STATE OF CONNECTICUT

PUBLIC UTILITIES REGULATORY AUTHORITY
TEN FRANKLIN SQUARE
NEW BRITAIN, CT 06051

DOCKET NO. 18-05-04 PURA IMPLEMENTATION OF JUNE SPECIAL SESSION PUBLIC ACT 17-3

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September 18, 2019

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2ND INTERIM DECISION

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2nd INTERIM DECISION

I. INTRODUCTION

A. SUMMARY

In this Interim Decision, the Public Utilities Regulatory Authority approves ten-year power purchase agreements between Dominion Energy Nuclear Connecticut, Inc. and The Connecticut Light and Power Company, dba Eversource Energy and The United Illuminating Company, subject to the contract parties confirming their agreement with the meaning of certain provisions of these agreements as set forth below in this decision. Furthermore, the Interim Decision approves the request by The Connecticut Light and Power Company and The United Illuminating Company to seek recovery of prudently-incurred costs associated with these power purchase agreements.

B. BACKGROUND OF THE PROCEEDING

On May 8, 2018, the Public Utilities Regulatory Authority (PURA or Authority) initiated this proceeding pursuant to subsection (d) of Conn. Gen. Stat § 16a-3m for the purpose of (1) reviewing any petition(s) received from an eligible resource seeking a determination that the resource is at risk to retire and, subsequently, (2) evaluating any contract(s) that may result from a Department of Energy and Environmental Protection (DEEP) conducted procurement(s).

After conducting an RFP, the Commissioner of DEEP directed The United Illuminating Company (UI) and The Connecticut Light and Power Company dba Eversource Energy (CL&P); together with UI, the EDCs) to enter into contract negotiations with developers of the selected projects, including Dominion Energy Nuclear Connecticut, Inc. (Dominion or DENC), the owner of the Millstone Power Station, and to submit any such agreements to PURA for review and approval pursuant to § 16a-3m(e)(3).

On March 29, 2019, the EDCs jointly with Dominion submitted to PURA ten-year power purchase agreements (PPAs or Agreements) and sought approval of these PPAs and the recovery of costs associated with the PPAs.[1]

C. CONDUCT OF THE PROCEEDING

In addition to the information filed in the EDCs' joint petition to approve the PPAs, PURA received additional evidence in response to PURA's interrogatories and from witness testimony at noticed hearings held on June 20, 2019, and on July 1, 2019, and

[1] On May 31, 2019 and June 5, 2019, the EDCs submitted supplemental applications for approval of additional agreements with zero carbon generation units and a request to recover the costs associated therewith. Because the PPAs with Dominion were submitted more than two months prior to the supplemental applications, the record in this portion of the proceeding has been developed only as to the PPAs with Dominion and this Interim Decision addresses only the PPAs with Dominion. The May 31, 2019 and June 5, 2019 PPAs will be addressed in a later decision after the record has been developed regarding those PPAs.

through Late Filed Exhibits and a Late-Filed Exhibit hearing held on July 15, 2019. By a notice issued on July 17, 2019, docket Participants were invited to file Briefs and Reply Briefs. The Authority issued a Proposed 2nd Interim Decision on August 29, 2019, with the opportunity for written exceptions and oral argument.

D. PARTICIPANTS

The Authority recognized the following as Participants to this proceeding: Dominion Energy Nuclear Connecticut, 20 Church Street, Hartford, CT 06103; Connecticut Light and Power Company d/b/a Eversource Energy, 107 Selden Street, Berlin, CT 06037; The United Illuminating Company, 180 Marsh Hill Road, Orange, CT 06477; Office of Consumer Counsel, Ten Franklin Square, New Britain, CT 06051; the Commissioner of the Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106; and Connecticut Industrial Energy Consumers, 540 Broadway, Albany, NY 12201.[2]

E. PUBLIC COMMENT

The Authority received written comments dated June 5, 2019 from members of the Connecticut General Assembly, including: Representative Kathleen McCarty, Senator Paul Formica, Representative Holly Cheeseman, Representative Irene Haines, Representative Mike France, Senator Cathy Osten, Representative Emmett Riley, Representative Christine Conley, Representative Devin Carney, Representative Brian Lanoue, Representative Doug Dubitsky, Representative Anthony Nolan, Representative Kevin Ryan, Senator Heather Somers, Representative Joe De La Cruz, Representative Kate Rotella, and Representative Linda Orange (collectively, Southeastern Legislative Delegation). The Southeastern Legislative Delegation members indicated that, in light of the short-term economic challenges facing nuclear power stations throughout the country, Connecticut policy makers passed enabling legislation that allowed nuclear power stations to compete to provide zero-carbon energy directly to Connecticut's ratepayers. Written Comments, p. 1.

The Southeastern Legislative Delegation members highlighted the instant process to emphasize its thoroughness, which the Delegation summarized as follows: subsequent to the DEEP and PURA determination that it was necessary to conduct a solicitation, DEEP initiated a solicitation process and took the unprecedented measure to allow resources to apply for an "at risk" designation in the solicitation. DEEP selected a dozen bids from various resources, including Millstone's bid. DEEP, however, instructed the EDCs "to further negotiate the contract to ensure that it was favorable to ratepayers." Id., p. 2. Dominion and the EDCs came to an agreement in March before the retirement notification deadline for ISO New England's Forward Capacity Market. That contract was executed and filed with PURA on March 29. The following month, Governor Lamont highlighted Millstone's executed contract and the fact that it would guarantee Millstone's continued operations as one of the highlights of his first 100 days in office. His office played a critical role in ensuring that Dominion and the EDCs negotiated with one another by facilitating the process. The Southeastern Legislative Delegation members concluded

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[2] This list of Participants does not include the Participants that were added as a result of applications filed subsequent to the Dominion related PPAs.

ultimately the facilitation led to an agreement that is good for Connecticut's energy, environment and economic future by ensuring Millstone's continued operations. Id.

The Southeastern Legislative Delegation indicated it has every confidence that this contract not only meets the requirements in the legislation, but that it exceeds them, and urged the Authority to complete a thorough but expeditious review of the contract culminating in its approval. Id.

II. LEGAL/STATUTORY REQUIREMENTS

Conn. Gen. Stat. § 16a-3m(e)(3) states that:

> Any agreement entered into pursuant to subdivision (2) of this subsection shall be subject to review and approval by the Public Utilities Regulatory Authority. The electric distribution company shall file an application for the approval of any such agreement with the authority. The authority's review shall commence upon the filing of the signed power purchase agreement with the authority. The authority shall approve agreements that it determines (A) provide for the delivery of adequate and reliable products and services, for which there is a clear public need, at a just and reasonable price, (B) are prudent and cost effective, and (C) that the respondent to the solicitation has the technical, financial and managerial capabilities to perform pursuant to such agreement. The authority shall issue a decision not later than one hundred eighty days after such filing. If the authority does not issue a decision within one hundred eighty days after such filing, the agreement shall be deemed approved. The net costs of any such agreement, including costs incurred by the electric distribution company under the agreement and reasonable costs incurred by the electric distribution company in connection with the agreement, shall be recovered on a timely basis through a nonbypassable fully reconciling component of electric rates for all customers of the electric distribution company. Any net revenues from the sale of products purchased in accordance with long-term contracts entered into pursuant to this section shall be credited to customers through the same nonbypassable fully reconciling rate component for all customers of the contracting electric distribution company.

The above statute forms the requirements that guide the Authority's review of the PPAs and the findings that it must make, as reflected in the Authority's analysis detailed below.

III. POSITIONS OF PARTICIPANTS

A. OFFICE OF CONSUMER COUNSEL

The Office of Consumer Counsel (OCC) supports approval of the PPAs, citing evidence in the record that DENC provides adequate and necessary services through the Millstone plant while maintaining a lengthy record of reliable operation. OCC Brief, p. 11 and 12. The OCC credits DENC's testimony that Millstone is a large and dependable asset on Connecticut's electric grid that produces an annual average of 16.5 million MWh

based on a consistent capacity factor above 90 percent. Id. The OCC agrees with the DENC testimony that the latter has established a strong 18-year history of reliable and safe operations of both Millstone units, while the plant's retirement would lead to an increase of approximately $300 million in total energy and capacity costs. Id. Further, the OCC contends that without Millstone, the region could experience major rolling blackouts during an extended cold snap. Id.

The OCC also contends that while the actual PPAs price remains confidential, based on DEEP's directive, the EDCs negotiated with DENC to achieve a reasonable 12 to 15 percent return on equity (ROE) using a cost-of-service model. OCC brief, pp. 12 and 13. Although the OCC acknowledges that the estimated 12 to 15 percent ROE is higher than the expected ROE for a Connecticut regulated utility, it contends that the range remains reasonable because some of the financial and operational risk remains with DENC. Id. Moreover, the OCC states that based on DEEP testimonies, the incremental ratepayer cost of the PPAs as compared to DENC's original bid was reduced by nearly 50 percent, and that the Agreements would result in a net benefit of more than $2 billion to ratepayers during the ten-year term. Id. Thus, the OCC concludes that the price agreed to in the PPAs is a sound investment for ratepayers based on the evidence in the record and given the acknowledged risk of a Millstone retirement. Id.

