Attachment VI

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New York Independent System Operator, Inc.	)	Docket No. ER17-____-000

TESTIMONY OF JOHN (JAY) PRESTIA

Q. Please state your name and title.

A. My name is John (Jay) Prestia and I am the Manager, New York Real Time Optimization. I am employed by TransCanada Power Marketing Ltd. in its Power Commercial Operations Department.

Q. Please state your job responsibilities.

A. Among other things, I currently manage procurement and delivery of natural gas for TC Ravenswood, LLC ("TC Ravenswood") and procurement and delivery activities of 0.3% sulfur No. 6 fuel oil ("Fuel Oil") for TC Ravenswood Services LLC ("TC Services"). TC Ravenswood Services LLC is the successor company to TC Ravenswood Services Corp. TC Services procures Fuel Oil in order to meet the Fuel Oil needs of Consolidated Edison Company of New York Inc.'s steam business ("Con Edison Steam") and TC Ravenswood at the site of the Ravenswood Generating Station.

Q. For how long have you managed natural gas and Fuel Oil procurement and delivery for TC Ravenswood and TC Services?

A. Since November 1999.

Q. What does your job entail?

A. Among other things, I manage the procurement, nomination, delivery and inventory management of Fuel Oil. This includes, but is not limited, to scheduling and obtaining barges and storage as well as balancing supply and demand for the portfolio of Fuel Oil use at the Ravenswood site. In addition, I manage the procurement and delivery of natural gas and balance the supply and demand for TC Ravenswood use. This includes but is not limited to scheduling procurement, transportation, and balancing.

Q. Please state the purpose of your testimony.

A. The purpose of my testimony is to support TC Ravenswood's proposed Implementation Agreement for the compensation and terms and conditions under which TC Ravenswood will generate electric energy using 0.3% sulfur High Pour ("HP") No. 6 Fuel Oil ("Fuel Oil") in lieu of natural gas in furtherance of New York State Reliability Council's Local Reliability Rule I-R3 (Loss of Generator Gas Supply - New York City) ("Rule I-R3") ("Fuel Oil Burn for I-R3") during a three-year period beginning May 1, 2017 and ending April 30, 2020. It also supports the cost sharing mechanism whereby TC Ravenswood, the NYISO and Con Edison Steam will share the prudently incurred capital costs associated with converting the onsite storage facilities and infrastructure to #4 and/or #2 fuel oil as well as associated revisions to Units 10, 20 and 30. The Facility burns Fuel Oil under varied circumstances. TC Ravenswood will, at the request of a customer, and for reliability purposes, burn Fuel Oil instead of natural gas to generate electric energy. Under the proposed Implementation Agreement, the NYISO will pay a share of the comingled costs TC Ravenswood incurs.

Q. How have you organized your testimony?

A. My testimony is divided into five sections. The first section provides information related to Fuel Oil capabilities and operations at the Ravenswood site. The second section explains the historic procurement practices for Fuel Oil at the Ravenswood site, as well as various agreements, including a 1999 agreement with the Con Edison Steam that expires in 2098 following a 99-year term ("1999 Agreement") and a separate agreement that was entered into as part of a settlement in Dockets ER14-1711 and ER14-1822 which expired on April 30, 2017 (the "Prior Settlement Agreement"). The third section explains certain costs associated with historic Fuel Oil procurement and Fuel Oil delivery and

handling. The fourth section describes certain environmental regulations and the impact those regulations could have upon the cost and the ability of TC Ravenswood to provide services under the Implementation Agreement. The fifth section outlines why the comingling of Fuel Oil supply for the three uses at the Ravenswood site is the cost effective and reliable way to provide service.

Q. Are there any work papers associated with your testimony?

A. Yes, a public spreadsheet outlining the costs and cost allocations contained in the Implementation Agreement is included as Appendix A of the Implementation Agreement. A confidential spreadsheet outlining the costs and cost allocations contained in the Implementation Agreement is included as Appendix B of the Implementation Agreement.

