UNITED STATES OF AMERICA

BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

AFFIDAVIT OF DAVID B. PATTON, PH.D.

I. Qualifications and Purpose

1. My name is David B. Patton. I am an economist and President of Potomac Economics. Our offices are located at 9990 Fairfax Boulevard, Fairfax, Virginia 22030. Potomac Economics is a firm specializing in expert economic analysis and monitoring of wholesale electricity markets.
2. Potomac Economics serves as the Independent Market Monitor for the New York Independent System Operator, Inc.. It also currently serves as the Independent Market Monitor for ISO New England Inc ("ISO-NE") and the Midwest ISO. In fulfilling my obligations to these ISOs, I am responsible for assessing the competitive performance of the markets administered by them, including assisting in the implementation of monitoring plans to identify and remedy market design flaws and abuses of market power. I also provide recommendations regarding market mitigation measures and other market rules. I have served in this capacity for the NYISO since 1999.
3. I have worked as an energy economist for nineteen years, focusing primarily on the electric utility and natural gas industries. I have provided strategic advice, analysis,

and expert testimony in the areas of electric power industry restructuring, pricing, mergers, and market power. I have also advised other existing and prospective RTOs on transmission pricing, market design, and congestion management issues. With regard to competitive analysis, I have provided expert testimony and analysis regarding market power issues in a number of merger and market-based pricing cases before the Federal Energy Regulatory Commission ("FERC" or the "Commission"), state regulatory commissions, and the U.S. Department of Justice.

4. Prior to my experience as a consultant, I served as a Senior Economist in the Office of Economic Policy at the FERC, advising the Commission on a variety of policy issues including transmission pricing, open-access and electric utility mergers.

5. Before joining the Commission, I worked as an economist for the U.S. Department of Energy. During this time, I helped develop and analyze policies related to investment in oil and gas exploration, electric utility demand side management, residential and commercial energy efficiency, and the deployment of new energy technologies. I hold a Ph.D. and M.A. in Economics from George Mason University and a B.A. in Economics with a minor in Mathematics from New Mexico State University.

II. Background

6. The New York State Reliability Council ("NYSRC") establishes reliability rules for the New York State Power System, and the NYISO complies with them in its operation of that system and in its administration of the electricity markets. One such rule, I-R3, the "Minimum Oil Burn Rule," states that:

> [T]he NYS Bulk Power System shall be operated so that the loss of a single gas facility does not result in the loss of electric load within the New York City or Long Island zones.

7. Under this rule, Consolidated Edison Company of New York, Inc. ("Con Edison") requires specifically identified units in its Load Zone that have dual fuel capability to utilize a minimum level of an alternative fuel when loads are expected to reach certain levels. The alternative fuel is usually No. 6 fuel oil ("Fuel Oil"). Generators operating with at least a minimum of the alternative fuel will remain on-line should the loss of gas contingency occur.

8. According to the complaint filed by TransCanada Ravenswood, LLC ("TCR") in this proceeding, TCR owns and/or leases three large steam units (Units 10, 20, and 30) at the Ravenswood generation complex in New York City that have the ability to burn both natural gas and oil, normally, Fuel Oil. TCR is thus subject to the Minimum Oil Burn Rule.

9. Because dual-fuel generators could be economically disadvantaged during periods when Fuel Oil is more expensive than natural gas if the Minimum Oil Burn Rule is triggered after the close of the Day-Ahead Market, and the generator had not factored the higher cost of Fuel Oil into its Day-Ahead bid, the NYISO established a supplemental payment mechanism to address these costs.

10. Section 4.1.7a of the NYISO's Services Tariff creates a special compensation rule under which generators are eligible to recover the "variable operating costs" of burning an alternate fuel in compliance with the Minimum Oil Burn Rule when: 1) such costs are not reflected in the unit's reference level; 2) the indexed alternate fuel

cost burned pursuant to the Minimum Oil Burn Rule is more than the indexed variable operating costs for natural gas; 3) the Minimum Oil Burn Rule was invoked; and 4) the variable operating costs would not have been incurred but for the requirement to burn the required alternate fuel for Minimum Oil Burn Rule purposes.

11. Section 4.1.7a does not define "variable operating costs" and it is my understanding that the term is likewise not defined in any other NYISO manual or procedure. In addition, as the NYISO explains in its answer to TCR's complaint, the Commission has clearly held that Section 4.1.7a does not compensate generators "for the storage and delivery infrastructure required to be able to burn an alternative fuel at any given time." Such costs are outside the tariff's definition of variable operating costs that would not have been incurred "but for" the Minimum Oil Burn Rule.

12. Therefore, it is my assumption that Section 4.1.7a is intended to provide compensation only for those costs that vary directly with the number of barrels burned for the Minimum Oil Burn Rule program. Put another way, to be a variable cost, an incremental change in usage should result in an incremental change in the cost. All other costs that do not vary with the alternative fuel consumed would thus not be recoverable under Section 4.1.7a.

13. I sympathize with the equity of allowing recovery of fixed costs that are incurred by a supplier to have the capability to respond to a Minimum Oil Burn call. Even though these costs are only incurred to provide the Minimum Oil Burn service, they are not variable costs under Section 4.1.7a.

14. Applying the definition of variable costs described above, costs recoverable under Section 4.1.7a should satisfy a "but for" test -- that is -- but for the Minimum Oil Burn call, the cost would not have been incurred. If the claimant experiences the cost whether there is a Minimum Oil Burn Rule call or not, the cost should not be considered a variable cost under Section 4.1.7a.