Lastly, the OCC argues that the requirement of Conn. Gen. Stat. §16a-3m(e)(3)(B), which states that the contract must be prudent and cost-effective, is substantiated by record evidence. The OCC cites DEEP's testimony that the PPAs between DENC and the EDCs have a projected 1.49 : 1 benefit/cost ratio for customers. The OCC concurs with DENC's Response to Interrogatory EL-68, which indicates that the PPAs meet the requirements of Conn. Gen. Stat. §16a-3m(e)(3)(C) (requiring that the bidder has the technical, financial, and managerial capabilities to perform such an agreement). Id.

B. CIEC

The Connecticut Industrial Energy Consumers (CIEC) is opposed to the PPAs. As a threshold matter, CIEC submits that using customers as the economic backstop for troubled generation facilities has no upside for customers. CIEC Brief, p. 6. CIEC stated it might agree that retaining selected nuclear generating facilities through temporary and limited subsidies is worthwhile; however, that is not the case with Millstone. Id., p. 7.

CIEC also argues that the PPAs' cost information and DEEP's analysis supporting the contracts with the EDCs should have been made available to ratepayers. Id. CIEC contends that the limited public information available and facts gathered during the evidentiary hearing do not support moving forward with the contracts. Id., p. 8. Also, CIEC claims that DEEP indicated during the proceeding that DENC has the financial ability to keep the Millstone facility operating but would not do so without the proposed out-of-market contracts, thus suggesting that the contacts are not in the best interests of ratepayers. Id., p. 10. Further, CIEC asserts that there are no supporting analyses for the 12 to 15 percent ROE range that DEEP directed the EDCs to adopt, nor was any review performed of the historical ROEs of other nuclear facilities that entered into out-of-market contracts for subsidization. Id. Thus, CIEC concludes that the outcome of the PPAs, especially regarding the products and cost, was pre-determined by DEEP. Id., p. 11.

CIEC argues for the Authority to reduce the allowed ROE to align with the reduction in market risks that the output from Millstone facilities will experience due to the proposed PPAs. According to CIEC, the EDCs' expert witness indicated that the PPAs provide DENC with "a fixed price hedged in effect for ten years for more than half of the plant's consolidated output thereby providing Dominion with enhanced operating revenues relative to what would otherwise be experienced if all Millstone output were merchandised." CIEC concludes the proposed ROE of 14% is unreasonable and violates the statutory requirements that the PPAs have just and reasonable prices and are prudent and cost effective. Id., p. 12.

CIEC asserts that the ratepayer cost impact analyses performed by DEEP did not account for unknown incremental costs associated with the PPAs and there was no analysis performed comparing current market prices of energy to future energy prices. Id. CIEC concludes that because the EDCs have the statutory ability to collect costs from ratepayers on "an unlimited basis," the proposed PPAs could potentially cost ratepayers substantial amounts over time. Id., p. 13. Furthermore, CIEC claims DEEP did not disclose any analysis performed to show the percentage by which ratepayers' bills will increase due to the proposed PPAs. Specifically, CIEC claims that DEEP did not perform any analysis of the effect of the proposed PPAs on Connecticut's commercial and industrial customers, primarily, CIEC members. Id., pp. 13 and 17

CIEC states that the conclusion drawn from the only publicly made available cost impact analysis by DEEP is "flawed" because the analysis included "subject externalities" and double counted some qualitative factors. CIEC Brief, p. 16. According to CIEC, DEEP only argued that the above market priced PPAs are in ratepayers' best interests because of the predicted impact on energy and capacity prices that could result from a potential retirement of Millstone nuclear facilities and the impact it would have on the markets. However, CIEC states, DEEP failed to publicly disclosed any analysis "if the status quo remains" (i.e., the facilities do not retire). Id., pp. 13 and 17. Additionally, CIEC asserts that the impact analysis is inconsistent as DEEP did not consistently include the impact of capacity markets in its determinations. Id., p. 14.

1. PPAs Do Not Appear to Reduce Carbon Emissions

CIEC states that, based on the EDCs' testimony that they will sell 100 percent of the GIS certificates associated with the environmental attributes to be purchased under the proposed PPAs, it is not clear how those environmental attributes will be factored into meeting Connecticut's goals under the Global Warming Solutions Act (GWSA). According to CIEC, DEEP's testimony does not support how it will conduct its GHG inventory as a result of the proposed PPAs. CIEC Brief, pp. 18 and 19. CIEC claims that there is a potential for double counting because the EDCs, under the PPAs' terms, have the exclusive right to resell the environmental attributes that Connecticut already counted towards achievement of its carbon reduction targets. Id. Additionally, CIEC asserts that based on the way the Regional Greenhouse Gas Initiative (RGGI) is currently implemented, the proposed PPAs may not result in any net reductions in GHG emissions. Id., pp. 19 and 20. According to CIEC, unless emission reductions in Connecticut incrementally related to the proposed PPAs result in the permanent retirement of the associated RGGI allowances, the proposed PPAs would result in a zero or an immaterial

amount of net emission reductions because any reductions achieved in Connecticut would increase the allowances available to other RGGI states. Id. As a result, CIEC requests that DEEP, at a minimum, should submit a clear and articulable plan on how the proposed PPAs will be used over the ten-year term to "meet the State's carbon reduction policies, and how the accounting for those policies will be carried out." Id.

2. Market Issues Should be Addressed by ISO-NE and FERC

CIEC argues that the Millstone generating facility serves all customers in the ISO-NE wholesale markets but only Connecticut ratepayers are being asked to subsidize the continued operation of the nuclear facilities. CIEC Brief, pp. 20 and 21. If ISO-NE determines that there is "an urgent reliability need," it can petition the Federal Energy Regulatory Commission (FERC) for a Reliability-Must-Run (RMR) contract that would be subsidized by all customers in the regional in order to maintain system reliability. Id.

CIEC alleges that the proposed PPAs do not include any impact for the pending changes in the ISO-NE markets for efforts to ensure fuel security. CIEC Brief, pp. 21 and 22. According to CIEC, on August 31, 2018, ISO-NE filed with FERC, in Docket No. ER18-2364, tariff sheets to implement a short-term, cost-of-service agreement to address fuel security concerns. According to CIEC, if the changes proposed in ISO-NE's August 31 filing with FERC are implemented, they would allow the costs of retaining Millstone to be socialized in the broader New England region. Id. CIEC asserts that the proposed PPAs do not include provisions addressing if these future changes are implemented, nor provide the EDCs the ability to terminate the proposed PPAs if subsequent market rule changes provide financial relief to Millstone. Id.

3. Mitigation Measures Should be Implemented

CIEC suggests that the Authority should inform ratepayers of the impacts of the PPAs by including a line item on customer bills for the monthly charge associated with the Millstone's and other long-term contracts. CEIC Brief, p. 22. Also, CIEC recommends that the Authority place a cap on the total indirect costs recoverable by the EDC for administering the PPAs and that the allowed administrative costs be subject to stakeholders' review and comment. Id., 23. Moreover, CIEC contends that the PPAs are inequitably one-sided because DENC has the ability to terminate the Agreements due to changes in the FCM rules but the EDCs do not have a similar right to end the Agreements. Id. Finally, CIEC proposes that the PPAs duration should be reduced to remove those years for which DENC already has a CSO with ISO-NE. Id., p. 24. According to CIEC, ratepayers should not subsidize the Millstone facility during the period it was required to operate. Id.

C. DEEP

As a threshold matter, DEEP agrees with the Authority's previous conclusion in the December 5, 2018 At-Risk Decision that 2,200 MW of zero emission generation from Millstone facilities is important to the region's electric grid with respect to fuel diversity, energy security and grid reliability. DEEP Brief, p. 15. As such, DEEP agrees that Millstone is an essential resource providing adequate and reliable products and services,

for which there is a clear public need; thus, DEEP advocates for approval of the PPAs. Id.

In support of its position, DEEP states that the expected ROE of approximately 14 percent, which DENC will receive under the final contract price, is reasonable. DEEP contends that the expected ROE is further supported by a significant reduction in the contract price achieved through negotiations with the parties, which lowered the above market costs of the contract by 50 percent thereby saving ratepayers several hundred million dollars over the life of these contracts. Id. Further, DEEP indicates that the PPAs cover approximately 50 percent of Millstone's output and do not compensate DENC in the event of extended and unplanned outages, nor is DENC's exposure to market energy prices and unexpected outages eliminated. Id.

