Broadwater Energy, LLC,[1] service of process has not been affected. 18 CFR § 385.211(b)(1). In the alternative, Law Students respectfully request that the Secretary waive any procedural defects in the service of process. 18 CFR § 385.211(b)(2).

3. Venue and jurisdiction in the above captioned proceedings properly lie before the Commission. 16 U.S.C. § 797(e).

4. The attached Comment/Protest is submitted in response to a draft environmental impact statement, dated November 17th, 2006 and listed in the record at accession number 20061117-4003 (hereinafter "Draft"), in the above captioned proceedings. The Draft asserts that all comments are due to the Commission on or before January 23rd, 2007. See Draft, p. 5.

5. Law Students assert that their participation in these proceedings is in the public interest and that the attached Comment/Protest is timely submitted via electronic filing. 18 C.F.R. 385.2001 (a)(1)(iii)

WHEREFORE, Law Students respectfully submit the attached Comment/Protest.

Respectfully Submitted,

_____/s/_____
Tamara L. Fowls

_____/s/_____
Sarosh N. Wahla

Dated: December 21st, 2006

[1] Broadwater Energy LLC is jointly owned by TCPL USA LNG, Inc. (a subsidiary of TransCanada Corporation) and Shell Broadwater Holdings LLC (a subsidiary of Shell Oil Company) and is represented by the law firm of LeBoeuf, Lamb, Greene & MacRae LLP in these proceedings.

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COMMENT IN RESPONSE TO
DRAFT ENVIRONMENTAL IMPACT
STATEMENT ISSUED ON NOVEMBER 17TH, 2006

Pursuant to Rule 211, Tamara Fowls and Sarosh Wahla, third year students at the University of Connecticut School of Law (collectively hereinafter "Student at the University of Connecticut School of Law" or "Law Students"), respectfully submit this Comment/Protest to the Federal Energy Regulatory Commission (hereinafter "FERC" or "Commission") in the above captioned proceedings. 18 CFR § 385.211(a)(1). Law Students are residents of the State of Connecticut and their participation in these proceedings is in the public interest.

I. Summary of Argument

Law Students propose that the Commission consider: (a) the likelihood of a company deviating from the methods of construction and operation detailed in their application with FERC, and (b) the harm that deviations in methods of construction or operation of a liquefied natural gas marine terminal will cause to the environment.

II. Procedural Background

Broadwater Energy LLC and Broadwater Pipeline LLC (collectively hereinafter "Broadwater") have filed an application with FERC for a proposed Broadwater Liquefied Natural Gas Project (hereinafter "Project") pursuant to Sections 3(a) and 7(c) of the Natural Gas Act (hereinafter "NGA"). On November 17th, 2006, FERC staff issued a draft environmental impact statement, listed in the record at accession number 20061117-4003 in the above captioned proceedings (hereinafter "Draft"), to discharge their obligations under the National Environmental Policy Act (hereinafter "NEPA"). Under *Sierra Club v. Peterson*, the NEPA "requires federal agencies to evaluate the environmental consequences of their actions prior to commitment to any actions which might affect the quality of the human environment." 717 F.2d 1409, 1415 (D.C. Cir. 1983) This is when "the critical agency decision is made which results in irreversible and irretrievable commitments of resources to an action which will affect the environment." *Id.*, (internal citations omitted).

The purpose of the Project is construction and operation of a liquefied natural gas ("LNG") marine terminal capable of receiving imported LNG from LNG carriers, storage, and regasification. The LNG marine terminal would provide natural gas to the Long Island, New York City, and Connecticut markets via the existing subsea natural gas

pipeline system owned by Iroquois Gas Transmission System. See Draft's Executive Summary p. ES-1. FERC "found that the demand for natural gas in each of these areas is rising and is projected to generate increasing price pressure and volatility in the future if the supply remains at its current level." *Id.*

The Draft concludes that the construction and operation of the Project would result in limited adverse environmental impacts. Draft's Conclusions and Recommendations, p. 5-1. Specifically, that during construction of the Project, "the primary impacts would be physical disturbance of the seafloor and related turbidity in the water column," and that "[d]uring operation, the impacts of primary concern would consist of minor impacts to water quality, air quality, fisheries associated with impingement and entrainment, recreational boating and fishing, and commercial vessel traffic, as well as minor to moderate impacts on visual resources." *Id.* Any adverse environmental impacts "occurring during operation would continue through the life of the proposed Project." *Id.* Neither renewable energy sources nor "existing or proposed pipeline systems or LNG terminals could meet the energy needs for the target markets without substantial system upgrades that would result in greater environmental impacts than those of the proposed Project." *Id.* at 5-15. In addition, the Draft proposed a series of seventy-nine measures that would further mitigate the environmental impacts associated with the construction and operation of the Project. *Id.* at 5-17 to 5-28.

III. Argument

Law Students assert that the Commission should consider the rationale and analytical framework underlying Newcomb's Paradox when promulgating a final environmental impact statement. Specifically, Law Students encourage the Commission to analyze the impact and probability of an applicant employing environmentally unsound methods in the construction or operation of an LNG marine terminal.

