

# MEMORANDUM

**TO:** NEPOOL Markets Committee

**FROM:** Samantha Regan and Paul Belval, NEPOOL Counsel

**DATE:** July 2, 2024

**RE:** NEPOOL Generation Information System Hourly Certificates Rule Changes

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At its July 9-10 meeting, the NEPOOL Markets Committee (the “Markets Committee”) will be asked to take action on changes to the NEPOOL Generation Information System (“GIS”) and the GIS Operating Rules (the “Rules”) to accommodate the transfer of hourly certificates that was referred by the Markets Committee to the GIS Operating Rules Working Group (the “Working Group”). The proposed changes to the Rules are included in Appendix A.

The proposed modifications would involve changes to the GIS and the Rules requested by Constellation Energy Generation LLC (“Constellation”). The requested changes would accommodate the transfer of Certificates on an hourly basis through a separate register maintained by APX, Inc. the GIS Administrator (“APX”), and would permit GIS Account Holders to identify certain generators for which the generation data in the GIS would be denoted hourly in that register, on an opt-in basis (the “Hourly Tracking Change”). The Hourly Tracking Change was discussed at several Working Group meetings and then was brought before the Markets Committee at its May 8, 2024 meeting for a vote. The Markets Committee did not vote on the Hourly Tracking Change proposal and agreed to discuss open items further at a future meeting. The Markets Committee asked APX to determine whether the work to implement the Hourly Tracking Change could be staged such that it would straddle 2024 and 2025 APX development hours. The Markets Committee also asked Constellation to provide information on whether a similar change for hourly tracking in the PJM Generation Attribute Tracking System (“PJM GATS”) had any impact on renewable energy credit (“REC”) prices in that region.

The Amended and Restated Generation Information System Agreement between NEPOOL and APX (the “GIS Agreement”) provides that APX will perform up to 500 hours of development work for enhancements to the GIS each year without additional cost to NEPOOL. Proposed GIS changes requiring more than 500 of the annual development hours included under the GIS Agreement would be charged to NEPOOL at the rate of \$180/hour, as provided in Section 4.8 of the GIS Agreement. APX has estimated that 1,245 hours would be required to implement the Hourly Tracking Change with the scope broken down below:

<i><b>Scope Breakdown</b></i>	<i><b>Hours</b></i>
Hourly Clean Energy tracking for wholesale ISO-NE generators	935 hours
Hourly Clean Energy tracking for Import Projects	310 hours

<b>Total</b>	<b>1,245 hours</b>
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Currently, there are 328 annual development hours remaining for 2024.<sup>1</sup>

At the May 8<sup>th</sup> meeting, Markets Committee members asked whether APX could stage the Hourly Tracking Change work over 2024 and 2025 so that NEPOOL could apply the 500 development hours for 2025 to that work, thereby reducing the out-of-pocket costs to NEPOOL of that work. APX has since responded that the work may be staged between 2024 and 2025. If that were the case, NEPOOL would have to pay for 417 development hours (1,245 hours, minus the 328 remaining 2024 development hours and minus the 500 2025 development hours). The total cost to NEPOOL would be \$75,060 (417 hours multiplied by \$180/ hour).

Also at the May 8<sup>th</sup> meeting, Markets Committee members expressed a concern that demand for Certificates that are registered in the hourly tracking register would decrease the total number of Certificates available for state clean energy law compliance, driving up the cost of those Certificates. Constellation noted that PJM GATS has already implemented an hourly tracking approach and offered to look into whether there has been an increase in REC costs in that region as a result. Constellation determined that, while Renewable Energy Credits and Emissions Free Energy Credits – collectively Energy Attribute Certificate (“EAC”) -- prices have certainly increased in PJM in recent years, it is unlikely that the GATS March 2023 hourly retirement implementation had a material effect. Of the more than 320 million carbon-free MWh generated in PJM in 2023, only 35 million EACs were retired for voluntary purposes. Of those 35 million, Constellation estimates that a very small share – perhaps less than 1% - were used for voluntary hourly purposes. Constellation expects the number of users retiring hourly EACs in PJM to grow over time as generators, suppliers, and energy users continue to recognize the system-level benefits of hourly-matched carbon-free electricity. However, Constellation states that this won’t necessarily result in more EACs being retired for voluntary purposes in total, but rather a shift from monthly to hourly retirements within the existing and growing voluntary footprint as a whole.

