

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Massachusetts Compliance Renewable Energy Certificate Class 1 Vintage 2017
Future

| ITEM | SPECIFICATION |
|--|--|
| Contract Description | Physically delivered Massachusetts Class 1 Renewable Energy Certificates ("Massachusetts Class 1 REC") where a REC is an electronic certificate issued by NEPOOL GIS for qualifying generation. |
| Contract Code | MAA |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 100 MWh representing 100 Massachusetts Class 1 RECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days following the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts in May, etc. The exchange may list any other calendar month contracts to set off the standard listing cycle for up to 10 years. |
| Deliverable Product | Massachusetts Class 1 RECs eligible for delivery are those representing Class 1 renewable energy (defined in Massachusetts General Law c.25A, 11F(c)) eligible to meet the Class I requirement of the Renewable Energy Portfolio Standard promulgated under Massachusetts General Law c.25A 11F and issued by NEPOOL GIS having a vintage or energy year designation that corresponds to the specified vintage of the expiring contract. |
| Registry | New England Power Pool Generation Information System (NEPOOL GIS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 15,000 lots, Single Month Accountability Level: 15,000 lots, All Month Accountability Level: 15,000 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Massachusetts Solar Renewable Energy Certificate Carve Out II Vintage 2017

Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered Massachusetts Solar Renewable Energy Certificates ("Massachusetts SREC") where an SREC is an electronic certificate issued by NEPOOLGIS for qualifying generation. |
| Contract Code | MCA |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 10 MWh representing 10 Qualifying SRECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts on Nov 19, May 19. The exchange may list any other calendar month contract series on the standard listing cycle for up to 10 years. |
| Deliverable Product | Massachusetts SRECs eligible for delivery are those representing solar renewable energy (defined in Massachusetts General Law c.25A, 11F(c)) eligible to meet the solar requirement of the Renewable Energy Portfolio Standard promulgated under Massachusetts General Law c.25A 11F and issued by NEPOOL GIS having a vintage year designation that corresponds to the specified vintage of the expiring contract. |
| Registry | New England Power Pool Generation Information System (NEPOOL GIS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 4,000 lots, Single Month Accountability Level: 4,000 lots, All Month Accountability Level: 4,000 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Maryland Compliance Renewable Energy Certificate Tier 1 Vintage 2017 Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered Maryland Tier 1 Renewable Energy Certificate (“Maryland Tier 1 REC”) where a REC is an electronic certificate issued by PJM GATS for qualifying generation. |
| Contract Code | MDA |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 100 MWh representing 100 qualifying Tier 1 RECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contract for Feb. 19. The Exchange may list any other calendar month contract set off the standard listing cycle for up to 10 years. |
| Deliverable Product | Maryland Tier 1 RECs eligible for delivery are those which are eligible to meet the Tier 1 renewable energy requirement (as defined in the Maryland Renewable Energy Portfolio Standard promulgated under 7-701 of the Public Utilities Article of the Annotated Code of Maryland) and issued by PJM GATS having a vintage or energy year designation that corresponds to the specified vintage of the expiring contract. |
| Registry | PJM-EIS Generation Attribute Tracking System (PJM GATS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 22,500 lots, Single Month Accountability Level: 22,500 lots, All Month Accountability Level: 22,500 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Maryland Compliance Renewable Energy Certificate Tier 1 Vintage 2018
Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered Maryland Tier 1 Renewable Energy Certificate (“Maryland Tier 1 REC”) where a REC is an electronic certificate issued by PJM GATS for qualifying generation. |
| Contract Code | MDB |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 100 MWh representing 100 qualifying Tier 1 RECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | February of the year following the vintage year, plus one additional February. The exchange may list any other calendar month contract set off the standard listing cycle for up to 10 years. |
| Deliverable Product | Maryland Tier 1 RECs eligible for delivery are those which are eligible to meet the Tier 1 renewable energy requirement (as defined in the Maryland Renewable Energy Portfolio Standard promulgated under 7-701 of the Public Utilities Article of the Annotated Code of Maryland and issued by PJM GATS having a vintage or energy year designation that corresponds to the specified vintage of the expiring contract. |
| Registry | M-EIS Generation Attribute Tracking System (PJM GATS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 22,500 lots, Single Month Accountability Level: 22,500 lots, All Month Accountability Level: 22,500 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Maryland Solar Renewable Energy Certificate Vintage 2017 Future