I. Fuel Oil Burn for I-R3, Fuel Oil Capabilities and Operations at the Ravenswood Site

Q. What is included in this section of your testimony?

A. This section of my testimony will explain Fuel Oil Burn for I-R3, as well as the relevant facts and circumstances associated with Fuel Oil capabilities at the Ravenswood site and Fuel Oil procurement and delivery activities and burn rates.

Q. What is Fuel Oil Burn for I-R3?

A. Fuel Oil Burn for I-R3 is the burning of Fuel Oil when the NYISO and/or the Consolidated Edison Company of New York Inc. electric business ("Con Edison") request it to generate electricity in TC Ravenswood's steam generating facilities (*i.e.*, Units 10, 20 and 30). Fuel Oil is burned in lieu of natural gas in order to ensure and/or enhance system reliability. Typically, this is requested notwithstanding that Fuel Oil is

more expensive than natural gas, although there also are times when the Fuel Oil burn is requested when natural gas is priced above the price of Fuel Oil.

Generally, it is the NYISO, either at its own or at Con Edison's direction that requests TC Ravenswood to burn Fuel Oil in lieu of natural gas due to reliability concerns. For example, switching to Fuel Oil may help prevent a loss of electric load caused by gas-fired generating units tripping off-line in response to a sudden and unexpected loss of gas or pressure in the natural gas facilities that serve them. A request to burn Fuel Oil in this type of circumstance is typically made in furtherance of the Minimum Oil Burn Rule, or Rule I-R3, established by the New York State Reliability Council. TC Ravenswood has also been directed to burn Fuel Oil, at various levels of output and/or forecasted load levels to address other constraints or reliability issues that do not rise to the load levels specified in Rule I-R3. In burning Fuel Oil instead of natural gas, TC Ravenswood enhances the reliability of the electric system through its ability to generate power with an alternative fuel supply, notwithstanding that TC Ravenswood's cost of addressing fuel interruptions or reliability constraints creating the need to switch to Fuel Oil, which are included in the Implementation Agreement, *are not* reflected in the NYISO market prices for electric energy or otherwise.

Q. Does TC Ravenswood anticipate the NYISO will request Fuel Oil burn for reliability reasons?

A. Yes. TC Ravenswood anticipates that the NYISO and/or Con Edison will request Fuel Oil be burned based on discussions with Con Edison and the NYISO ahead of the Summer 2017 Capability Period. Both the NYISO and Con Edison have indicated they want TC Ravenswood to be capable of burning Fuel Oil for various reliability reasons.

Therefore, the Implementation Agreement sets forth rates, terms and conditions that would apply.

Q. How is Fuel Oil used at the Ravenswood site?

A. TC Ravenswood's three large steam units, Units 10, 20 and 30, each have the ability to burn fuel oil and natural gas at the same time. Fuel oil may also be burned by itself with limited amounts of gas ignition. So those units, which typically burn natural gas, can be switched to Fuel Oil in conjunction with natural gas burn or independent of natural gas burn. Fuel Oil is also supplied to Con Edison Steam through the Ravenswood site.

Q. How is Fuel Oil delivered to the Ravenswood site?

A. The Ravenswood site is located on the East River in Queens, New York. Fuel Oil is delivered to the Ravenswood site by barges on the East River from off-site storage facilities.