DEEP argues the final contracts negotiated by the EDCs and DENC will allow Connecticut ratepayers to avoid costs of approximately $2 billion dollars over the ten-year contract term. DEEP Brief, p. 18. Additionally, as indicated in the February 1, 2018 Joint Determination, DEEP reiterates that it would cost the State's ratepayers an estimated $1.8 billion (2017 dollars) in order to replace 25 percent of Millstone's 2,200 MW of zero emission generation, and even with that investment, the regional emissions would increase by 20 percent. Id. Because replacing 100 percent of Millstone's output with zero carbon resources would cost Connecticut ratepayers an estimated $5.5 billion, DEEP concludes that the prudency and cost effectiveness of the contracts is clear. Id.

DEEP concludes that DENC has the technical, financial and managerial capabilities to perform pursuant to the contracts given DENC's successful operation of Millstone since purchasing the power station in 2000 as well as DENC's record of investing more than $1 billion into the plant. DEEP Brief, p. 18. Moreover, DEEP has no information to indicate that DENC will not maintain the same level of success and investment over the life of the contracts. Id. While DEEP acknowledges the previous finding that Millstone is an at-risk existing facility, DEEP contends that such determination has no bearing on DENC's prospective financial capability to operate the plant given that the at-risk determination focused on whether the expected return on investment was sufficient to justify DENC's continued investment in Millstone. Id., p. 19.

D. Dominion

DENC asserts that the Authority should approve the proposed PPAs without any change or modification. DENC Brief, p. 6. DENC claims that the Millstone PPAs will deliver adequate and reliable products and services for which there is a clear public need. The Millstone facilities are nuclear power plants, which operate as baseload units running continuously on a daily basis, and have high capacity factors and rigid operational characteristics. Id., p. 2. DENC maintains that Millstone, as the single largest provider of zero carbon generation in New England, accounts for 95 percent of Connecticut's zero carbon generation and 16 percent of the region's total electricity. Id., pp. 20 and 3. DENC relies on DEEP's and PURA's previous determination that the retirement of Millstone would increase costs to ratepayers and result in an increase of GHG emissions. Id.

DENC argues that the Millstone PPAs are also just and reasonably priced, as well as prudent and cost effective when compared to other previously approved contracts for

zero carbon resources, such as the renewable energy PPAs and the LREC/ZREC program. Id., p. 3. DENC indicates that the cost-effectiveness of the Millstone PPAs is also apparent when compared with offshore wind projects and existing generation projects procured by New Jersey, Massachusetts and Rhode Island. Id. DENC claims that, based on these other competitive procurements, the PPA price for the Millstone output is reasonable, prudent and cost effective. Id. DENC further suggests that the Authority also consider "just and reasonable" as a zone, rather than a fixed point, because courts have considered rate orders within a "zone of reasonableness," as neither "less than compensatory" nor "excessive." Id.

DENC asserts that while the Millstone PPAs provide some security to DENC for the next 10 years, a significant portion of the plant remains exposed to foreseeable and unforeseeable market and operational risks. Id., pp. 5 and 6. DENC cites DEEP's testimony that the contract does not alleviate full risk because it only procures about 50 percent of Millstone's power output, as well as DEEP's position that a 12 to 15 percent ROE is reasonable for a plant such as Millstone. Id. DENC concludes that given the remaining considerable risk factors, and considering that the PPAs' price falls within a zone of reasonableness, the Authority should find the proposed PPAs to be just and reasonable. Id.

Lastly, DENC maintains that it has the managerial, technical and financial capability to execute its obligations under the PPAs. Id., p. 6. To support its contention, DENC cites its operation of Millstone dating back to 2001 as occurring in a safe, reliable and effective manner, and further points to the nonexistence of record evidence to the contrary. Id. Therefore, DENC states that the Millstone PPAs meet the criteria laid out in Conn. Gen. Stat. § 16a-3m(e)(3), and should be approved by the Authority. Id.

E. EDCs

The EDCs state that DEEP's directives outlined in the DEEP Selection Notice were designed to result in a contract that meets the standard for the Authority's approval, as required by Conn. Gen. Stat. §16a-3m. Thus, the EDCs support a conclusion that the proposed PPAs provide for the delivery of adequate and reliable products and services, for which there is a clear public need, at a just and reasonable price, and are prudent and cost effective. EDCs Joint Brief, pp. 13 and 14. Because DENC has operated the Millstone plant for nearly two decades, the EDCs argue there is sufficient evidence for the Authority to conclude that DENC has the ability to operate the plant and deliver the associated benefits for the term of the proposed PPAs. Id.

IV. AUTHORITY ANALYSIS

A. Requirements of CGS Section 16a – 3m(e)(3)(A)

Conn. Gen. Conn. Gen. Stat. § 16a-3m(e)(3)(A) requires the purchase power agreements (Agreements) between DENC and the EDCs to "provide for the delivery of adequate and reliable products and services, for which there is a clear public need, at a just and reasonable price." This standard has three elements to it: 1) the delivery of adequate and reliable products and services; 2) for which there is a clear public need; and 3) at a just and reasonable price. The Authority will address each in turn below.

1. Delivery of Adequate and Reliable Products and Services

The first element of Conn. Gen. Stat. § 16a-3m(e)(3)(A) hinges on *adequacy*, or the sufficiency of the amount contracted for under the Agreements, and on *reliability*, or the product delivery dependability that can be expected under the Agreements. In order to determine the adequacy of the amount under contract (*i.e.* 9,000,000 MWh/year over ten years), it is necessary to ascertain the objectives of the Agreements and to understand whether the contracted amount enables those objectives to be met.

In the DEEP RFP, DEEP specified that the objectives of the Agreements consisted of securing cost-effective zero carbon resources consistent with the State's GHG emission reduction goals and other energy and environmental goals and policies. DEEP RFP, p. 1. Since the Millstone Units were determined to be an at-risk resource for purposes of the RFP and because the retirement of those units would have significant negative impacts on not only Connecticut's ability to meet its GHG emissions reduction goals, but also on the region's electric grid with respect to fuel diversity, energy security and grid reliability, a parallel and perhaps superseding objective of the Agreements is to secure the continued operation of the units. Tr., 6/20/19, pp. 155, 156,160 and 161.

DENC is committed to the continued operation of the Millstone units under the Agreements thus evidencing the adequacy of the amount under contract. The adequacy of the amount is further demonstrated in that the Agreements entitle Connecticut to 100 percent of the environmental attributes from operation of the units. Tr.,6/20/19, p. 156. The retention of the Millstone units avoids over 36 million tons of carbon as compared to a reference case where units are not operating beginning in 2023. DEEP Response to Interrogatory EL-63, Exhibit A, pp. 10, 16 and 17. The ongoing reduction in carbon related to the operation of the units goes a long way towards meeting Connecticut's GHG emission reduction goals. For these reasons, the Authority finds that the amount of electricity output under contract is adequate to help meet both Connecticut's winter electric system reliability demands and GHG emission reduction standards.

With regard to reliable operation of the power plant, the Authority relies on DENC's successful track record with respect to the Millstone units, which spans almost two decades. Between 2008 and 2017, this operation has produced an average of 16.5 million MWh of energy per year, with a capacity factor consistently above 90 percent inclusive of planned outages for the past three years. DENC Response to Interrogatory EL-67. DENC has invested more than $390 million into the plant since 2013 and established a strong 18-year history of reliable and safe operations at both Millstone Units since 2001. DENC Response to Interrogatory EL-68. Given this track record, the Authority concludes that the products and services under contract will be reliably provided over the term of the Agreements.

2. Clear Public Need

The second element of the applicable standard hinges on need, or the degree to which the Agreements provide something that is essential. The Authority finds that the emissions-free energy output of the units purchased through the PPAs is needed to

maintain electric system winter reliability and to achieve compliance with State GHG emission reduction standards. February 1, 2018 Joint Determination, pp. 2, 39 and 40.

In terms of compliance needs with respect to GHG emission reduction standards, the PPAs allow Connecticut to meet its carbon dioxide emissions standard compliance requirements and further the legislative intent of the GWSA. DEEP Brief, pp. 13-14; OCC Brief, p. 9. Further, the record evidence reflects that Connecticut may not be able to comply with prescribed emission standards if the Millstone units retire because it would result in an "increase [of] carbon dioxide emissions for the entire New England electric sector by 80 million short tons, or 25 percent." Id., p. 3. The Joint Determination also found that replacing 25 percent of Millstone's 2,200 MW with zero carbon generation, such as hydropower, energy storage, demand reduction, wind, and solar, after Millstone's retirement would increase regional emissions by 20 percent and cost an estimated $1.8 billion (2017 dollars) in new resource deployment. Id.