| ITEM | SPECIFICATION |
|--------------------------------------|---|
| Contract Description | Physically delivered Maryland Solar Renewable Energy Credits (“Maryland SREC”) where a SREC is an electronic certificate issued by PJM GATS for qualifying generation. |
| Contract Code | MRA |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 10 MWh representing 10 Maryland SRECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contract for Feb. 19. The exchange may list any other calendar month contract set off the standard listing cycle for up to 10 years. |
| Deliverable Product | Maryland SRECs eligible for delivery are those representing solar photovoltaic sources eligible to meet the Solar Carve Out requirement of the Maryland Renewable Energy Portfolio Standard promulgated under 7-701 of the Public Utilities Article of the Annotated Code of Maryland and issued by PJM GATS having a Reporting Year designation that corresponds to the specified Energy Year of the expiring contract. |
| Registry | PJM-EIS Generation Attribute Tracking System (PJM GATS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tenders and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement Payment Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 12,000 lots, Single Month Accountability Level: 12,000 lots, All Month Accountability Level: 12,000 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Maryland Solar Renewable Energy Certificate Vintage 2018 Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered Maryland Solar Renewable Energy Credits (“Maryland SREC”) where a SREC is an electronic certificate issued by PJM GATS for qualifying generation. |
| Contract Code | MRB |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 10 MWh representing 10 Maryland SRECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts for Nov 18-Feb 19, Feb 20. Exchange may list any other calendar month contract set off the standard listing cycle for up to 10 years. |
| Deliverable Product | Maryland SRECs eligible for delivery, i.e. those representing solar photovoltaic sources eligible to meet the Solar Carry Out requirement of the Maryland Renewable Energy Portfolio Standard promulgated under 7-701 of the Public Utilities Article of the Annotated Code of Maryland and issued by PJM GATS having a Reporting Year designation that corresponds to the specified Energy Year of the expiring contract. |
| Registry | PJM-EIS Generation Attribute Tracking System (PJM GATS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to untraded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 12,000 lots, Single Month Accountability Level: 12,000 lots, All Month Accountability Level: 12,000 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Massachusetts Solar Renewable Energy Certificate Vintage 2017 Future

| ITEM | SPECIFICATION |
|--|--|
| Contract Description | Physically delivered Massachusetts Solar Renewable Energy Certificates ("Massachusetts SREC") where an SREC is an electronic certificate issued by NEPOOLGIS for qualifying generation. |
| Contract Code | MSA |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 10 MWh representing 10 Qualifying SRECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts for Nov 18, May 19. The exchange may list any other calendar month contract set off the standard listing cycle for up to 10 years. |
| Deliverable Product | Massachusetts SRECs eligible for delivery are those representing solar renewable energy (defined in Massachusetts General Law c.25A, 11F(c)) eligible to meet the RPS Solar Carve Out Program (SREC I) requirement of the Renewable Energy Portfolio Standard promulgated under Massachusetts General Law c.25A 11F and issued by NEPOOL GIS having a vintage year designation that corresponds to the specified vintage of the expiring contract. |
| Registry | New England Power Pool Generation Information System (NEPOOL GIS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to trade contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information to the Participants with delivery obligations for the purpose of issuing order and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 10,000 lots, Single Month Accountability Level: 10,000 lots, All Month Accountability Level: 10,000 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

New Jersey Compliance Renewable Energy Certificate Class 1 Vintage 2017 Future

| ITEM | SPECIFICATION |
|--|--|
| Contract Description | Physically delivered New Jersey Class 1 Renewable Energy Certificates ("New Jersey Class 1 REC") where a REC is an electronic certificate issued by the PJM Environmental Information System Generation Attribute Tracking System ("PJM GATS") for qualifying generation. |
| Contract Code | NJA |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 100 MWh representing 100 New Jersey Class 1 RECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts for Jun 19, Jul 19, Aug 19. The exchange may list any other calendar month contract set off the standard listing cycle for up to 10 years. |
| Deliverable Product | New Jersey Class 1 RECs eligible for delivery and those which are eligible to meet the Class 1 Renewable Energy minimum requirements specified in N.J.A.C. 14:8-2-3 under the New Jersey Renewable Energy Production Standard promulgated under N.J.A.C. 14:8 verified and qualified by the NJ Board of Public Utilities having a vintage or energy year designation that corresponds to the specified vintage of the expiring contract. |
| Registry | PJM-Environmental Attribute Tracking System (PJM GATS) |
| Daily Settlement Price | Determined by the exchange based on exchange activity, other market data, and extrapolation of traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 47,500 lots, Single Month Accountability Level: 47,500 lots, All Month Accountability Level: 47,500 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