Q. Please describe the process involved in Fuel Oil procurement and scheduling of barges.

A. Scheduling Fuel Oil procurement and delivery via transient barges in the New York City harbor to the Ravenswood site is a complicated and often time consuming proposition. Before Fuel Oil can be scheduled for delivery, arrangements must be made to secure the supply from a reputable supplier. These suppliers prefer Fuel Oil procurement nominations to be made the month prior to delivery to ensure delivery arrangements can be made. In addition, a barge and tug need to be scheduled to get the supply and deliver it to the Ravenswood site. These may be contracted for under reserved time charter agreements or spot agreements. Tides also play an important part in timing deliveries because, when loaded, barges are moved during the slack high tides which occur every

twelve hours or twice a day. At times barges are moved when empty during slack low tide depending on weather. If any tide is missed, it could cause a 12-hour delay. Traffic at the Fuel Oil terminal could cause delays also. Berths are provided on a first come, first served basis – so a barge may have to wait in line for a loading berth to become vacant. It can take between 8 – 10 hours to load a barge. It takes between 3 – 4 hours to move a barge to the Ravenswood site from the *nearest* New York City harbor Fuel Oil terminal assuming 0.3% sulfur fuel oil is stored locally and available. If 0.3% sulfur fuel oil is not stored or available in the New York City harbor area, it has to be brought in from Philadelphia or another supply location further increasing delivery time.

Q. What barge berths are available at the Ravenswood site for deliveries?

A. There are a total of four (4) barge berths at Ravenswood. There are three (3) barge berths for Fuel Oil. From south to north they are referred to as the South, the North, and Lemon Creek berths. The fourth berth is for kerosene. It is the northern most berth. Transient Fuel Oil barges are accepted at the South and North berths depending on weather conditions, harbor traffic and other activity at the berths. The Lemon Creek barge is a storage barge, which is docked at the Lemon Creek berth for most of the year, and the Lemon Creek berth is reserved for that purpose.

Q. What are the unloading facilities at the barge berths and what are their limitations?

A. There is one 12" Fuel Oil unloading pipeline. It can send Fuel Oil from any of the three Fuel Oil berths into TC Ravenswood's East and West Tanks at Rainey Substation, into the Lemon Creek barge, and through to be burned at the various on-site facilities and Con Ed's 74th Street station. The Rainey Substation is adjacent to the Ravenswood site. Fuel Oil can be transferred between the various barges and the East Tank, the West Tank, and

the No. 6 Oil Tank ("FO6 Tank") which is located at the Ravenswood site. Various interconnected pipe routes, pumps and equipment exist on-site to allow the transfer of Fuel Oil between tanks, barges and operating facilities.

Q. Are there any restrictions related to Fuel Oil deliveries to the Ravenswood site and if so what are they?

A. Yes. The maximum barge size that may deliver Fuel Oil to the Ravenswood site or berth at the Ravenswood site is 380' loa, 80' beam. Delivery barges to the Ravenswood site have a draft restriction of 15' 6". These restrictions essentially limit Fuel Oil deliveries to approximately 40,000 barrels. Further, the quantity of Fuel Oil that may be stored in the Lemon Creek barge at any time is dependent on the quantity of low pour oil that is also stored due to balance and draft issues. Low pour oil is used to pack the fuel oil line across to the Con Ed 74th Street steam facility to ensure the oil does not solidify in the line when not in use. Weather also can impact Lemon Creek storage due to balance issues.

Q. What is the available storage capacity for Fuel Oil at the Ravenswood site?

A. Useable Fuel Oil storage capacity on the Ravenswood site is approximately 100,000 barrels. That number reflects the combined capacity of storage tanks and the Lemon Creek barge. There are three (3) storage tanks on the Ravenswood site; the East Tank at the Rainey Substation, the West Tank at the Rainey Substation, and the FO6 tank on the Ravenswood site. The combined capacity of the three on-site tanks is approximately 53,000 Bbls but to be conservative, usable capacity is frequently estimated at 45,000 Bbls due to equipment and other limitations, including but not limited to maintenance. In addition to that storage capacity, as I mentioned, the storage barge Lemon Creek is

docked at the Ravenswood site. It has compartments to separate low pour oil and Fuel Oil. The storage capacity of the Lemon Creek is approximately 50,000 Bbls of High Pour and 10,000 Bbls of Low Pour 0.3% #6 fuel oil.