In terms of fuel security needs and benefits, the Joint Determination cites the New England grid operator, ISO New England, Inc.'s (ISO NE), Operational Fuel-Security Analysis, released on January 17, 2018 (Fuel Security Study), which evaluated the level of operational risk posed to the electric power system by a variety of potential fuel-mix scenarios. Among the various hypothetical outcomes analyzed, ISO NE modeled the loss of the Millstone nuclear units for an entire winter under different resource mix scenarios. The Fuel Security Study showed that no level of LNG, oil, imports, and renewables would avoid load shedding in New England if the Millstone nuclear units were out of operation for a prolonged period of time during the winter. Fuel Security Study, pp. 42, 43-45.[3] Simply put, "the loss of the Millstone Station – even for a single season – would result in persistent energy shortages that would require frequent and long periods of rolling blackouts." Joint Determination, p. 31. In short, the continued operation of the Millstone units is essential to maintain continued reliable operation of the electric grid in Connecticut and New England.

Based on the foregoing analysis, the Authority finds that the proposed PPAs meet a clear public need uniquely served by the Millstone nuclear units in regard to maintaining regional fuel security, diversity and electric grid reliability, particularly during the winter, and with respect to compliance requirements associated with carbon dioxide emission reduction standards. As such, the Authority concludes that the proposed PPAs are in clear alignment with the State's GWSA goals.

3. At a Just and Reasonable Price

The third element of the applicable legal standard references the price charged for the products and services under the Agreements and whether that price is just and reasonable. Because the Millstone units were found to be an at-risk existing resource, the just and reasonable price benchmark is necessarily uniquely applied to this scenario. Unlike other resources that are either not at-risk or not currently operational, the Millstone units do not have comparably situated resources that can be used to determine the just and reasonable benchmark. This is because of two factors that cut in opposing directions:

[3] https://www.iso-ne.com/static-assets/documents/2018/01/20180117_operational_fuel-security_analysis.pdf.

(1) the at-risk designation means that Millstone's energy output-related attributes, including carbon-free, cannot be taken for granted and assumed to be included in their energy only bid; and (2) Millstone's current status as an existing, operational resource means that many of its construction costs are already incurred and thus depreciated or sunk, giving the units a significant cost advantage over new resources. As such, an at-risk existing resource can undercut all other resources by virtue of its energy output-related attributes or lesser cost structure. Tr., 6/20/19, pp. 163 and 164.[4]

Given the uniqueness of the just and reasonable benchmark with regard to at-risk, existing resources generally, and the Millstone units specifically, DEEP required as part of its RFP that such resources include with their bids, "a cost of service model and all supporting documentation for the proposed PPA term that supports the proposed per MWh price." DEEP RFP, Section 2.3.1. Using a cost-based model as a just and reasonable benchmark in this case is rational because it allows the existing resource confirmed at-risk to bid above the market price of energy in recognition of its energy output-related attributes, yet prevents the same resource from unjustly profiting by virtue of its different cost structure. DEEP further sought to enforce the cost-of-service benchmark on the Millstone units by directing the EDCs to enter into negotiations with DENC for a contract with the units at a price consistent with its cost of service, which DEEP defined as producing an estimated 12 to 15 percent ROE. DEEP Selection Letter, dated Dec. 28, 2018. In pursuing its negotiations with DENC, the EDCs retained the services of Levitan & Associates (Levitan) to perform technical and financial modeling to ensure that the DEEP directives were met, including the profit level associated with the Millstone units under the Agreements. Tr., 7/1/19, pp. 350-352 and 356.

In order to ensure that the DEEP directives were satisfied and that the price awarded to the Millstone units under the Agreements is cost-justified, Levitan modeled the expected costs, revenues and investments in the units over the period of the Agreements. Tr., 7/1/19, pp. 359-360 and 372-376. In determining the appropriate costs, revenues and investments to use in its modeling, Levitan tested the numbers provided by DENC for reasonableness based on their expertise and experience, and given historical operations and current and expected market conditions. Levitan independently concluded that the Millstone units could be expected to earn less than 15 percent on the average net investment in the units over the period of the Agreements. Tr., 7/1/19, pp. 350-352, 363 and 364.

Two parts of the aforementioned conclusion deserve particular attention: (1) the level of net investment used in Levitan's analysis; and (2) the reasonableness of the Millstone units' expected earnings over the period of the Agreements. With regard to the net investment used in its analysis, Levitan stated that using the historical and going forward net investment, or the net book value, is an appropriate way to value the Millstone enterprise and to calculate its return on equity. Tr., 7/1/19, pp. 356-360. In its Interim

[4] By contrast, an existing resource that is not at-risk is comparably situated with all the other existing not at-risk resources and competes in the attribute-indifferent wholesale market. Such a resource does not have an energy output-related attribute advantage and the wholesale market clearing price sets the just and reasonable benchmark. Likewise, a new resource that can meaningfully offer attributes separate from the energy only bid, is comparably situated with all the other new resources offering equivalent attributes. Such a resource does not have a significant cost structure advantage and the RFP winning bid or bids sets the just and reasonable benchmark.

Decision dated December 5, 2018 in this proceeding, the Authority primarily used going forward capital expenditures as the basis for determining the net investment, but recognized that tax benefits and market value from the Millstone site, including materials and supplies, related to the historical net investment and needed to be taken into account. December 5, 2018 Decision, pp. 23, 24 and 26. On balance, the Authority believes that Levitan's approach to net investment can contribute to a reasonable cost-based benchmark for the Millstone units.

While Levitan did not explicitly test the reasonableness under the Agreements of the 12 to 15 percent ROE range found appropriate by DEEP, Levitan did review the allocation of risks under the Agreements and qualitatively compared these risks to the risks of a merchant plant. Tr., 7/1/19, pp. 352-355. Based on this comparison, Levitan found the risks as they related to market price variations significantly reduced, but relatively unchanged as they relate to operational costs and performance. Levitan was not prepared to speculate on how the risk differential would translate in basis points of required return. Tr., 7/1/19, p. 355. Levitan also asserted that the Agreements did not amount to a strict cost of service type arrangement since certain risks are retained by DENC under the Agreements that are not faced by a utility under cost of service regulation. Tr., 7/1/19, p. 353. Indeed, DENC continues to carry significant risk under the Agreements with regard to unplanned expenditures over time, and outages. In addition, the Agreements only apply to approximately 50% of the output of the units, meaning that a large portion of the units still carry all the risks and return requirements of a merchant plant. Tr., 6/20/19, pp. 47 and 48.

In order to determine an appropriate profit level to use as a reasonable cost-based benchmark for the Millstone units, several required return levels must be considered. In its Interim Decision dated December 5, 2018 in this proceeding, the Authority found that the market-required return on equity under a merchant operation scenario is likely to be at least 15 percent. December 5, 2018 Decision, pp. 24 and 25. For Connecticut utilities under cost of service regulation, the Authority recently found equity returns in the 9 to 10 percent range to be appropriate. The latest equity returns allowed for the EDCs are 9.25 percent for CL&P (Decision dated April 18, 2018 in Docket No. 17-10-46) and 9.10 percent for UI (Decision dated December 14, 2016 in Docket No. 16-06-04). These equity cost data points suggest that the cost under the Agreements is likely to be in the 10 to 15 percent range (*i.e.* greater than a utility under cost of service regulation and less than a merchant plant). Combining this cost level with the greater than 15 percent cost level associated with the portion of the Millstone units' output not under the Agreements results in a cost level in the 12 to 15 percent range for the entirety of the units. Since the expected profitability of the Millstone units under the Agreements is within this range, the Authority finds the price under the Agreements to be just and reasonable.

As with any forecast of profitability, the conclusions will vary if the underlying expectations change. One of the significant unknowns with regard to Millstone's revenues is the degree to which ISO NE will prospectively implement additional revenue sources for generating units, such as the Millstone units, that provide energy or fuel security benefits. Since these revenues are not assumed in Levitan's modeling, they have the potential to move the pricing in the Agreements from reasonable to unreasonable, if such additional revenues are retained by DENC. For this reason, the inclusion of contract clauses contemplating the treatment of "New Revenue Sources",

Section 19.8, and dispute resolution processes, Section 11.1, are important to the reasonableness of the pricing under the proposed PPAs.

ISO NE is currently developing Energy Security Improvements (ESI) to provide long-term market solutions to the region's energy security challenges, particularly in the winter months. It is unclear as to which form the ESI(s) will take as ISO NE's ESI proposals have yet to be fully developed or approved by FERC. It is likely, however, given the stated intent of the ESI is to improve the region's energy, and fuel, security challenges, that the ESI will provide additional financial compensation to generators that deliver energy and fuel security benefits. As discussed in Section IV.A.2, Clear Public Need, of this Decision, Millstone provides significant winter fuel security benefits to the region. Thus, Millstone is likely to financially benefit from ISO NE's final ESI market design. As such, it is essential to ratepayers to include any future revenues from ISO NE's ESI as part of the proposed PPAs.

The Authority finds the inclusion of "New Revenue Sources" as defined in the proposed PPAs and discussed in Section 19.8 of said PPAs to be appropriate given the stipulations discussed below in Section IV.D.1, Sections 1 and 19.8, New Revenue Source Definition and Determination.