New Jersey Compliance Renewable Energy Certificate Class 1 Vintage 2018

Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered New Jersey Class 1 Renewable Energy Certificates ("New Jersey Class 1 REC") where a REC is an electronic certificate issued by the PJM Environmental Information System Generation Attribute Tracking System ("PJM GATS") for qualifying generation. |
| Contract Code | NJB |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 100 MWh representing 100 New Jersey Class 1 RECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last business day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts for Jun 19, Jul 19, Aug 19, Jun 20, Jul 20, Aug 20. The exchange may list any other calendar month contract set off the standard listing cycle for up to 10 years. |
| Deliverable Product | New Jersey Class 1 RECs eligible for delivery are those which are eligible to meet the Class 1 Renewable Energy minimum requirements specified in N.J.A.C. 14:8-2-3 under the New Jersey Renewable Energy Portfolio Standard promulgated under N.J.A.C. 14:8-2-3 and verified and qualified by the NJ Board of Public Utilities having a vintage or energy year designation that corresponds to the specified vintage of the expiring contract. |
| Registry | PJM-EIS Generation Attribute Tracking System (PJM GATS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 47,500 lots, Single Month Accountability Level: 47,500 lots, All Month Accountability Level: 47,500 lots |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

| ITEM | SPECIFICATION |
|-------------|---------------|
| Margin Unit | US Dollars |

DELISTED

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Cross State Air Pollution Rule TR NOx Annual Allowance Vintage 2018 Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered EPA Cross State Air Pollution (“CSAPR”) TR NOx Annual Trading Program Allowances (“U.S. EPA CSAPR TR NOx Annual Allowances”). |
| Contract Code | NOB |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 25 U.S. EPA CSAPR TR NOx Annual Allowances |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per U.S. EPA CSAPR TR NOx Annual Allowance |
| Settlement Price Precision | \$0.01 per U.S. EPA CSAPR TR NOx Annual Allowance |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | December of the year, plus one additional December. The exchange may list any other calendar month contract set off the standard listing cycle for up to 10 years. |
| Deliverable Product | Allowances acceptable for delivery are those designated as U.S. EPA CSAPR TR NOx Annual Allowances as promulgated under CSAPR having a vintage corresponding to the specific vintage of the expiring contract. |
| Registry | Clear Air Markets Division Allowance Management System (CAMD AMS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 6,000 lots, Single Month Accountability Level: 6,000 lots, All Month Accountability Level: 6,000 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

NEPOOL Dual Qualified Renewable Energy Certificate Class 1 Vintage 2017

Future

| ITEM | SPECIFICATION |
|-----------------------------------|--|
| Contract Description | Physically delivered Class 1 Renewable Energy Certificates (“Class 1 RECs”) where a REC is an electronic certificate issued by the NEPOOL GIS system for generation simultaneously qualifying for the Massachusetts Class 1 and Connecticut Class 1 portions of the Renewable Portfolio Standard programs. |
| Contract Code | NPA |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 100 MWh representing 100 qualifying Class 1 RECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contract for May 19. The exchange may issue any other calendar month contract set off the standard listing cycle for up to 10 years. |
| Deliverable Product | RECs eligible for delivery are those that simultaneously qualify in Massachusetts and Connecticut as specified. Massachusetts Class 1 RECs eligible for delivery are those representing Class 1 renewable energy (defined in Massachusetts General Law c.25A, 11F(c)) eligible to meet the Class 1 requirement of the Renewable Energy Portfolio Standard promulgated under Massachusetts General Law c.25A 11F and issued by NEPOOL GIS having a vintage or energy year designation that corresponds to the specified vintage of the expiring contract Connecticut Class 1 RECs eligible for delivery are those representing Class 1 renewable energy (defined in General Statutes of Connecticut, Title 16, c. 277, §16-1(20)) eligible to meet Class 1 requirement of the Renewable Energy Portfolio Standard promulgated under General Statutes of Connecticut (Title 16, c. 283, §16-245a) and issued by NEPOOL GIS having a vintage or energy year designation that corresponds to the specified vintage of the expiring contract. |
| Registry | New England Power Pool Generation Information System (NEPOOL GIS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