A. Newcomb's Paradox

The traditional formulation of Newcomb's Paradox involves two parties, the Chooser and the Predictor, who are involved in a game.[2] The game entails the Chooser deciding whether to take either the contents of two boxes, A and B, or just the contents of box B. In the game, box A will always contain $1,000. The contents of box B, however, will be determined by the Predictor before the Chooser decides which box(es) to take. If the Predictor predicts that both boxes will be taken, then box B will contain nothing. If the Predictor predicts that only box B will be taken, then box B will contain $1,000,000. Thus, by the time the Chooser is making a decision, box B contains either $0 or $1,000,000. The caveat to the game is that the Predictor is nearly infallible, and has never before incorrectly guessed which box(es) a Chooser will take.

Each Chooser knows the information outlined in the preceding paragraph, and has to choose between two conflicting strategies that can both theoretically lead to maximizing their payout. The first theory (hereinafter, "Theory 1") suggests that taking

[2] The description of Newcomb's Paradox found above was based off of the explanation provided at Wikipedia, *available at* http://en.wikipedia.org/wiki/Newcomb's_paradox. Further analysis was based on the work of Waldemar Stronka, *Newcomb's Paradox and Neuroeconomics, Proposal of an Experimental Investigation,* The Poznan University of Economics (2006).

only B is optimal. Under this line of thinking, making a return of $0 or $1,001,000 are impossible since they would require an incorrect prediction from the Predictor. Thus, the Chooser really must simply elect between whether to receive $1,000 (boxes A and B) or to receive $1,000,000 (box B only). This theory has drawn criticism for its inapplicability to real world situations since it relies on an infallible Predictor.

The second theory (hereinafter, "Theory 2") is that, regardless of the Predictor's prediction, taking both boxes yields more money. According to this theory, if the prediction is for both A and B to be taken, then the Chooser's election of boxes A and B ($1,000) produces a greater yield than taking just box B ($0). Likewise, if the prediction is for the Chooser to take only B ($1,000,000), then taking both boxes still will increase the payout (to $1,001,000). This theory further suggests that the best solution is for a Chooser to convince a Predictor that they are going to choose only box B, but then to actually choose both boxes.

B. Newcomb's Paradox Applied

Broadwater's application is a real world example of Newcomb's Paradox. FERC is the Predictor and Broadwater is the Chooser. The Chooser, Broadwater, must decide whether to submit an application indicating that it will construct and operate an LNG marine terminal by environmentally sound and unsound means in conjunction (i.e., boxes A and B), or solely by environmentally sound means (i.e., box B only). Similarly, the Predictor, FERC, has the opportunity to put either $0 or $1,000,000 into box B when it decides whether to accept or reject Broadwater's application. As the Draft has concluded that Broadwater will employ only environmentally sound methods in the construction and operation of the LNG marine terminal, FERC has made a prediction that Broadwater will select only box B. Accordingly, FERC has put the equivalent of $1,000,000 into box B by approving the application.

However, since this application is a real world instance of Newcomb's Paradox, it is important to determine with accuracy whether Broadwater will elect Theory 1 or Theory 2 to maximize its payout of application approvals. If Broadwater elects Theory 1, it will fully disclose all activities to FERC in its application, and will assume that it is not possible to state one position in the application while performing another. Conversely, if Broadwater elects Theory 2, Broadwater will attempt to convince FERC that it will only use environmentally sound methods in the construction and operation of the LNG marine terminal, while actually planning to use both sound and unsound methods.

Unless Broadwater selects Theory 1 (which is improbable because Theory 1 requires the Predictor, FERC, to be wholly infallible), Broadwater will be likely to not fully disclose in its FERC application the unsound environmental methods it plans to use. Furthermore, since it is likely that Broadwater subscribes to Theory 2, it is important that FERC fully consider the environmentally unsound methods that might be employed in the construction and operation of a LNG marine terminal, even if Broadwater does not explicitly state that they will be using such methods.

FERC may argue that Broadwater is unlikely to use Theory 2 because, in the past, there have not been many instance in which companies switched their methods of

construction and operation after their applications with FERC have been approved.[3] It may point out that the Recommended Mitigation, and possible sanctions for non-compliance, are deterrents that will ensure that Broadwater complies with the terms outlined in its application. However, while these methods may lower the probability with which corporations will deviate from the actions outlined in their FERC applications, it does not *fully* ensure that all deviations will be eradicated. As such, in addition to considering the environmentally unsound methods that might me employed by an applicant, FERC should determine with what probability a company is expected to deviate from the actions set forth in their application.[4] Doing this analysis will allow for FERC to complete an appropriately comprehensive risk analysis.

IV. Conclusion

In summary, Law Students urge the Commission to apply Newcomb's Paradox when considering the likelihood of a company deviating from the methods of construction and operation detailed in their application with FERC, and the harm that deviations in methods of construction or operation of a liquefied natural gas marine terminal will cause to the environment. This should allow the Commission to better understand and account for the risk of noncompliance when issuing its final environmental impact statement.

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[3] Reasoning based on past inference does allow for an inference of probability. As John Leslie points out in his article *Doomsday Revisited*, if one were to go into a casino and observe a roulette table which came up "red" thirteen times in a row, it would indicate that there was an increased probability that the table was rigged. THE PHILOSOPHICAL QUARTERLY, Vol. 46 No. 166 (1992). Likewise, if FERC observes a past trend of adherence to proposed Projects, it make likewise make inferences regarding the probability of Broadwater's will adhere to the specifics detailed in its proposed Project.

[4] Law Students suggest that the optimal method of calculating the probability would be through the use of Bayes' Theorem. Details regarding this theorem may be found in Stanford Encyclopedia of Philosophy, *available at* http://plato.stanford.edu/entries/bayes-theorem/.

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