Under Rule 1.3 of the Rules, changes to the GIS that require 50 hours or more of labor or have an estimated cost to NEPOOL of more than \$30,000 and that in either case are not required to address a change in law or a change in the ISO Tariff must be approved by the NEPOOL Participants Committee. In the past, the Markets Committee has provided a recommendation on Rule changes that require Participants Committee action. Based on Rule 1.3, if the Markets Committee votes to recommend the Hourly Tracking Change, the Hourly Tracking Change must then be approved by the NEPOOL Participants Committee.

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<sup>1</sup> At the May 8<sup>th</sup> meeting, the Markets Committee approved a change to the GIS related to the password reset reminder in the application program interface, which will require 10 development hours to implement. The Markets Committee also recommended that the Participants Committee approve a GIS change that would provide for the bulk upload of Clean Peak Resources data, which would require 424 development hours to implement, and that change was approved by the Participants Committee on June 25<sup>th</sup>. APX had agreed that NEPOOL could use the 262 development hours that were not used in 2023 for those changes, meaning only 172 of the 500 development hours for 2024 are needed for those changes.

The following resolution may be used to recommend the Hourly Tracking Change:

RESOLVED, that the Markets Committee recommends that the NEPOOL Participants Committee adopt the changes to the NEPOOL Generation Information System and the NEPOOL Generation Information System Operating Rules proposed and discussed at this meeting related to transferring Certificates on an hourly basis, with such non-material changes thereto as the Vice Chair of the Markets Committee may approve.

cc: NEPOOL GIS Operating Rules Working Group

APPENDIX A

HOURLY TRACKING CHANGE RULE CHANGES

[Attached]

## **Rule 2.2      Account Holder Registration**

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(l) A NEPOOL Generator that is also a Zero Emissions Generator, or an Importing Account Holder importing Imported Unit Energy from a Zero Emissions Generator, may opt to have the Certificates for its generation in any calendar month denoted as being tracked in the Hourly Generation Ledger, as described in Rule 2.9. Such Certificates are referred to as “Hourly Claim Certificates,” and the NEPOOL Generator or Importing Account Holder receiving Hourly Claim Certificates shall be referred to as an “Hourly Claim Generator”. Hourly Claim Certificates shall be denoted in full MWh, as with other Certificates. Hourly Claim Certificates will be issued, in accordance with Rule 2.9 and transferred in accordance with Rule 3.1(b).

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## **Rule 2.9      Hourly Claim Certificates**

(a) Each Account Holder opting to claim the hourly output of its eligible NEPOOL Generator or Imported Unit Energy and have Hourly Claim Certificates issued for that eligible NEPOOL Generator or Imported Unit Energy for a specific calendar month shall notify the GIS Administrator at least five (5) days prior to the start of that month, which notice shall apply to all subsequent calendar months unless and until that Account Holder notifies the GIS Administrator that it no longer wishes to receive Hourly Claim Certificates for that GIS Generator or Imported Unit Energy, which notice shall also be given at least five (5) days prior to the start of the month for which Hourly Claim Certificates are not to be issued.

(b) Monthly generation data for an Hourly Claim Generator must meet all requirements of these Rules. The hourly breakdown of that monthly generation data must be provided directly to the GIS Administrator via a secure internet portal by either (1) the regional transmission organization or independent system operator (as recognized by the Federal Energy Regulatory Commission) that covers the area in which such generating unit is located (including ISO-NE for NEPOOL Generators), or (2) an electric utility metering the generation of such generating unit, or (3) a nationally recognized renewable energy credit tracking system, or (4) a Third Party Meter Reader meeting the requirements of Rule 2.5(j). The GIS Administrator will keep a separate ledger of the generation data for each such Hourly Claim Generator for each month in which it is an Hourly Claim Generator (the “Hourly Generation Ledger”). Generation data shall be recorded in the Hourly Generation Ledger in thousandths of a MWh. The GIS Administrator shall not create Hourly Claim Certificates or record generation in

the Hourly Generation Ledger for any hour for which it has not received hourly generation data as provided above.