| ITEM | SPECIFICATION |
|--|---|
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 15,000 lots, Single Month Accountability Level: 15,000 lots, All Month Accountability Level: 15,000 lots |
| Margin Unit | US Dollars |

DELISTED

NODAL EXCHANGE CONTRACT SPECIFICATIONS

New Jersey Solar Renewable Energy Certificate Vintage 2017 Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered New Jersey Solar Renewable Energy Certificates ("New Jersey SREC") where a SREC is an electronic certificate issued by the PJM Environmental Information System Generation Attribute Tracking System ("PJM GATS") for qualifying generation. |
| Contract Code | NSA |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 10 MWh representing 10 New Jersey SRECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the first Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts for Nov 18-Aug 19. The exchange may list any other calendar month contract set off the standard listing cycle for up to 4 years. |
| Deliverable Product | New Jersey SRECs eligible for delivery are those which are eligible to meet the SREC requirements specified in N.J.A.C. 14:8-2-3 under the New Jersey Renewable Energy Portfolio Standard promulgated under N.J.A.C. 14:8 verified and qualified by the NJ Board of Public Utilities having an Energy Year designation that corresponds to the specified Energy Year of the expiring contract. |
| Registry | PJM-EIS Generation Attribute Tracking System (PJM GATS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 45,000 lots, Single Month Accountability Level: 45,000 lots, All Month Accountability Level: 45,000 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

New Jersey Solar Renewable Energy Certificate Vintage 2018 Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered New Jersey Solar Renewable Energy Certificates (“New Jersey SREC”) where a SREC is an electronic certificate issued by the PJM Environmental Information System Generation Attribute Tracking System (“PJM GATS”) for qualifying generation. |
| Contract Code | NSB |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 10 MWh representing 10 New Jersey SRECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts for Nov 18-Apr 19. The exchange may list any other calendar month contract in the standard listing cycle for up to 4 years. |
| Deliverable Product | New Jersey SRECs eligible for delivery are those which are eligible to meet the SREC requirements specified in N.J.A.C. 14:8-2-3 under the New Jersey Renewable Energy Portfolio Standard promulgated under N.J.A.C. 14:8 verified and qualified by the NJ Board of Public Utilities having an Energy Year designation that corresponds to the specific Energy Year of the expiring contract. |
| Registry | PJM EIS Generation Attribute Tracking System (PJM GATS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 45,000 lots, Single Month Accountability Level: 45,000 lots, All Month Accountability Level: 45,000 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

**Cross State Air Pollution Rule NOX Ozone Season Group 2 Allowance Vintage
2018 Future**

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered EPA Cross State Air Pollution Rule ("CSAPR") Group 2 NOx Ozone Season Trading Program Allowances ("U.S. EPA CSAPR Group 2 NOx Ozone Season Trading Program Allowance"). |
| Contract Code | NZB |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 25 U.S. EPA CSAPR Group 2 NOx Ozone Season Allowances |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per U.S. EPA Group 2 NOx Ozone Season Allowance |
| Settlement Price Precision | \$0.01 per U.S. EPA Group 2 NOx Ozone Season Allowance |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | December of the vintage year, plus one additional December. The exchange may list any other calendar month contract set off the standard listing cycle for up to 10 years. |
| Deliverable Product | Allowances acceptable for delivery are those designated as U.S. EPA CSAPR Group 2 NOx Ozone Season Trading Program Allowances as promulgated under the CSAPR Update having a vintage corresponding to the specified vintage of the expiring contract. |
| Registry | Clean Air Markets Division Allowance Management System (CAMD AMS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 4,000 lots, Single Month Accountability Level: 4,000 lots, All Month Accountability Level: 4,000 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2017

Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier 1 AEC") where an AEC is an electronic certificate issued by PJM GATS for qualifying generation. |
| Contract Code | PAA |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 100 MWh representing 100 qualifying Tier 1 AECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts for Jun, Jul, and Aug of 2019. The exchange may list any other calendar month contract set off the standard listing cycle for up to 10 years. |
| Deliverable Product | Pennsylvania Tier 1 AECs eligible for delivery are those which are eligible to meet the Tier 1 renewable energy requirement in the state of Pennsylvania. The requirements are specified in Pennsylvania Statutes Title 73 Chapter 18F and issued by PJM GATS having a vintage or energy year designation that corresponds to the specified vintage of the expiring contract. |
| Registry | PJM-EIS Generation Attribute Tracking System (PJM GATS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 22,500 lots, Single Month Accountability Level: 22,500 lots, All Month Accountability Level: 22,500 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2018
Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier 1 AEC") where an AEC is an electronic certificate issued by PJM GATS for qualifying generation. |
| Contract Code | PAB |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 100 MWh representing 100 qualifying Tier 1 AECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts for Jun, Jul, and Aug of 2019 and 2020. The exchange may list any other calendar month contract series on the standard listing cycle for up to 10 years. |
| Deliverable Product | Pennsylvania Tier 1 AECs eligible for delivery and those which are eligible to meet the Tier 1 renewable energy requirement in the state of Pennsylvania. The requirements are specified in Pennsylvania Statute Title 73 Chapter 18F and issued by PJM GATS having a vintage or energy year designation that corresponds to the specified vintage of the expiring contract. |
| Registry | PJM-EIS General Attribute Tracking System (PJM GATS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 22,500 lots, Single Month Accountability Level: 22,500 lots, All Month Accountability Level: 22,500 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

PJM Tri-Qualified Renewable Energy Certificates Class 1 Vintage 2017 Future

| ITEM | SPECIFICATION |
|-----------------------------------|--|
| Contract Description | Physically delivered Class 1 and Tier 1 Renewable Energy Certificates (“Class 1 RECs”) where a REC is an electronic certificate issued by the PJM Environmental Information System Generation Attribute Tracking System (“PJM GATS”) for generation simultaneously qualifying for the Pennsylvania, New Jersey and Maryland Class 1 portions of the Renewable Portfolio Standard programs. |
| Contract Code | PMA |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 100 MWh representing 100 Qualifying Class 1 RECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts for Nov-18-Sep-19. The exchange may list any other calendar month contract set off the standard listing cycle for up to 10 years. |
| Deliverable Product | Class 1 RECs eligible for delivery are those which are eligible to meet the Class 1 requirements in each of the states of Pennsylvania, New Jersey and Maryland where; the Pennsylvania requirements are specified in Pennsylvania Statutes Title 73 Chapter 18F; the New Jersey requirements are specified in N.J.A.C. 14:8-2-3; and the Maryland requirements are specified in Maryland Annotated Code, Public Utility Companies Article, § 7-701 – 7-713 and in the Code of Maryland Regulations as implemented through Title 20, Subtitle 61. Class 1 RECs acceptable for delivery are those having a vintage year designation that corresponds to the specified vintage year of the expiring contract. Applicable to the Maryland vintage-year designation only and only for the expiry months of January through July, sellers have the option to deliver a vintage designation that corresponds to the specified vintage year of the expiring contract or one that is one year earlier. |
| Registry | PJM-EIS Generation Attribute Tracking System (PJM GATS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

| ITEM | SPECIFICATION |
|--|--|
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle, which will be the next Business Day) |
| Position Limit | Spot Month: 42,500 lots, Single Month Accountability Level: 42,500 lots, All Month Accountability Level: 42,500 lots |
| Margin Unit | US Dollars |