Q. Approximately how much Fuel Oil can be burned by the TC Ravenswood facilities on a daily basis?

A. Unit 30 can burn up to 25,000 Bbls of Fuel Oil in a day. Each of four (4) tiers can burn approximately 6,000 Bbls. The minimum burn rate is one tier or 6,000 Bbls. Units 10 and 20 can burn up to 10,000 Bbls in a day. Similar to Unit 30, each of four tiers can burn approximately 2,500 Bbls. The minimum burn rate is one tier or 2,500 Bbls. Therefore, on a combined basis, Units 10, 20 and 30 have minimum daily burn rates of 11,000 Bbls, but can burn up to 45,000 Bbls of Fuel Oil in a day.

Q. How is on-site Fuel Oil storage used?

A. TC Services also procures and stores Fuel Oil for Con Edison Steam. Con Edison Steam uses the Fuel Oil when necessary for its steam facilities at the Ravenswood site (*i.e.*, the A-House) as well as for its 74th street steam facilities. These facilities are associated with Con Edison Steam's regulated steam business, not its regulated electric business.

Based on the burn rates of the A-House, 74th street and Units 10, 20 and 30 and a requirement to maintain a minimum of 55,000 barrels of Fuel Oil on site for Con Edison's Steam business in accordance with a 1999 Agreement (which I will discuss in the next section of this testimony), and the need to nominate/order Fuel Oil from TC Services' suppliers in the month prior to delivery, currently, all of the on-site storage capacity of approximately 100,000 barrels is needed and reserved for Con Edison Steam and the Fuel Oil storage requirement of TC Ravenswood associated with actual gas

system interruptions unless Con Edison Steam agrees otherwise. Off-site storage is currently used to supplement these needs as necessary.

Q. Is TC Ravenswood obligated to pay for any off-site storage costs?

A. TC Ravenswood was obligated to lease and pay for some off-site storage based on the terms of a Settlement Agreement entered into as part of Dockets ER14-1711 and ER14-1822. I discuss that Settlement Agreement in Section II of this testimony. Aside from the payment obligations under that Settlement Agreement (which expired on April 30, 2017), TC Ravenswood would have no other obligation to lease or pay for off-site storage capacity. Consistent with the lack of this obligation, the off-site storage is only available to TC Ravenswood if TC Ravenswood requests the service from TC Services. TC Services is the entity with the rights to the storage. If TC Ravenswood does not request use of the storage, it does not have to pay for it, but it also cannot use the storage. Nevertheless, to facilitate the Implementation Agreement TC Services will lease its storage rights to TC Ravenswood so they can be available and used for I-R3 service and natural gas interruptions.

Q. How is Fuel Oil transported from off-site storage to the Ravenswood site?

A. Time charter (reserved) contracts may be entered into with transient barges, or barges may be sought in the spot market as needed. The costs associated with reserved time charters are approximately $5500-8500/day and this provides a first call option on the barge. In the event TC Ravenswood does not have sufficient notice to enter into a time charter contract, TC Ravenswood can attempt to obtain supplies via a spot barge, but the daily rate for a spot barge is significantly greater. Moreover, the spot barges may not be available when needed because others have a first call option on them.

Q. Can TC Ravenswood always generate electricity by burning natural gas if Fuel Oil is not available?

A. No. TC Ravenswood obtains natural gas deliveries from Con Edison on an interruptible basis. As a Con Edison SC No 9 interruptible rate customer, TC Ravenswood does not have a right to firm deliveries of natural gas from Con Edison. As a result, and specifically because it is a SC No 9 interruptible rate customer, TC Ravenswood maintains an adequate reserve of Fuel Oil as an energy source in case of gas curtailments by the gas utility. A portion of the aforementioned 100,000 barrels of on-site storage is used for this purpose as well as traditional Fuel Oil supply agreements and off-site storage, if necessary. This, in conjunction with the ability of TC Ravenswood to stop burning gas and buy out of any energy commitments, meets the requirements of the SC No 9 rate.