The dispute resolution process outlined in Sections 11.1(a) and 11.1(b) of the proposed PPAs are important to ensuring that ratepayers, through the EDCs, do not overpay for these Contracts while also accruing the full benefits contemplated by the Agreements. Section 11.1(a) is of particular importance as the form of any "New Revenue Source", particularly any penalty structure, is currently undefined. As discussed at the Late File Hearing, Parties may disagree over the calculation of the net benefits or penalties of a "New Revenue Source," highlighting the importance and necessity of a clearly-defined dispute resolution process.

The Authority finds the proposed PPAs to be just and reasonably priced, given the stipulations discussed later in this Decision, due in part to the above mentioned contract clauses, which safeguard the expected reasonableness of the proposed PPAs.

B. Requirements of CGS Section 16a – 3m(e)(3)(B)

Conn. Gen. Conn. Gen. Stat. § 16a-3m(e)(3)(B) requires the Authority to approve only agreements that it finds are prudent and cost effective.

DEEP presented on June 20, 2019 that the proposed PPA "is expected to result in Connecticut ratepayers avoiding more than $2 billion dollars over the ten-year contract term." Late File Exhibit 8, p. 15. The referenced $2 billion in ratepayer savings constitutes the net present value of dispatch modelling, which: (1) compared forecasted energy and capacity prices without Millstone with forecasted energy and capacity prices with Millstone over the contract horizon; (2) applied a social cost of carbon reduced by the Regional Greenhouse Gas Initiative (RGGI) allowance price to the avoided carbon emissions; and (3) subtracted any portion of the proposed PPA price forecasted as above market over that same period. In short, DEEP calculated the wholesale energy and capacity market savings, as well as the avoided social cost of carbon, of retaining Millstone while taking into account how the proposed contract may increase electric rates in the State. This

analysis does not include the cost to procure new resources if Millstone retires in order to meet the State's GWSA goals. The Authority and DEEP performed an analysis of the additional cost of procuring resources to meet the GWSA should Millstone retire in the previous Joint Determination, as discussed in Section IV.A.2, Clear Public Need, in this Decision, and found that the total cost to ratepayers of replacing Millstone would be upwards of $5.5 billion (2017 dollars) depending on the resource mix used.

The Authority finds the proposed PPAs to be prudent and cost effective based on the ratepayer savings demonstrated in the modeling preformed for the Joint Determination and DEEP's analysis of the proposed PPAs detailed in EL-74 and LFE-16. Ultimately, the Authority finds the proposed PPAs to be prudent and cost effective as any increase in Connecticut's retail electric rates due to the proposed PPAs over the contract period are significantly lower than the increase in retail electric rates that would occur should Millstone retire, the risk of which was established in the Interim Decision in this Docket.

C. REQUIREMENTS OF CGS SECTION 16A – 3M(E)(3)(C)

Conn. Gen. Conn. Gen. Stat. § 16a-3m(e)(3)(C) requires the Authority to determine that the applicant has the technical, financial and managerial capabilities to perform pursuant to the PPA. The Authority will address each requirement in turn below.

1. Technical Capability

Millstone Power Station is located in Waterford, Connecticut, and currently consists of two pressurized water nuclear reactors. Millstone Unit 2 is an 882 megawatt (MW) combustion engineering reactor that began operation in 1975. Millstone Unit 3 is a Westinghouse 1230 MW rated pressurized water reactor that began operation in 1986. Id. DENC purchased the Millstone nuclear facilities in 2001 and testified that it has established a strong 18-year history of reliable and safe operations of both units. DENC's Response to Interrogatory EL-6. According to DENC, for the eleven years (1990 to 2000) prior to the purchase of these nuclear generating units by Dominion, the average annual output of the then three-unit station was 13.2 million MWh per year. However, in the ten years between 2008 and 2017, output from the two remaining units averaged 16.5 million MWh per year, or an increase of 25 percent for the whole station. Moreover, DENC states that the capacity factor for both units has consistently been above 90 percent for the past 3 years, including forced, maintenance and refueling outages. Id.

The technical capability of DENC to efficiently, effectively and safely operate the Millstone nuclear facilities was not a subject of argument in this proceeding. According to UI, DENC has successfully operated the Millstone plant for nearly two decades and there is sufficient evidence to conclude DENC has the ability to operate the plant and deliver the associated benefits for the term of the PPAs. UI's Response to Interrogatory EL-68. Similarly, the General Assembly's Energy and Technology Committee (E&T) states that Dominion is a "premier operator of nuclear power stations" and has the technical, financial and managerial capabilities to perform under the proposed PPAs. E&T Written Comments, p. 2. The EDCs' witness contends that Millstone is a baseload resource that operates throughout the year with an enviable record of performance. Tr., 07/01/19, p. 362.

2. Financial Capability

During the proceeding for the Interim Decision dated December 5, 2018, the Authority reviewed annual financial reports, including Form 10-Ks, that DENC's ultimate parent, Dominion Energy, Inc. (Dominion) filed with the United States Securities and Exchange Commission (SEC) for calendar years ended 2013 through 2017. Based on that review, the Authority finds that Dominion has the financial capability to continue to invest in the Millstone facilities or decide to allocate such investment capital or resources to other operations to generate better returns on investment. See, Interim Decision, pp. 8 and 11. Also, in its Form 10-Q for the quarter ended March 31, 2019 (Form 10-Q 1Q19) filed with the SEC, Dominion reported consolidated total assets of approximately $100 billion and net total property plant and equipment of approximately $66.6 billion.[5]

According to the EDCs' expert witness, DENC retains "substantial" economic benefits under the proposed PPAs because it has a "fixed price hedge[d]" for ten years for more than half of the nuclear facilities' total output. This will provide DENC with better operating revenues than if all of Millstone's outputs are treated as merchant power generation. Thus, the EDCs' expert witness concludes that the proposed PPAs "materially" reduce the Millstone facilities' market risk when compared to a pure merchant generator that is exposed to ISO-NE's day ahead energy and capacity markets. Tr., 07/01/19, pp. 351-354. Moreover, while affirming DENC's position that Dominion does not issue debt nor raise investment capital on a project or company specific basis; the EDCs' expert witness maintains that the value of the proposed fixed price contract takes away a sizeable amount of market risk such that Dominion could facilitate recourse or nonrecourse financing for the Millstone facility. Tr., 07/01/19, pp. 355 and 356. Therefore, the EDCs' expert witness agrees that the proposed PPAs modify the financial capability of DENC to run the Millstone nuclear facilities. Id., p. 361.

DEEP states that DENC has invested more than $1 billion in the Millstone nuclear units since Dominion purchased the power station. DEEP-BETP Brief, pp. 18 and 19. DEEP declares there is no evidence that would indicate that DENC will not maintain the same level of investment over the life of the proposed PPAs. Id. DEEP clarifies that the finding in the Interim At-Risk Decision in the instant docket, which confirmed that Millstone is an at-risk, existing facility, did not implicitly or explicitly state that DENC lacks the financial capability to operate the plant. According to DEEP, the at-risk determination focused on whether the expected return on DENC's investment was sufficient to justify Dominion's continued investment of capital into Millstone. Id.

3. Managerial Capability

DENC states that its parent company, Dominion, is one of the nation's largest producers and transporters of energy. DENC Response to Interrogatory EL-68. Dominion's subsidiaries include owners of merchant electric generation, vertically integrated electric utilities, natural gas pipeline companies and natural gas distribution companies. Dominion's electric portfolio consists of approximately 31,000 MW of power generation, 10,200 miles of electric transmission, and 84,000 miles of electric distribution.

[5] https://www.sec.gov/Archives/edgar/data/103682/000156459019015583/d-10q_20190331.htm

Dominion's gas portfolio includes 15,900 miles of natural gas transmission pipeline, 92,900 miles of natural gas distribution pipeline, 1.1 Tcf of natural gas storage capacity and an LNG-export facility. Id. Virginia Electric and Power Company, doing business as Dominion Energy Virginia, operates two nuclear generating stations in Virginia. Id.

DENC asserts that it has consistently improved Millstone's performance since acquiring the station in 2001, and plans to continue to safely, reliably and efficiently operate the station under the PPAs. Id. Also, DENC claims it has historically invested in the operations of Millstone units, including a Dominion investment of over $390 million, at an average rate of $78 million per year in capital improvements at Millstone since 2013. Id. DENC states that during that five-year period, Millstone placed in-service over 700 unique capital projects that included switchyard transformer replacements, circulating water pumps, feedwater heaters, upgrades to the site's security structures, NRC required equipment for the beyond design basis program, and numerous maintenance projects. Id. Likewise, DENC indicates both it and Dominion Energy Generation Marketing, Inc. (DEGMI), the marketing affiliate responsible for Millstone, have extensive experience in the ISO-NE markets. DENC states that DEGM is an active participant in the NEPOOL stakeholder process and the lead market participant for Millstone since Dominion purchased the station in 2001. Id.