DELISTED

NODAL EXCHANGE CONTRACT SPECIFICATIONS

PJM Tri-Qualified Renewable Energy Certificates Class 1 Vintage 2018 Future

| ITEM | SPECIFICATION |
|-----------------------------------|---|
| Contract Description | Physically delivered Class 1 and Tier 1 Renewable Energy Certificates (“Class 1 RECs”) where a REC is an electronic certificate issued by the PJM Environmental Information System Generation Attribute Tracking System (“PJM GATS”) for generation simultaneously qualifying for the Pennsylvania, New Jersey and Maryland Class 1 portions of the Renewable Portfolio Standard programs. |
| Contract Code | PMB |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 100 MWh representing 100 Qualifying Class 1 RECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts for 18-Sep-2018. The exchange may list any other calendar month contract set off the standard trading cycle for up to 10 years. |
| Deliverable Product | Class 1 RECs eligible for delivery are those which are eligible to meet the Class 1 requirements of the states of Pennsylvania, New Jersey and Maryland where; the Pennsylvania requirements are specified in Pennsylvania Statutes Title 73 Chapter 73; the New Jersey requirements are specified in N.J.A.C. 14:8-2-3; and the Maryland requirements are specified in Maryland Annotated Code, Public Utility Companies Article, § 7-701 – 7-713 and in the Code of Maryland Regulations as implemented through Title 20, Subtitle 61. Class 1 RECs acceptable for delivery are those having a vintage year designation that corresponds to the specified vintage year of the expiring contract. Applicable to the Maryland vintage-year designation only and only for the expiry months of January through July, sellers have the option to deliver a vintage designation that corresponds to the specified vintage year of the expiring contract or one that is one year earlier. |
| Registry | PJM-EIS Generation Attribute Tracking System (PJM GATS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

| ITEM | SPECIFICATION |
|--|---|
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 42,500 lots, Single Month Accountability Level: 42,500 lots, All Month Accountability Level: 42,500 lots |
| Margin Unit | US Dollars |