Q. What happens if a generating facility is unable to procure, deliver or burn Fuel Oil?

A. Generating units may be derated due to the unavailability of Fuel Oil or fuel oil equipment problems. In keeping with longstanding practice, if Fuel Oil is not available for TC Ravenswood Units 10, 20, or 30, the NYISO and Con Edison Electric are both notified and a fuel derate is put in place. Derates could include but are not limited to: unavailability of supply, equipment unavailability or failure, and fuel transport unavailability due to weather or barge scarcity. When the restriction causing the unavailability of Fuel Oil is eliminated, the NYISO and Con Edison Electric are informed that Fuel Oil is once again available and the derate is lifted.

Q. What could cause an interruption in Fuel Oil availability?

A. Availability interruptions can occur due to, among other issues: Fuel Oil supply unavailability in the New York City harbor area, harbor traffic, tug unavailability, barge unavailability, tides and weather conditions.

Q. Is the Ravenswood site capable of serving the three Fuel Oil needs at the site?

A. Yes, since its divestiture in 1999, the Ravenswood site has been able to serve the Fuel Oil needs of Minimum Oil Burn, Con Edison Steam and Ravenswood use in a comingled manner with shared storage, barges, equipment and other resources in an efficient and reliable manner.

II. <u>Historic Procurement Practices for Fuel Oil at the Ravenswood Site</u>

Q. What is included in this section of your testimony?

A. In this section of my testimony I describe the historic arrangements that have been, or are in place, for the procurement of Fuel Oil at the Ravenswood site.

Q. For what purpose is Fuel Oil procured and delivered to the Ravenswood site?

A. Fuel Oil has been, and is, delivered to the Ravenswood site for Con Edison Steam usage ("Steam Use"), Minimum Oil Burn and Electric System Reliability ("Fuel Oil Burn for Reliability"), and for TC Ravenswood use for electric economic dispatch when Fuel Oil is less costly than natural gas as well as for actual gas system interruptions ("Ravenswood Use").

Q. Will you describe the arrangements by which TC Services procures Fuel Oil for Steam Use?

A. TC Services sells and delivers Fuel Oil to Con Edison Steam pursuant to the 1999 Agreement, which is a long term cost-based fuel oil supply agreement that was entered into for a 99-year term. The 1999 Agreement was amended in 2014 to reconcile with the 2014 Settlement Agreement TC Ravenswood entered into with the New York Independent System Operator, Inc. ("NYISO"), Con Edison and others to resolve rate cases ER14-1711 and ER14-1822 related to the recovery of costs associated with providing Fuel Oil burn in furtherance Rule I-R3. Under the 1999 Agreement, TC Services supplies Con Edison Steam with is fuel oil requirements for its A-House and 74th Street facilities. As I indicated earlier, the agreement requires that a minimum of 55,000 Bbls of Fuel Oil be maintained on the Ravenswood site at all times. The contractual obligation to meet this need poses a risk to TC Services if TC Services does not comply with this requirement and/or is unable to provide Fuel Oil to Con Edison Steam. Therefore, meeting this need is always the first priority for use of on-site Fuel Oil and facilities in order for TC Services to satisfy its contractual obligations. A buffer in excess of this 55,000 Bbl amount needs to be stored in order to prevent service interruptions to Con Edison Steam as well as natural gas interruptions.

Q. Please describe the separate agreement that was entered into as part of the 2014 Settlement Agreement.

A. The 2014 Settlement Agreement resolved all issues related to TC Ravenswood's compensation for complying with NYSRC Rule I-R3 for the period May 1, 2014 through April 30, 2017. It once again established a comingled service strategy as opposed to an independent "just-in-time" delivery program.