(c) Each Hourly Claim Certificate shall include a notation that it is an Hourly Claim Certificate and the generation represented by that Certificate is registered in the Hourly Generation Ledger maintained by the GIS Administrator, as provided in Part 12 of Appendix 2.1. Except for such notation on each Hourly Claim Certificate, Hourly Claim Certificates shall be created and issued in the same manner as all other Certificates.

### **Rule 3.1 Transfers Among Account Holders**

(a) Except as otherwise provided in these Rules, Account Holders may transfer Certificates to other Account Holders pursuant to a Forward Certificate Transfer (defined below) or at any time during a Trading Period (defined below). Account Holders transferring such Certificates shall reflect such transfer in the GIS by indicating in a designated screen in the GIS that such Certificate has been transferred and selecting the transferee. The designated transfer screen shall include a field for price information and a free-form text field for the transferor to use in identifying the transfer transaction, which fields shall also only be visible to the GIS Administrator and the transferee and which fields may be left blank in any transfer. In turn and in a similar fashion, the Certificate transferee shall confirm the transfer in a designated screen in the GIS. If the transfer includes Hourly Claim Certificates as described in Rule 3.1(b), the date and hour of the generation represented by those Hourly Claim Certificates shall also be included in the designated transfer screens. Subject to any restrictions for Forward Certificate Transfers described in Rule 3.3, the transferring Account Holder may cancel any Certificate transfer before such transfer has been confirmed by the transferee by withdrawing the transfer in a designated screen in the GIS. The transfer of any Certificate shall only be registered in the GIS upon the electronic notification by both the transferor and the transferee. Account Holders may designate one or more agents for purposes of transfers and acceptances of transfers of Certificates by creating logins for them.

(b) In any transfer of Hourly Claim Certificates, the transferring Account Holder shall include in the transfer request the date(s) and hour(s) of the generation associated with such Hourly Claim Certificates. Prior to the transfer screen becoming available to the transferee for confirmation, the GIS Administrator will confirm in the Hourly Generation Ledger that such generation does not exceed the uncommitted generation (i.e., generation that actually occurred and is not associated with Hourly Claim Certificates subject to another pending or accepted transfer request) of the applicable Hourly Claim Generator for the specified date(s) and hour(s). Upon confirmation of the transfer by the transferee, the GIS Administrator shall record the transfer in the Hourly Generation Ledger. In the event that the sum of the generation included in a single transfer request for Hourly Claim Certificates does not result in whole MWhs being transferred, the number of Hourly Claim Certificates transferred in response

to such transfer request will in each case be rounded down to the next lower number of whole MWhs.

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### **Rule 3.3      Forward Certificate Transfers**

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(b) In the registration of a Forward Certificate Transfer, the GIS Generator or Importing Account Holder registering that transfer shall indicate (in addition to the requirements in Rule 3.1) (1) the GIS Generator or Importing Account Holder that will create such Forward Certificates, (2) the months or Trading Period(s) to which the Forward Certificate Transfer relates (which may be a single month or Trading Period or a specific number of Trading Periods, as designated in the registration), (3) the maximum number of Forward Certificates to be transferred, or the percentage of total Certificates actually created that will be transferred, during each such month or Trading Period, (4) whether, as a result of Massachusetts vintage requirements, a certain number of Certificates must be created in any calendar year before the Forward Certificates to be transferred will be created, and, if so, the number of such Certificates in each indicated calendar year, and (5) whether the transferor has the ability to rescind the Forward Certificate Transfer prior to the creation of the Forward Certificates. For a Forward Certificate Transfer of Hourly Claim Certificates, the GIS Generator or Importing Account Holder registering the transfer may only indicate a percentage of total Hourly Claim Certificates to be transferred in that Forward Certificate Transfer, and that percentage will be applied to the generation in every hour of the month or Trading Period to which the Forward Certificate Transfer relates. For Reserved Certificate and export transactions, the transferor shall transfer the number or percentage of Forward Certificates to the specially designated accounts for Reserved Certificate transfers and exports in the same fashion as those transfers are effected presently under Rules 3.5 and 3.6, respectively. Neither NEPOOL nor the GIS Administrator, nor the ISO shall have any liability if some or all of the Forward Certificates to be transferred are not created during any applicable Trading Period because of an outage of the GIS Generator or importing generating unit, failure to dispatch the GIS Generator or importing generating unit, failure of an Importing Account Holder to satisfy the requirements of Rule 2.7, or any other reason beyond the reasonable control of NEPOOL, the GIS Administrator or the ISO. Once the Forward Certificate Transfer is registered in the GIS, such Forward Certificates, when converted into Certificates on their Creation Date, will be deposited directly into the account of the transferee, and the transferor will not at any point have possession of those Forward Certificates. The GIS Administrator will notify each transferor when its Forward Certificate Transfer has been registered in the GIS. Any exercise of a contractual right of rescission of a Forward Certificate Transfer by a transferor shall be effected upon notice to the GIS Administrator from the transferor (without confirmation by the transferee), and in no event will the GIS Administrator be required to determine