DENC indicates that there is no evidence in the record, and further that no participant claimed, it lacks managerial and technical capabilities to "safely, reliably, and effectively" operate the Millstone nuclear units. DENC Brief, p. 6. The OCC agrees that DENC has effectively operated the Millstone units over the long-term and supports a finding that DENC has met the statutory requirements of technical, financial and managerial competence to continue to operate the nuclear units. OCC Brief, p, 13.

Based on the review of all record evidence provided in this proceeding, the Authority finds that DENC has the technical, financial and managerial capabilities to operate the Millstone nuclear facilities pursuant to the proposed agreements.

D. VARIOUS PURCHASE POWER AGREEMENT PROVISIONS

1. Sections 1 and 19.8, New Revenue Source Definition and Determination

a. New revenue source determination

New Revenue Source is defined by the Agreements to mean:

> any new ISO-NE rule, new state law or regulation, or new federal law or regulation, each taking effect after January 1, 2019, creating a program, product or ancillary service providing direct net compensation for the Facility for reliability, resource diversity, grid resilience, fuel or energy diversity or security attributes associated with the Facility.

Agreements, Section 1, p. 7.

DENC stated that the above definition has been drafted to capture the changes implemented through future ISO-NE rules that create new revenues that are quantifiable and attributable to the Facility. DENC Response to Interrogatory EL-55. Although it is not possible to provide a detailed description of all types of new revenues for which the Seller would qualify, DENC identified ISO NE's proposed Inventoried Energy Program filed for approval at the FERC on March 25, 2019 (FERC Docket No. ER19-1428-000) as a potential new revenue source that could fall under the New Revenue section, depending on the manner in which it is ultimately implemented. Id.; Tr. 6/20/19, p.81 CL&P stated that at a high level, the type of products that could be eligible under the New Revenue section would be fuel inventory or fuel storage. Tr. 6/20/19, p. 81. UI added that one possible New Revenue Source that would flow back to customers could be a winter reliability-related program that recognized the onsite storage nature of the resource; however, it opined there could be various revisions to market rules over the term of this Agreement. Id., p. 80.

The EDCs each clarified that, even though capacity is not a part of the Agreements, if an identifiable New Revenue Source for the fuel security attributes is paid through the capacity market, those revenues may flow back to customers through the Agreements. Tr. 6/20/19, pp. 90-92. DENC similarly confirmed that New Revenue Sources need not be derived from environmental attributes or energy. Id., p. 272.

The Authority finds the definition of New Revenue Source in the Agreements is specific as to the intended purpose of the future compensation applicable to Section 19.8 of the Agreements, but also sufficiently broad so as not to limit the types of future products and associated compensation that may be eligible, and may include capacity or other sources of revenue. The Authority will direct the EDCs to report on any New Revenue Source(s) that become available in the market and notify the Authority of the status on their efforts to reach mutual agreement with the Seller on a Price reduction or pass through methodology for any New Revenue Source(s) identified. These additional reporting requirements will enable the Authority to to stay informed and to provide proper oversight and guidance to the EDCs as they administer the PPAs.

b. New Revenue Source Compensation

Section 19.8 of the Agreements provide, in relevant part, that:

> Seller shall use commercially reasonable efforts consistent with this Agreement and with Good Utility Practice for a nuclear facility to qualify for and obtain the maximum compensation available to the Facility associated with any and all New Revenue Sources. For portions owned by Seller, Buyer shall be entitled to . . . of all such compensation net of Buyer's . . . of the incremental direct costs incurred by Seller to obtain or retain such compensation. The Parties shall agree on a Price reduction or other pass-through methodology whereby such compensation is promptly and fully remitted to the Buyer. If the Parties are unable to reach mutual agreement on the Price reduction or pass through methodology, the dispute resolution procedures in Section 11.1 shall apply. To the extent the Facility thereafter becomes ineligible to receive compensation for any previously implemented

> New Revenue Source, the pass-through methodology or the Price shall be adjusted to reflect the loss of that compensation.

Agreements, Section 19.8 (confidential portion omitted).

DENC indicated that this provision is intended to capture and convey to the Buyers the benefits associated with New Revenue Source(s) not currently in existence that directly compensate the Facility for “reliability, resource diversity, grid resilience, fuel or energy diversity or security attributes” associated with the Facility. DENC Response to Interrogatory EL-43. The EDCs added that the “other pass–through methodology” language provides another mechanism to provide compensation when a direct price reduction is not feasible, for example during a period when there are not sufficient payments to the Seller to account for the compensation. EDCs’ Responses to Interrogatory EL-43. DENC added that the “other pass-through methodology” is intended to allow for an alternative to direct price reduction if the nature of the new revenue source is accounted for more easily through the alternative method. DENC Response to Interrogatory EL-43. Depending on the nature and periodicity of the new revenue source, and the remaining term of the Agreements, the PPA Parties may elect to cause such benefits to be assigned directly to Buyer, or for Seller to credit to Buyer in a lump-sum or structured payment. Id.

In addition, DENC confirmed that the Agreements entitle the Buyers to 100 percent of all Environmental Attributes generated by the Facility. Id. As is customary, Environmental Attributes are defined expansively to include credits or attributes not currently in existence that arise or are created during the term of the Agreements. Id.

The PPA Parties confirmed that the compensation for a New Revenue Source is net of costs to obtain the new revenues. CL&P, UI and DENC Responses to Interrogatory EL-58. The PPA Parties indicated that, generally, any performance penalties associated with a New Revenue Source would be treated as an incremental direct cost for the calculation of net compensation. Late Filed Exhibit No. 12. As a result, any net compensation that the Buyer is entitled to will reflect a deduction of any performance penalties assessed while obtaining the New Revenue Source compensation. Id. DENC acknowledged that there could be some level of performance penalties associated with obtaining a New Revenue Source. Tr. 7/15/19, p. 506.

DENC added that “Direct net compensation” connotes (i) that compensation is net of costs to obtain the new revenues and (ii) that the compensation or benefit is a direct and quantifiable payment to the Facility. DENC Response to Interrogatory EL-58. DENC added that it would not be required to participate in the market if participation is not consistent with the obligations described above. Id. If Seller does not participate in a new market for these valid reasons, Buyer is not entitled to make reduced payments as if the Seller had participated in the new market, nor would Buyer be entitled to collect damages. Id. If a Buyer takes the position that Seller breached its obligation to obtain a New Revenue Source, it has remedies for breach under its Agreement. Id.

The EDCs stated that to the extent that the Seller failed to use commercially reasonable efforts to obtain a New Revenue Source, the Seller would be in default of an obligation of the Agreements, which, if not cured, could lead to termination of the

Agreements and a termination payment claim by the Buyer under Section 9.3 of the Agreements. EDCs' Responses to Interrogatory EL-58.

The PPA Parties collectively indicated that there could hypothetically be situations where it does not make sense for Millstone to participate in a new market because the expected performance penalties roughly equal or exceed the expected revenues. Id. This hypothetical seems unlikely, however, since winter capacity ratings provided by DENC show the units performed well over several years. Tr. 9/15/19, pp. 501-502, Late Filed Exhibit 14.

Aside from the net compensation consideration, the PPA Parties collectively acknowledged that DENC is not expected to pursue any New Revenue Source that will cause DENC to knowingly violate any tariff, interconnection agreement, market rule, law, NRC procedure or will result in operation of the units in a manner inconsistent with reliability, good utility practice or commercially reasonable practices. CL&P, UI and DENC Responses to Interrogatory EL-58. Additionally, it is understood that DENC will not put the unit or the public safety in jeopardy by running the units in a haphazard manner. Tr. 7/15/19, p. 492. Aside from these situations, DENC states that its intent is to pursue any new revenue sources that are available. Id., p 497.

DENC describes that if a New Revenue Source becomes available, it would engage in discussion with the EDCs about operational or economic concerns it identifies related to its participation, prior to the initiation of the dispute resolution process. Tr. 7/15/19, pp. 494-495. All PPA Parties may present their respective calculations of net compensation associated with the new revenue source in these discussions. Id. pp. 495-496.

The Authority finds that the Section 19.8 provision of the Agreements is a critical aspect to its determination that the proposed Agreements are just and reasonably priced. The Agreements provide interim compensation to the Seller, in part, for fuel security attributes that Millstone possesses, but are not currently valued fully in the ISO New England wholesale markets. ISO NE has been ordered by the FERC to file permanent tariff revisions reflecting improvements to its market design to better address regional fuel security concerns.[6] Since the market rule revisions are still underway, and may take several years before the full suite of changes are designed and implemented, the Section 19.8 provision of the Agreements provides a mechanism to reimburse the EDCs' customers for compensation later received by the Seller as the value of the fuel security attributes of the Millstone Facility become properly allocated to the remainder of the region.