III. Analysis

15. TCR is claiming that it is entitled to three "buckets" of costs: (1) its *pro rata* payments to have barges deliver Fuel Oil to its facilities ("Barge and Delivery Lease Payments"), (2) its *pro rata* payments for third-party off-site Fuel Oil tank and barge storage applicable to the days when it was ordered to provide minimum oil burn service ("Storage Lease Payments"); and (3) its other miscellaneous charges associated with on-site Fuel Oil and delivery equipment (*e.g.*, piping, pumps and other facilities separate and apart from on-site storage tanks)("On-Site Equipment" costs").

16. TCR's claim that its costs for Barge and Delivery Lease Payments and Storage Lease Payments should be recoverable under Section 4.1.7a is in error. These costs do not vary directly "with the amount of the alternative fuel burned." (Complaint at 13).

A. Barge and Delivery Lease Payments

17. Based on the information provided in TCR's complaint, its costs for Barge and Delivery Lease Payments during Summer 2009 appear to be based on a fixed-cost lease obligation entered into by a TCR affiliate, TC Ravenswood Services Corp. ("TC Services"). TCR's portion of the total monthly lease payment varied between

Con Edison and TCR monthly, based on the *proportionate* number of barrels each used each month.

18. TCR explains that in months in which it and Con Edison both used Barge and Delivery service, TCR paid a greater or lesser amount depending on its usage relative to Con Edison's usage. If it used Barge and Delivery service, for its own Fuel Oil use or to comply the Minimum Oil Burn rule), the amount TCR would charge for complying with the Minimum Oil Burn rule would also vary proportionately depending on the barrels burned for each of the three uses (Con Edison's, Ravenswood's own use, and Minimum Oil Burn use) in that month. This allocation mechanism is also explained by Witness Jay Prestia at p. 9 of his testimony.

19. TCR also asserts that in the months of June, July, August and September, 2009, it burned Fuel Oil exclusively to comply with the Minimum Oil Burn Rule, that its share of payments to TC Services in those months was directly the result of, and proportionate to the barrels used for, complying with the Minimum Oil Burn Rule. It used Fuel Oil for no other purposes.

20. Costs for Barge and Delivery Lease Payments that vary each month depending on use *proportionate to another's use* are not variable costs. Rather, it is a variable allocation methodology that is applied to recover fixed costs. In fact, this allocation can cause TCR's costs to rise as its usage for Minimum Oil Burn calls declines, which would occur in months when Con Edison's usage declines by a large amount in percentage terms.

21. Further, the fact that TCR and TC Services are affiliates is important. Economists generally evaluate affiliates as a single entity. Evaluated in this manner, it becomes much clearer that these costs are fixed costs. The holding company in this case must cover these lease costs, but for the portion that is allocated to Con Edison.

22. The only legitimate argument for these costs to be considered variable is the fact that TC Services could work with the barge owner to turn the barge back to the owner when it does not need it to recover the daily lease cost. However, TCR provides no information regarding how it would determine that the barge will not be needed or how successful TC Services was in turning the barge back to the owner. Hence, the complaint does not provide enough information to allow one to conclude that the lease costs are truly variable. Additionally, the variation in the lease costs through this process would be related not only to TCR's use of the barges for the Minimum Oil Burn calls, but also to Con Edison's usage.

B. Storage Lease Payments

23. The costs of Storage Lease Payments appear to have been contractually assigned to Con Edison and to TCR in static proportions.[1] TCR states that it assigns proportionate shares of its allocated portion of these expenses to Minimum Oil Burn and to its other economic functions based on the relative use of Fuel Oil by each function in a given month. TCR's costs for this service may vary, but the amount of costs allocated to the Minimum Oil Burn Rule does not vary by the quantity of oil burned for that program.

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1 TCR has agreed to pay for approximately 65 percent of the off-site storage tanks at Bayonne, N.J., and 35% of the Lemon Creek barge. These percentages do not change based on usage.

24. As much as 100 percent of TCR's contractual share of the Storage Lease Payments could be assigned to the Minimum Oil Burn Rule program whether the program required zero barrels or 100,000 barrels of Fuel Oil in the month. Thus, these costs do not vary by usage for Minimum Oil Burn calls. They are fixed costs that TCR is obligated to pay, regardless of the usage. Although TCR has not proposed to recover these costs in months when no oil is used under the Minimum Oil Burn program, such an offer does not make the costs any more variable. TCR is contractually obligated to incur these costs regardless of its usage so they cannot be considered variable costs under Section 4.1.7a.

C. On-Site Equipment Costs

25. Finally, TCR's On-Site Equipment costs are not allocated between it and Con Edison in the same manner as its Barge and Delivery Lease Payment and Storage Lease Payment costs. The complaint describes a $0.39/barrel charge for maintenance of this equipment, but it is not clear whether this charge is a means to allocate the O&M expenses related to this equipment or whether the O&M expenses actually tend to increase by $0.39 for every barrel of oil that is consumed. If it is the latter, this may be a variable cost as defined earlier in my affidavit. However, if this per barrel charge is simply an accounting mechanism to allocate O&M expenses that do not vary with the amount of oil consumed, than it should not be considered a variable cost. I was unable to make this determination based on the information in the complaint.

IV. Conclusion

26. Based on my analysis of the information in the complaint that is described above, I concur with the response of the NYISO that the costs TCR is seeking are not variable operating costs.

27. This concludes my affidavit.

ATTESTATION

I am the witness identified in the foregoing Affidavit of David B. Patton, Ph.D. dated June 28, 2010 (the "Affidavit"). I have read the Affidavit and am familiar with its contents. The facts set forth therein are true to the best of my knowledge, information, and belief.

David B. Patton

June 28th, 2010

Subscribed and sworn to before me

this 28th___th day of June, 2010

Notary Public

MATTHEW JAMES CARRIER
Notary Public
City/County of Fairfax
Commonwealth of Virginia
Notary registration number - 7233763
My commission expires - Nov. 30, 2013

My commission expires: 11/30/2013