DELISTED

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Pennsylvania Solar Alternative Energy Certificate Vintage 2017 Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered Pennsylvania Solar Alternative Energy Credit (“Pennsylvania Solar AEC”) where a Solar AEC is an electronic certificate issued by PJM GATS for qualifying generation. |
| Contract Code | PSA |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 10 MWh representing 10 qualifying SAECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts for Jun, July, and Aug of 2019. The exchange may list any other calendar months to set off the standard listing cycle for up to 10 years. |
| Deliverable Product | Pennsylvania Solar AEC eligible for delivery are those representing solar photovoltaic sources eligible to meet the Tier 1 Alternative Energy Credit requirement of the Alternative Energy Portfolio Standard promulgated under Pennsylvania 2004 Act 213P.L. 1672 No. 213 and issued by PJM GATS having an Energy Year designation that corresponds to the specified Energy Year of the expiring contract. |
| Registry | PJM-EIS Generation Attribute Tracking System (PJM GATS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 10,000 lots, Single Month Accountability Level: 10,000 lots, All Month Accountability Level: 10,000 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Pennsylvania Solar Alternative Energy Certificate Vintage 2018 Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered Pennsylvania Solar Alternative Energy Credit (“Pennsylvania Solar AEC”) where a Solar AEC is an electronic certificate issued by PJM GATS for qualifying generation. |
| Contract Code | PSB |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 10 MWh representing 10 qualifying SAECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts for Jun, Jul, and Aug of 2019 and 2020. The exchange may list any other calendar month contract series of the standard listing cycle for up to 10 years. |
| Deliverable Product | Pennsylvania Solar AECs eligible for delivery are those representing solar photovoltaic sources eligible to meet the Tier 1 Alternative Energy Credit requirements of the Alternative Energy Portfolio Standard promulgated under Pennsylvania Act 2013-P.L. 1672 No. 213 and issued by PJM GATS having an Energy Year designation that corresponds to the specified Energy Year of the expiring contract. |
| Registry | M-EIS Generation Attribute Tracking System (PJM GATS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 10,000 lots, Single Month Accountability Level: 10,000 lots, All Month Accountability Level: 10,000 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Connecticut Compliance Renewable Energy Certificate Class 1 Vintage 2017
Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered Connecticut Class 1 Renewable Energy Certificates (“Connecticut Class 1 REC”) where a Connecticut Class 1 REC is an electronic certificate issued by the NEPOOL GIS for qualifying generation. |
| Contract Code | RCA |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 100 MWh representing 100 Connecticut Class 1 RECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contract for day 19. The exchange may list any other calendar month contract off the standard listing cycle for up to 10 years. |
| Deliverable Product | Connecticut Class 1 RECs eligible for delivery are those representing Class 1 Renewable energy (defined in General Statutes of Connecticut, Title 16, c. 277, §16-100) eligible to meet Class I requirement of the Renewable Energy Portfolio Standard promulgated under General Statutes of Connecticut (Title 16, c. 283, §16-15a) and issued by NEPOOL GIS having a vintage or energy year designation that corresponds to the specified vintage of the expiring contract. |
| Registry | New England Power Pool Generation Information System (NEPOOL GIS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 17,500 lots, Single Month Accountability Level: 17,500 lots, All Month Accountability Level: 17,500 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Cross State Air Pollution Rule TR SO2 Group 1 Allowance Vintage 2018 Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered EPA Cross State Air Pollution (“CSAPR”) TR SO2 Group 1 Trading Program Allowances (“U.S. EPA CSAPR TR SO2 Group 1 Trading Program Allowance”). |
| Contract Code | S1B |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 25 U.S. EPA CSAPR TR SO2 Group 1 Trading Program Allowances |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per U.S. EPA CSAPR TR SO2 Group 1 Trading Program Allowance |
| Settlement Price Precision | \$0.01 per U.S. EPA CSAPR TR SO2 Group 1 Trading Program Allowance |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | December of the vintage year, plus one additional December. The exchange may list any other calendar month contract set off the standard listing cycle for up to 10 years. |
| Deliverable Product | Allowances acceptable for delivery are those designated as U.S. EPA CSAPR TR SO2 Group 1 Trading Program Allowances as promulgated under CSAPR having a vintage corresponding to the specified vintage of the expiring contract. |
| Registry | Clean Air Markets Division Allowance Management System (CAMD AMS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 10,000 lots, Single Month Accountability Level: 10,000 lots, All Month Accountability Level: 10,000 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Cross State Air Pollution Rule TR SO2 Group 2 Allowance Vintage 2018 Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered EPA Cross State Air Pollution (“CSAPR”) TR SO2 Group 2 Trading Program Allowances (“U.S. EPA CSAPR TR SO2 Group 1 Trading Program Allowance”). |
| Contract Code | S2B |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 25 U.S. EPA CSAPR TR SO2 Group 2 Trading Program Allowances |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per U.S. EPA CSAPR TR SO2 Group 2 Trading Program Allowance |
| Settlement Price Precision | \$0.01 per U.S. EPA CSAPR TR SO2 Group 2 Trading Program Allowance |
| Last Trading Day | Three Business Days prior to the first Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | December of the vintage year plus one additional December. The exchange may list any other calendar month contract set off the standard listing cycle for up to 10 years. |
| Deliverable Product | Allowances acceptable for delivery are those designated as U.S. EPA CSAPR TR SO2 Group 2 Trading Program Allowances as promulgated under CSAPR having a vintage corresponding to the specified vintage of the expiring contract. |
| Registry | Clear Air Markets Division Allowance Management System (CAMD AMS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 5,000 lots, Single Month Accountability Level: 5,000 lots, All Month Accountability Level: 5,000 lots |
| Margin Unit | US Dollars |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

New Jersey Compliance Renewable Energy Certificate Class 2 Vintage 2020 Future

| ITEM | SPECIFICATION |
|--|---|
| Contract Description | Physically delivered New Jersey Class 2 Renewable Energy Certificates (“New Jersey Class 2 REC”) where a REC is an electronic certificate issued by the PJM Environmental Information System Generation Attribute Tracking System (PJM GATS) for qualifying generation. |
| Contract Code | SGD |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 100 MWh representing 100 New Jersey Class 2 RECs |
| Currency | US Dollars |
| Minimum Tick | \$0.01 per MWh |
| Settlement Price Precision | \$0.01 per MWh |
| Last Trading Day | Three Business Days prior to the last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts for Jun, Jul, and Aug of the trading year. The exchange may list any other calendar month contract set on the standard listing cycle. |
| Deliverable Product | New Jersey Class 2 RECs eligible for delivery are those which are eligible to meet the Class II Renewable Energy requirements specified in N.J.A.C. 14:8-2.6 under the New Jersey Renewable Energy Portfolio Standard promulgated under N.J.A.C. 14:8 verified and qualified by the NJ Board of Public Utilities having a vintage or energy year designation that corresponds to the specified vintage of the expiring contract. For deliveries of Class II RECs generated from a resource recovery facility located outside of the State of New Jersey, the seller must also deliver the Class II Renewable Energy Certificate from. |
| Registry | PJM-EIS Generation Attribute Tracking System (PJM GATS) |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 7500 lots, Single Month Accountability Level: 7500 lots, All Month Accountability Level: 7500 lots |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

| ITEM | SPECIFICATION |
|-------------|---------------|
| Margin Unit | US Dollars |