While the Authority does not dispute the PPA Parties' general claim that "there could hypothetically be situations where it does not make sense for Millstone to participate in a new market because the expected performance penalties roughly equal or exceed the expected revenues," the Authority finds that this contract provision requires that any going forward net compensation assessments must reasonably reflect the reliable performance history of the Millstone 2 and 3 units, particularly in winter. Moreover, the

[6]https://www.iso-ne.com/static-assets/documents/2018/07/er18-1509-000_7-2-18_order_deny_waiver_request.pdf

Seller is required to "operate the Facility so as to maximize energy production during the hours of anticipated peak load and Energy prices in New England,"[7] and it is reasonable to assume that the Facility would do so.

2. Section 8.2, Amendments/Waivers

Section 8.2 of the Agreement states:

> Amendments. Buyer shall determine in its sole discretion whether any amendment or waiver of the provisions of this Agreement shall require Regulatory Approval or PURA filing and/or approval. If Buyer determines that any such approval or filing is required, then such amendment or waiver shall not become effective unless and until Regulatory Approval or such other approval is received, or such PURA filing is made and any requested PURA approval is received.

In implementing this provision, the Authority finds that it will be prudent for CL&P and UI to obtain PURA's regulatory approval for (1) any material amendment or any material waiver, and (2) any amendment or waiver for which the EDC is uncertain about a PURA materiality finding. To provide guidance to the EDCs, the Authority finds that material amendments and waivers requiring PURA's regulatory approval include, but are not limited to, amendments or waivers that materially alter: the unit price of the contract; modifies contract maximum amount or the buyers' percentage entitlement performance requirement under the contract; or any proposals pursuant to Section 19.7 of the Agreement, which address alleged changes in law, accounting treatment, or subsequent judicial or regulatory action. Furthermore, the Authority directs the EDCs to notify the Authority through a filing in this docket of any such amendment or waiver it deems as non-material not later than thirty (30) days prior to the effective date of the amendment or waiver *or* as soon as reasonably possible thereafter.

3. Section 11.1, Dispute Resolution

a. New Revenue Source Dispute Resolution

Section 11.1(a) of the Agreements provides, in relevant part:

> <u>Dispute over New Revenue Source Calculation</u>. In the event of a dispute over the calculation of the price and payment adjustment related to the New Revenue Source pursuant to Sections 5.2 and 19.8 of this Agreement ("New Revenue Source Calculation Dispute"), the Parties shall attempt in good faith negotiation between executives who have authority to settle the controversy and who are at a higher level of management than the persons with direct responsibility for administration of this Agreement. Any Party may give the other Party written notice of New Revenue Source Calculation Dispute not resolved in the normal course of business ("Initial Notice"). . . Within thirty (30) Days after delivery of the Initial Notice, the executives of both Parties and a representative from each of PURA and the Department

[7] Agreements, Section 3.2(n).

> shall meet at a mutually acceptable time and place, and thereafter as often as they reasonably deem necessary, to attempt to resolve the dispute. All reasonable requests for information made by one Party to the other will be honored. All negotiations pursuant to this clause are confidential and shall be treated as compromise and settlement negotiations for purposes of applicable rules of evidence. If the New Revenue Source Calculation Dispute has not been resolved after such consultations between the Parties and the PURA and Department representatives, then either Party may seek to resolve that Dispute in the courts of the State of Connecticut.

DENC explained that Section 11.1(a) of the PPAs provide that "a dispute over the calculation of the price and payment adjustment related to the New Revenue Source…" will be subject to the dispute resolution process set forth in that section. DENC Brief, p. 7. Disputes that fall outside of the scope of Section 11.1(a) will be governed by the terms of 11.1(b) related to "Other Disputes." Id. In other words, a dispute related to a New Revenue Source that does not pertain to the calculation of the price and payment adjustment is outside the scope of Section 11.1(a). Id. All other disputes, controversies or claims between the Parties arising out of or relating to the Millstone PPAs fall under Section 11.1(b). Id., pp. 7 and 8. DENC conceded, however, that a dispute by one of the PPA Parties involving whether a New Revenue Source should have been pursued falls under Section 11.1(a). Id., p. 8.

DEEP stated its belief that the PPA Parties intended for all disputes concerning a New Revenue Source to be subject to the dispute resolution process established in Section 11.1(a). DEEP Brief, p. 8. Section 11.1(a) contemplates several opportunities for a negotiated settlement prior to proceeding to court in the hopes that the dispute can be resolved. Id. An important distinction between 11.1(a) and 11.1(b) is that under 11.1(a), DEEP and the Authority participate in the negotiations prior to any party bringing a court action. Id. DEEP indicated it does not expect that relations would deteriorate to such an extent that any party would refuse to follow the procedural steps of Section 11.1(a). Id.

OCC argued that the best interpretation of the Agreements is that all disputes between the PPA Parties regarding a New Revenue Source determination should be treated as pertaining, in a broad sense, to "the calculation of the price and payment adjustment," and thus treated as a Section 11.1(a) dispute. OCC Brief, p. 6. OCC views the words "the calculation of the price and payment adjustment related to the New Revenue Source" as being descriptive for the parties as to the substance of what is covered by Sections 5.2 and 19.8 of the Agreements. Id. Whether the parties' dispute arises over disagreement about the nature of a new market or legal rule and whether it creates a New Revenue Source opportunity, or regarding the actions that DENC has taken to qualify for and achieve the revenue through Millstone, or whether it involves some narrow mathematical issue, all such disputes ultimately impact the calculation of the price and payment adjustment in Section 19.8 and should be treated as Section 11.1(a) disputes under the Agreements. Id.

The Authority finds that disputes affecting "the calculation of the price and payment adjustment" in Section 19.8 include, but are not limited to, the nature of a new market or legal rule and whether it creates a New Revenue Source opportunity, the actions that

DENC has taken to qualify for and achieve the revenue through Millstone, and the calculation of direct net compensation related to a New Revenue Source. As a result, these disputes are actionable by the PPA Parties pursuant to Section 11.1(a) of the Agreements, as disputes that may affect “the calculation of the price and payment adjustment” in Section 19.8.

In the event the PPA Parties are unable to reach an agreement on whether a New Revenue Source should have been pursued by the Seller, or any other matter materially affecting the calculation of the price and payment adjustment related to a New Revenue Source, the Authority authorizes, and will direct in specific instances, each EDC to initiate the dispute resolution procedures in Section 11.1a of the Agreements.

4. Section 19.9, [BEGIN CONFIDENTIAL] [redacted]

[redacted] [END CONFIDENTIAL]

E. EDC Administration of the Purchase Power Agreements

1. Authority Expectaions

With regard to the EDCs administration of the PPAs, the Authority fully expects that the EDCs will rigorously protect ratepayer interests under the PPAs and take every cost-effective measure to maximize the value of the PPAs for their ratepayers. The Authority will carefully review the EDCs’ administration of the PPAs to ensure that their administration has been prudent and appropriate.

2. Rate Recovery for the Companies

a. Purchase and Sale of Products under the Agreements

Pursuant to the Conn. Gen. Stat. § 16a-3m, the EDCs request that the Authority authorize each EDC to seek recovery all of prudently-incurred costs related to the Agreements from all customers and credit any related revenues of the Agreements to all customers through a fully-reconciling component of electric rates for all customers of the EDC for the full term of the Agreements. Application, p. 5. Specifically, and consistent with prior Authority decisions, the EDCs propose to reconcile these costs and revenues through the nonbypassable federally mandated congestion cost (NBFMCC) charge. Id.

Part of what is proposed to be reconciled through the NBFMCC charge are revenues from the resale of Products conveyed under the Agreements. With regard to this resale, Section 4.1(c) of the Agreements provide that the Buyer shall have the exclusive right to resell or convey such Products in its sole discretion. CL&P clarifies that Section 4.1(c) addresses which of the two counterparties in its Agreement has the right to determine how the Products are resold. Of the two, CL&P has the exclusive right to make that determination, without discussing its decision with the Seller. The Agreements do not discuss whether the Authority is precluded from providing direction on the matter. CL&P Response to Interrogatory EL-33.

UI restates the language in the Agreements and adds that the company intends to resell or convey the Products purchased under the PPA in a manner that is in the best interest of ratepayers. Further, UI indicates that Conn. Gen. Stat. § 16a-3m states that "[a]ny net revenues from the sale of products purchased in accordance with long-term contracts entered into pursuant to this section shall be credited to customers through the same nonbypassable fully reconciling rate component for all customers of the contracting electric distribution company." UI Response to Interrogatory EL-33. The Authority believes that the manner in which these Products are resold can impact the value of the Agreements to ratepayers and directs the EDCs to thoughtfully consider their options in this area and to pursue those options that maximize such value.

The Authority authorizes the EDCs to reconcile the costs and revenues of the Agreements through the NBFMCC charge, unless and until recovery of such costs is authorized by the Authority in an alternative manner pursuant to the requirements of Conn. Gen. Stat. § 16a-3m. The Authority accepts the EDCs' proposed approach to resell or convey the Products purchased under the Agreements, but reserves the right to investigate alternative approaches with regard to the use of the Products in a separate proceeding.