whether conditions to that rescission, other than receipt of the rescission notice, have been satisfied before effecting the rescission.

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### **Rule 3.5      Reserved Certificates**

- (a) Account Holders may sell Certificates directly to third parties in good faith, arm's length transactions for reasonable value, independent of transactions involving Energy between those purchasers and their Retail LSEs (Certificates sold in such transactions are referred to herein as "Reserved Certificates." ) To avoid the possibility of double counting Certificates, each Account Holder that sells a Reserved Certificate shall, at the time of such transfer, transfer such Reserved Certificate in the GIS to a specially designated Reserved Certificate account using the procedure described in Rule 3.1 and, for a Forward Certificate Transfer of Reserved Certificates, the procedure described in Rule 3.3 (but without confirmation by the transferee). Each Account Holder may designate one or more subaccounts within the Reserved Certificate account. Transactions involving Reserved Certificates are limited to Certificates (other than Clean Peak Energy Certificates) representing MWhs (A) generated or to be generated by a Zero Emissions Generator or (B) generated or to be generated using a fuel source that is designated as being eligible for such transactions on Appendix 2.4 hereto (except as otherwise provided in these Rules) ("Renewable Certificates"), it being the intent of this Rule that Fuel Sources identified in Part 1 of Appendix 2.4 that are defined as "renewable" (i) by any Attribute Law or (ii) by any statute, regulation or order or decision of a governmental agency of a New England state with respect to eligibility for monies from a state renewable energy fund would be considered Renewable Certificates. A Reserved Certificate may be returned from the Reserved Certificates account to the Account Holder transferring it at any time during the Trading Period for that Certificate if the underlying sale of such Certificate to a third party has not been effectuated. At the end of such Trading Period, all Reserved Certificates in the Reserved Certificate account shall be retired and shall no longer be available for further transfer, and their attributes shall not be included in any Residual Mix Certificates.

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### **Rule 4.1      Retail LSE Obligations, Accounts and Subaccounts**

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- (e) Retail LSEs may hold Certificates in their Default Subaccounts without assigning them to any other Retail Subaccount. APS Certificates may be held in a Retail LSE's Retail Subaccount without being matched to that Retail LSE's Certificates Obligation. Clean Peak Energy Certificates shall be held solely in a



Retail LSE's subaccount specifically designated for those Clean Peak Energy Certificates, and no Certificates that are not Clean Peak Energy Certificates will be held in such a subaccount. [Hourly Claim Certificates may not be transferred into or held in a Retail Subaccount.](#)

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## **Rule 5.2      Reports for Account Holders**

(a)      The GIS Administrator will furnish electronically to each registered Account Holder quarterly and annual reports that aggregate by MWh the various Certificate fields listed on the Certificates owned by such Account Holder for such reporting period. [Information regarding Hourly Claim Certificates may be provided in a separate report.](#) Quarterly reports shall be provided by the 5th day after the close of a Trading Period, and annual reports shall be produced by June 20 of the year following the year to which the report applies. Annual reports shall include amounts for the generation occurring and Certificates Obligations arising during the applicable calendar year and shall include Certificates transactions that occurred during the portions of the Trading Periods that occurred following the end of such calendar year. Account Holders may view only data for their individual accounts and subaccounts.