The Settlement Agreement provided three different mechanisms for TC Ravenswood to recover the costs it would incur that would not otherwise be incurred but for complying with Rule I-R3. One mechanism was for recovery of what were designated as "Predetermined Costs" or a Demand Charge. Those costs were to cover: (i) a portion of TC Ravenswood's costs of leasing one and one half (1½) off-site storage tanks to provide approximately 240,000 barrels of working capacity of Fuel Oil storage; (ii) a portion of the costs TC Ravenswood would incur to lease one large time-chartered barge to provide approximately 40,000 barrels of working capacity of Fuel Oil transportation, and the Lemon Creek dockside storage barge or an equivalent replacement of approximately 50,000 barrels of working capacity; (iii) a charge for the use of on-site storage tanks at the Ravenswood facility; and (iv) certain ancillary Fuel Oil related fees (*e.g.*, labor, barge heating, tank heating, booming, testing, taxes, and carrying charges). The 2014 Settlement Agreement provided that TC Ravenswood would have no right to seek reimbursement of additional costs associated with the items covered by the Predetermined Costs in the event its costs exceeded the agreed to amounts. Similarly, NYISO and its customers waived any right to refunds in the event TC Ravenswood's costs for the covered items were less than the agreed to amounts.

The second cost recovery mechanism in the 2014 Settlement Agreement was intended, in part, to reimburse TC Ravenswood for the commodity costs of Fuel Oil burned in compliance with Rule I-R3 to the extent those costs exceeded the commodity costs of burning natural gas as provided for in Section 4.1.9 of the NYISO Services Tariff, including applicable taxes and emission allowance fees not included in TC Ravenswood's reference bid. Those costs were passed through and recovered on a dollar-for-dollar basis. The second mechanism also provided for TC Ravenswood's

recovery of operations and maintenance ("O&M") expenses associated with Rule I-R3 compliance. The O&M expenses were recovered based upon an agreed to O&M rate times the actual number of barrels of Fuel Oil burned to comply with Rule I-R3.

The third cost recovery mechanism in the 2014 Settlement Agreement provided TC Ravenswood the right to recover additional costs in the event it determined that additional Fuel Oil had to be obtained *via* a spot barge for any fuel oil usage at the Ravenswood site. Upon that determination, TC Ravenswood was to provide notice to the NYISO and Con Edison, and the NYISO was to pay to TC Ravenswood one-third of the costs of the barge.

Q. How has TC Services procured Fuel Oil under the 2014 Settlement Agreement?

A. TC Services entered into Fuel Oil supply agreements that required advance nomination, typically in the month prior to the desired delivery. Fuel Oil was delivered to agreed upon local storage facilities to provide a buffer of supply for use when needed. Stored Fuel Oil was barged to the Ravenswood site as necessary with agreed upon time chartered barges. Payments have been made pursuant to the terms of the 2014 Settlement Agreement.

Q. Given that the 2014 Settlement Agreement expired, what significance, if any, does the 2014 Settlement Agreement have with respect to TC Ravenswood's current proposal in the Implementation Agreement?

A. The 2014 Settlement Agreement is helpful to understand the historical context and the types of terms and arrangements under which TC Ravenswood has previously provided Fuel Oil burn in furtherance of I-R3 and the benefits of comingling procurement, handling and storage of Fuel Oil for all usage at the Ravenswood site as opposed to "just-

in-time" deliveries. Given changes in the Fuel Oil market, TC Ravenswood does not think "just-in-time" delivery of fuel oil is an economic or reliable option at this time. This is due in part to a dwindling number of customers that use the type of Fuel Oil burned by TC Ravenswood and a corresponding reduction in the number of suppliers. There is a significant amount of risk in a "just-in-time" agreement and accordingly the cost can be very high as was the case under a prior agreement. Therefore, TC Ravenswood continues to propose a comingled arrangement in the Implementation Agreement similar to prior years. The details of the comingled service in the Implementation Agreement are described in Section V of my testimony.

III. Costs to Procure and Deliver Fuel Oil

Q. What is included in this section of your testimony?

A. This section of my testimony will discuss the specific costs associated with the procurement and delivery of Fuel Oil and the forecasted costs for the May 2017 through April 2020 Implementation Agreement.