The Authority will direct the EDCs to periodically submit a detailed report on the revenues generated from Products purchased through the Agreements and credited back to customers through the NBFMCC in their respective annual Revenue Adjustment Mechanism (RAM) filings.

b. Recovery of costs related to Administration of the Agreements.

The EDCs request that the Authority authorize each EDC to recover in their respective annual RAM proceedings, through the NBFMCC, the reasonable and prudently incurred costs associated with hiring outside consultants and legal counsel to negotiate the Agreements, as previously approved by the Authority.[8] Id., pp. 5 and 6. Additionally, the EDCs request rate recovery of all costs they prudently incur to administer, defend and enforce the Agreements, including but not limited to, any amounts paid under the Contracts if they are ever invalidated, in whole or in part, at a later date, but excluding internal labor costs that are already recovered in rates from customers. Id., p. 6.

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[8] *See,* the Authority's January 23, 2019 ruling on Motion No 14.

The Authority finds that the request by the EDC detailed above is consistent with the rate recovery treatment authorized in Conn. Gen. Stat. § 16a-3m, and with prior rulings by the Authority related to the Agreements and/or similar contract approvals. Therefore, each EDC will be authorized to seek recovery, through the NBFMCC[9], of the reasonable and prudently-incurred costs associated with hiring outside consultants and legal counsel to negotiate the Agreements. Additionally, the EDCs are authorized to recover all costs the EDCs prudently incur to administer, defend and enforce the Agreements, including but not limited to any amounts paid under the Contracts if they are ever invalidated, in whole or in part, at a later date, but excluding internal labor costs that are already recovered in rates from customers.

V. FINDINGS OF FACT

1. DENC has reliably operated the Millstone units since purchasing the power station in 2001.

2. Between 2008 and 2017, DENC's operation of the Millstone units has produced an average of 16.5 million MWh of energy per year, with a capacity factor consistently above 90 percent inclusive of planned outages.

3. Since assuming ownership, DENC has invested more than $1 billion into the plant and established a strong 18-year history of reliable and safe operations of both Millstone units.

4. The DEEP and PURA February 1, 2018 Joint Determination outlined specific benefits of retaining the Millstone nuclear units, including GWSA compliance, fuel security, macroeconomic, fuel diversity, and ratepayer benefits.

5. The retention of the Millstone units avoids over 36 million tons of carbon as compared to a reference case where units are not operating beginning in 2023.

6. Absent continued operation of the Millstone units, Connecticut may not be able to comply with its emission reduction standards since a Millstone retirement is projected to increase carbon dioxide emissions for the entire New England electric sector by 80 million short tons, or 25 percent.

7. The New England grid operator, ISO New England, Inc., issued a January 2018 Operational Fuel-Security Analysis study in which it concluded that the loss of the Millstone Station – even for a single season – would result in persistent energy shortages that would require frequent and long periods of rolling blackouts.

8. The Agreements only apply to approximately 50 percent of the energy output of the Millstone units.

9. Dominion's electric portfolio consists of approximately 31,000 megawatts of power generation, 10,200 miles of electric transmission, and 84,000 miles of electric

[9] Or a separate, fully-reconciling component of electric rates for all customers of the EDCs, if established by the Authority.

distribution and its gas portfolio includes 15,900 miles of natural gas transmission pipeline, 92,900 miles of natural gas distribution pipeline.

10. Dominion owns Virginia Electric and Power Company, which is doing business as Dominion Energy Virginia, and operates two nuclear generating stations in Virginia.

11. The emissions-free energy output of the units purchased through the PPAs is adequate and needed to achieve regional fuel security, diversity and electric grid reliability, particularly during the winter, and compliance with carbon dioxide emissions standards.

12. Based on the expected profit levels of the Millstone units during the operation of the PPAs, and based on the specific PPA provisions discussed in this Decision, the proposed contract price is just and reasonable.

13. Based on the ratepayer savings demonstrated in the modelling preformed for the Joint Determination and DEEP's analysis of the proposed PPAs detailed in EL-74 and LFE-16, the proposed PPAs are prudent and cost effective.

14. Based on the record evidence provided in this proceeding, DENC has the technical, financial and managerial capabilities to operate the Millstone nuclear facilities pursuant to the proposed PPAs.

VI. CONCLUSION AND ORDERS

A. CONCLUSION

Subject to the UI, CL&P and DENC submitting the Order No. 10 compliance filing on or before September 28, 2019, the Authority approves the ten-year power purchase agreements between DENC and the EDCs, under the terms as discussed by the Parties during the proceeding and memorialized herein. Furthermore, the 2nd Interim Decision approves CL&P's and UI's recovery of credits and charges associated with the approved Agreements through the NBFMCC.

B. ORDERS

For the following Orders, the Company shall submit one original of the required documentation to the Executive Secretary, 10 Franklin Square, New Britain, Connecticut 06051 <u>and</u> file an electronic version through the Authority's website at <u>www.ct.gov/pura</u>. Submissions filed in compliance with the Authority's Orders must be identified by all three of the following: Docket Number, Title and Order Number. Compliance with orders shall commence and continue as indicated in each specific Order or until the Company requests and the Authority approves that the Company's compliance is no longer required after a certain date.

1. No later than 120 days prior to the effective date of a potential New Revenue Source, *or* as soon as reasonably possible thereafter, each EDC shall submit to

the Authority a report describing the potential New Revenue Source and a detailed assessment on:

a) whether the Seller may qualify for such New Revenue Source; and

b) whether it expects the New Revenue Source to result in a direct and quantifiable payment to the Seller, net of any associated costs to obtain such revenue.

2. No later than 60 days following the identification of a potential New Revenue Source, *or* as soon as reasonably possible thereafter, as required by Order No. 1, and every 30 days thereafter, each EDC shall notify the Authority of the status of its efforts to reach mutual agreement with the Seller on a Price reduction or pass through methodology pursuant to Section 19.8 of the Agreements, until such time as an agreement is reached, or the EDC gives the Seller written notice of New Revenue Source Calculation Dispute not resolved in the normal course of business (Initial Notice).

3. Upon identification of a potential New Revenue Source pursuant to Order No. 1, each EDC shall:

a) provide the Authority with the agreed-upon calculation methodology if mutual agreement with the Seller on a Price reduction or pass-through methodology is reached pursuant to Section 19.8 of the Agreements; and

b) give the Seller an Initial Notice to initiate the dispute resolution procedures in Section 11.1a of the Agreements if mutual agreement with the Seller on a Price reduction or pass through methodology is not reached pursuant to Section 19.8 of the Agreements, unless otherwise directed by the Authority.

4. Effective immediately, each EDC shall resell or convey the Products purchased under the PPA in a manner that is in the best interest of ratepayers and credit all proceeds against any rate recovery requests in the applicable annual RAM filings.

5. In the annual RAM filings, each EDC shall file a detailed report of all of costs and revenues associated with the sale of Products purchased under the Agreements for the applicable period, including the quantity of Products purchased/sold and separately identifying any adjustments related to New Revenue Source(s).

6. In calculating any going forward net compensation assessments, the Parties shall ensure such calculations reasonably reflect the reliable performance history of the Millstone 2 and 3 units, particularly in winter.

7. For amendments and waivers deemed by the EDCs as not subject to PURA approval under Section 8.2 of the Agreements, the EDCs shall notify the Authority of such amendment or waiver no later than thirty (30) days prior to the effective date of the amendment or waiver *or* as soon as reasonably possible thereafter.

8. The EDCs shall seek recovery of the costs and revenues of the Agreements in their annual RAM proceeding, through the NBFMCC charge, unless and until recovery of such costs is authorized by the Authority in an alternative manner pursuant to the requirements of Conn. Gen. Stat. § 16a-3m.

9. [BEGIN CONFIDENTIAL] [redacted] [END CONFIDENTIAL]

10. No later than September 28, 2019, the contracting Parties must submit a compliance filing confirming that Section IV.D of this Decision memorializes the representations of the Parties and the facts in the record for this Proceeding upon which the Authority has relied in reaching its conclusion, orders and findings of fact.

DOCKET NO. 18-05-04 PURA IMPLEMENTATION OF JUNE SPECIAL SESSION PUBLIC ACT 17-3

This Decision is adopted by the following Commissioners:

Marissa P. Gillett

Michael A. Caron

John W. Betkoski, III

CERTIFICATE OF SERVICE

The foregoing is a true and correct copy of the Decision issued by the Public Utilities Regulatory Authority, State of Connecticut, and was forwarded by Certified Mail to all parties of record in this proceeding on the date indicated.

Jeffrey R. Gaudiosi, Esq.
Executive Secretary
Public Utilities Regulatory Authority

September 18, 2019
Date