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## **Rule 5.3      Reports for Regulatory Agencies and ISO**

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(b)      Each report provided to the Regulators and the ISO shall include the following information:

- (i)      List of GIS Generators identified by name, date commercial operations were commenced, and date of any repowering and/or capacity addition, categorized by fuel source, [with Hourly Claim Generators during the applicable period specifically designated;](#)

\* \* \* \*

- (vi)    Total number of Certificates created during the reporting period (with APS Certificates, NH Class I Thermal Certificates, NH Biodiesel Producer Certificates, Maine Thermal Certificates ~~and~~, Conservation Certificates [and Hourly Claim Certificates](#) accounted for separately);

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(xxv) Subject to Rule 5.3(d) below, list of GIS Generators identified by (A) name, (B) location, (C) date commercial operations were commenced, (D) date of any repowering and/or capacity addition, (E) fuel source, (F) eligibility under state renewable portfolio standards, alternative energy portfolio standards, clean energy standards or clean peak standards (as reflected in Part 2 of Appendix 2.4), (G) asset identification number, (H) total generation or conservation, in MWh, for the reporting period, ~~and~~ (I) whether generation or conservation data included in that report was provided to the GIS Administrator by a Third Party Meter Reader and the identity of any Third Party Meter Reader providing such data; and (J) whether each GIS Generator was an Hourly Claim Generator during the applicable reporting period (the information described in items (G), (H) and (I) of this Section 5.3(b)(xxv) is referred to as “Protected Generator Information”);

\* \* \* \*

(xxviii) Total number of SREC-II Ineligible Certificates created during the reporting period; ~~and~~  
(xxix) Total number of Clean Peak Energy Certificates created during the reporting period; ~~and~~  
(xxx) Total number of Hourly Claim Certificates created during the Reporting Period, reported separately for NEPOOL Generators and Importing Account Holders.

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#### **Rule 5.4      Publicly Available Reports**

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(e)      The publicly available reports posted on the GIS Administrator’s website shall include an aggregation and/or average, as appropriate, of the Certificate fields for all Certificates created during the quarterly or annual reporting period. Such reports shall aggregate data separately for NEPOOL Generators, Importing Account Holders, Non-NEPOOL Generators, Included Generators, C&LM Resources, BMG Resources, Class III Cogeneration Resources, DR Resources, MAPS CHP Resources, MAPS Useful Thermal Resources, NH Useful Thermal Resources, NH Biodiesel Producers, Maine Thermal Resources, Clean Peak Resources ~~and~~, Non-NEPOOL Generator Representatives and Hourly Claim Generators, and shall also include data aggregated for all GIS Generators and Importing Account Holders and data aggregated by originating control area (if other than ISO New England) and RPS or APS eligibility for all Imported Unit Energy. Those reports shall include the aggregate and/or average, as appropriate, of the Certificate fields for all Residual Mix Certificates, all Reserved Certificates, all Certificates assigned to state-specific subaccounts and all

Certificates associated with Energy exported from the New England for the quarterly or annual reporting period as well. Those reports shall also include a listing of all Third Party Meter Readers for the time period covered by each such report and the number of Certificates issued using the RSIP Estimation Methodology during the time period covered by each such report. In addition, those reports shall be capable of being sorted by the state of origination and settlement, by eligibility for RPS and APS programs, and by fuel type for all such Certificates for the time period covered by each such report.

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(h) In addition to the other reports provided for under this Rule 5.4, at the start of each Trading Period, the GIS Administrator will post in a publicly available portion of the GIS website the following information for the three-month period applicable to such Trading Period:

- (i) GIS Generators names and locations;
- (ii) Total number of Certificates created in such Trading Period;
- (iii) Total Energy imported into the New England Control Area by state or control area, aggregated by RPS or APS eligibility;
- (iv) Total Energy exported from the New England Control Area: ~~and~~
- (iii) Total Certificate Obligations for such Trading Period~~;~~
- (iv) Total Hourly Claim Certificates created in such Trading Period, reported separately for NEPOOL Generators and Importing Account Holders; and
- (v) Total Hourly Claim Certificates transferred in such Trading Period, reported separately for NEPOOL Generators and Importing Account Holders.

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*Appendix 2.4*

### **GIS Certificate Fields<sup>1</sup>**

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**Part 12 –Hourly Claim Certificate with the generation represented by that Certificate registered in the Hourly Generation Ledger maintained by the GIS Administrator (yes/no)**

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<sup>1</sup> Fields identified with an asterisk (\*) will not change.