Q. What was the *pro rata* (%) and quantity usage of Fuel Oil during the May 2014-April 2017 period?

A. There are three different types of Fuel Oil usages: Ravenswood Use, Steam Use and Fuel Oil Burn for Reliability. Fuel Oil Burn for Reliability includes any instance in which TC Ravenswood was requested by The NYISO or Con Edison Electric to switch to Fuel Oil for reliability purposes. The actual Fuel Oil pro rata percentage burned for the three usages during May 2014 – April 2017 were: Ravenswood Use 28.39%; Steam Use 62.43%; and Fuel Oil Burn for Reliability 9.18%. Table 1 below shows the quantities of

Fuel Oil burned for Ravenswood Use, Steam Use and Fuel Oil Burn for Reliability for the period May 2014 through April 2017.

Table 1

	May 2014- April 2015	May 2015 – April 2016	May 2016 – April 2017
Ravenswood Use	70,489.86 Bbls	13,764.55 Bbls	12,148.52 Bbls
Steam Use	148,135.29 Bbls	43,367.19 Bbls	20,455.74 Bbls
Fuel Oil Burn for Reliability	1,285.36 Bbls	6,021.86 Bbls	23,868.1 Bbls

Q. Do you see any need to procure off-site storage for Steam Use, Ravenswood Use or Fuel Oil Burn for Reliability in the future?

A. Yes. Based on discussions with Con Edison and the NYISO TC Ravenswood had to be prepared to burn Fuel Oil commencing May 1, 2017 to meet reliability needs as well as its own purposes. Con Edison Steam will also continue to be served by TC Services. Off-Site storage is necessary to meet these needs considering the current Fuel Oil delivery constraints.

The overall costs of leased Storage and Barge capacity increased beginning in May 2017 because the suppliers faced increasing costs. In addition, the anticipated needs associated with Steam Use, Ravenswood Use and Fuel Oil Burn for Reliability warrant sufficient storage and delivery facilities such that Fuel Oil is able to be supplied even when

replenishment takes six weeks or more as recent experience shows. This storage and barging is required notwithstanding the fact that Con Edison Steam converted its 74th Street steam facility to gas. In addition, Con Edison Steam is not reducing its minimum reserve quantity. Accordingly, storage and barging need to be able to meet peak demands even if overall usage is reduced.

Although Fuel Oil for Steam Use is expected to be reduced, a local Fuel Oil storage buffer nonetheless is desirable to Con Edison Steam to ensure the 55,000 barrel minimum on-site storage quantity is readily maintained and to protect against Fuel Oil delivery interruptions. The cost of this additional call option (or insurance buffer) is considered small when compared against the potential loss of Fuel Oil availability. The Implementation Agreement reflects a quantity of storage that the NYISO, Con Edison Steam and Con Edison Electric are comfortable with. The Implementation Agreement reflects the current lease costs from IMTT for two tanks.

Q. What on-site storage and barges will be used and leased for Steam Use, Fuel Oil Burn for Reliability and Ravenswood Use?

A. The Lemon Creek barge and a time charter barge of approximately 40,000 barrels will be leased beginning 5/1/2017 as part of the Implementation Agreement. If a spot barge is necessary it will be obtained after approval from the NYISO and Con Edison.

Q. What is the estimated lease cost of a barge commencing May 1, 2107?

A. It depends on the size and period of charter. TC Services is entering into leases for the Lemon Creek barge as well as a 40,000 time charter barge. The approximate cost of these barges range from $5,500 - 6,500/day plus operating expenses.