DELISTED

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Texas Compliance Green-e Eligible Renewable Energy Certificate Specific Vintage 2018 Back Half Future

| ITEM | SPECIFICATION |
|-----------------------------------|--|
| Contract Description | Physically delivered Texas Compliance Green-e® eligible Renewable Energy Certificates (REC) where a Texas Compliance Green-e® eligible REC is an electronic certificate issued by the ERCOT Renewables Registry for qualifying wind energy production. |
| Contract Code | TBB |
| Settlement Method | Physical Delivery |
| Hours of Trading | As defined at http://www.nodalexchange.com |
| Unit of Trading | 1 lot |
| Lot Size | 1,000 MWh representing 1,000 Texas Green-e® eligible RECs |
| Currency | US Dollars |
| Minimum Tick | \$0.001 per MWh |
| Settlement Price Precision | \$0.001 per MWh |
| Last Trading Day | Three Business Days prior to the Last Business Day of the delivery month |
| Delivery Day | Three Business Days after the Last Trading Day (Last Business Day of the delivery month) |
| Contract Series | Monthly contracts beginning in December of the corresponding vintage year through December of the year following the vintage year. The exchange may list any other calendar month contract set off the standard listing cycle. |
| Deliverable Product | Texas RECs eligible for delivery are those which are eligible to meet the REC requirements specified in the Public Utility Commission of Texas Substantive Rule Chapter 161, Subchapter H, Division 1 under the renewable energy trading program, have been generated from wind energy production technology. REC Offsets are not deliverable. RECs delivered must be from facilities that have a Tracking Attestation form on file with the Center for Resource Solutions ("CRS"), in connection with CRS's administration of its Green-e® certification programs. The Tracking Attestation form must cover the generation period of the RECs. Maintenance of an active Tracking Attestation form does not guarantee that a facility meets the requirements of any Green-e® renewable energy standards and does not mean that a facility's supply is Green-e® Certified. The Green-e® name and symbol are a registered trademark owned and administered by Center for Resource Solutions (CRS). For more information about Tracking Attestation forms and Green-e® certification, please visit the Green-e® website at www.green-e.org . To confirm that a facility has an active Tracking Attestation form on file, please contact the Center for Resource Solutions at verification@green-e.org . For contracts which are designated as Back Half or BH, RECs acceptable for delivery are those that were issued for generation occurring in the last six calendar months of the specified vintage year. |
| Registry | ERCOT Renewables Registry |
| Daily Settlement Price | Determined by the Exchange based on exchange activity, other market data, and extrapolation to traded contracts, as appropriate |
| Final Settlement Price | The Daily Settlement Price on the Last Trading Day |

NODAL EXCHANGE CONTRACT SPECIFICATIONS

| ITEM | SPECIFICATION |
|--|---|
| Delivery | On the Last Trading Day, the Exchange will provide the Clearing House with information identifying the Participants with delivery obligations for the purpose of issuing Tender and invoice notices in accordance with Section IX (Physical Delivery and Settlement) of the Nodal Clear Rulebook. |
| Final Settlement (Payment) Date | Three or four Business Days after the Last Trading Day on the successful delivery of the underlying instruments (if the delivery confirmation is available by 11:30am on the third Business Day after the Last Trading Day, the payment will be made on the same day during the Midday Margin Cycle; if it is available after 11:30am, the payment will be made on the next Margin Cycle which will be the next Business Day) |
| Position Limit | Spot Month: 9200 lots, Single Month Accountability Level: 9200 lots, All Month Accountability Level: 9200 lots |
| Margin Unit | US Dollars |

DELISTED

NODAL EXCHANGE CONTRACT SPECIFICATIONS