Q. Under the proposed Implementation Agreement, what type of costs is TC Ravenswood seeking to recover?

A. TC Ravenswood proposes, under the Implementation Agreement, to recover the costs associated with off-site tank leasing, barge leasing and other expenses allocated to Fuel Oil Burn for Reliability, which are outlined in the spreadsheet. In return, TC Ravenswood will burn Fuel Oil when requested pursuant to the Implementation Agreement. The costs identified in the Implementation Agreement include those costs incurred by TC Ravenswood to procure, deliver, maintain, store and burn Fuel Oil for Reliability requested by the NYISO or Con Edison Electric. These costs include: barge lease payments and associated operating expenses; costs of on-site and off-site storage tanks; variable charge for the use of on-site equipment at the Ravenswood facility; and variable O&M expenses, including labor, barge heating, tank heating, booming, testing, taxes and carrying costs.

IV. Applicability and Cost Impact of Additional Environmental Regulations

Q. Please describe the upcoming changes to fuel oil specifications.

A. Counsel advises me that beginning in 2020 TC Ravenswood will no longer be permitted to burn #6 Fuel Oil and instead will have to burn #4 Fuel Oil.[1] In 2030, #2 Fuel Oil will have to be burned instead of #4.[2] There is a possibility that conversion to #2 Fuel Oil will occur in 2025.[3]

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1 NYC Local Law No. 38.

2 *Id.*

3 The City of New York Committee on Environmental Protection is currently considering Int. No. 1465, in relation to phasing out the use of fuel oil grade no. 4 by October 1, 2025. http://legistar.council.nyc.gov/MeetingDetail.aspx?ID=539352&GUID=95733C0A-2C2F-4E9E-A8B3-2A771A85954D&Search

Q. Please describe the work associated with converting the Ravenswood Facility from #6 Fuel Oil to #4 Fuel Oil and potentially #2 Fuel Oil.

A. To store #4 Fuel Oil in underground tanks they must pass a permeability test. The Rainey tanks require modifications to ensure they pass such a test. Above ground tanks require upgraded monitoring. Fuel pumps and other equipment associated with the handling and storage may require upgrades to comply with #4 Fuel Oil standards. The detailed scope of the project and cost has not been determined yet but consultants and in-house engineering are working on both the scope and cost. As detailed information becomes available it will be shared with the NYISO, Con Edison Electric and Con Edison Steam.

Nevertheless, in order to meet current deadlines and coordinate the change with Con Edison Steam, work needs to progress during the three year Implementation Agreement.

V. <u>Explanation of TC Ravenswood's Proposed Implementation Agreement</u>

Q. How is Fuel Oil currently procured, stored, transported, delivered and handled for the Ravenswood site?

A. Currently, TC Services comingles all the Fuel Oil procurement, storage, transportation delivery and handling for the Ravenswood site. It then bills Con Edison Steam and TC Ravenswood in accordance with various agreements. TC Ravenswood in turn charges the NYISO in accordance with the 2014 Settlement Agreement.

Q. Is this how Fuel Oil Burn for Reliability will be provided if the proposed Implementation Agreement is implemented?

A. Yes. Fuel Oil will be commingled and the costs allocated and billed in accordance with the Implementation Agreement. The percentage allocations and cost estimates are based on historic usage, costs and current quotes. The Parties are in agreement that the Implementation Agreement is a reasonable estimate of costs and allocation.

Q. Does this conclude your testimony?

A. Yes.

AFFIDAVIT

STATE OF New York)
) ss.
COUNTY OF Suffolk)

John (Jay) Prestia, being first duly sworn, on oath states that he is the witness whose testimony appears on the preceding pages entitled "Testimony of John (Jay) Prestia" that, if asked the questions which appear in the text of said testimony, he would give the answers that are therein set forth; and that affiant adopts the aforesaid testimony as his sworn, answering testimony in this proceeding.

John (Jay) Prestia
Manager, New York Real Time Optimization
TransCanada Power Marketing Ltd.

Subscribed and sworn to before me, a Notary Public in and for Suffolk County, New York, this 15th day of May, 2017.

Notary Public

My Commission expires:
Jan 31st 2019

FRANK M. DARIENZO
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 01DA6234872
Qualified in Suffolk County
Commission Expires Jan. 31, 2019