Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2021 <u>Future</u>

| ITEM | SPECIFICATION |
|----------------------------|--|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier I AEC") where an AEC is an electronic certificate issued by PJM GATS for qualifying generation. |
| Contract Code | PAE |
| 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 the vintage year, plus two additional years. 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 Statues 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. |

| 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 | https://www.nodalexchange.com/files/autogenerated/Nodal_Rulebook_Appendix_ C-Limits_and_Levels.PDF |
| Margin Unit | US Dollars |

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2022 <u>Future</u>

| ITEM | SPECIFICATION |
|----------------------------|--|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier I AEC") where an AEC is an electronic certificate issued by PJM GATS for qualifying generation. |
| Contract Code | PAF |
| 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 the vintage year, plus two additional years. 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 Statues 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. |

| 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 | https://www.nodalexchange.com/files/autogenerated/Nodal_Rulebook_Appendix_ C-Limits_and_Levels.PDF |
| Margin Unit | US Dollars |

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2023 <u>Future</u>

| ITEM | SPECIFICATION |
|----------------------------|--|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier I AEC") where an AEC is an electronic certificate issued by PJM GATS for qualifying generation. |
| Contract Code | PAG |
| 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 the vintage year, plus two additional years. 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 Statues 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. |

| 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 | https://www.nodalexchange.com/files/autogenerated/Nodal_Rulebook_Appendix_ C-Limits_and_Levels.PDF |
| Margin Unit | US Dollars |

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2024 <u>Future</u>

| ITEM | SPECIFICATION |
|----------------------------|--|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier I AEC") where an AEC is an electronic certificate issued by PJM GATS for qualifying generation. |
| Contract Code | PAH |
| 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 the vintage year, plus two additional years. 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 Statues 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. |

| 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 | https://www.nodalexchange.com/files/autogenerated/Nodal_Rulebook_Appendix_ C-Limits_and_Levels.PDF |
| Margin Unit | US Dollars |

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2025 <u>Future</u>

| ITEM | SPECIFICATION |
|----------------------------|--|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier I AEC") where an AEC is an electronic certificate issued by PJM GATS for qualifying generation. |
| Contract Code | PAI |
| 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 the vintage year, plus two additional years. 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 Statues 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. |

| 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 | https://www.nodalexchange.com/files/autogenerated/Nodal_Rulebook_Appendix_ C-Limits_and_Levels.PDF |
| Margin Unit | US Dollars |

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2026 <u>Future</u>

| ITEM | SPECIFICATION |
|----------------------------|--|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier I AEC") where an AEC is an electronic certificate issued by PJMGATS for qualifying generation. |
| Contract Code | PAJ |
| 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 the vintage year, plus two additional years. 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 Statues 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. |

| 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 | https://www.nodalexchange.com/files/autogenerated/Nodal_Rulebook_Appendix_ C-Limits_and_Levels.PDF |
| Margin Unit | US Dollars |

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2027 <u>Future</u>

| ITEM | SPECIFICATION |
|----------------------------|--|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier I AEC") where an AEC is an electronic certificate issued by PJMGATS for qualifying generation. |
| Contract Code | PAK |
| 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 the vintage year, plus two additional years. 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 Statues 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. |

| 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 | https://www.nodalexchange.com/files/autogenerated/Nodal_Rulebook_Appendix_ C-Limits_and_Levels.PDF |
| Margin Unit | US Dollars |

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2028 <u>Future</u>

| ITEM | SPECIFICATION |
|----------------------------|--|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier I AEC") where an AEC is an electronic certificate issued by PJMGATS for qualifying generation. |
| Contract Code | PAL |
| 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 the vintage year, plus two additional years. 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 Statues 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. |

| 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 | https://www.nodalexchange.com/files/autogenerated/Nodal_Rulebook_Appendix_ C-Limits_and_Levels.PDF |
| Margin Unit | US Dollars |

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2029 <u>Future</u>

| ITEM | SPECIFICATION |
|----------------------------|--|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier I AEC") where an AEC is an electronic certificate issued by PJM GATS for qualifying generation. |
| Contract Code | PAM |
| 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 the vintage year, plus two additional years. 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 Statues 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. |

| 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 | https://www.nodalexchange.com/files/autogenerated/Nodal_Rulebook_Appendix_ C-Limits_and_Levels.PDF |
| Margin Unit | US Dollars |

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2030 <u>Future</u>

| ITEM | SPECIFICATION |
|----------------------------|--|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier I AEC") where an AEC is an electronic certificate issued by PJMGATS for qualifying generation. |
| Contract Code | PAN |
| 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 the vintage year, plus two additional years. 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 Statues 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. |

| 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 | https://www.nodalexchange.com/files/autogenerated/Nodal_Rulebook_Appendix_ C-Limits_and_Levels.PDF |
| Margin Unit | US Dollars |

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2031 <u>Future</u>

| ITEM | SPECIFICATION |
|----------------------------|--|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier I AEC") where an AEC is an electronic certificate issued by PJMGATS for qualifying generation. |
| Contract Code | PAO |
| 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 the vintage year, plus two additional years. 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 Statues 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. |

| 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 | https://www.nodalexchange.com/files/autogenerated/Nodal_Rulebook_Appendix_ C-Limits_and_Levels.PDF |
| Margin Unit | US Dollars |

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2032 <u>Future</u>

| ITEM | SPECIFICATION |
|----------------------------|--|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier I AEC") where an AEC is an electronic certificate issued by PJMGATS for qualifying generation. |
| Contract Code | PAP |
| 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 the vintage year, plus two additional years. 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 Statues 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. |

| 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 | https://www.nodalexchange.com/files/autogenerated/Nodal_Rulebook_Appendix_ C-Limits_and_Levels.PDF |
| Margin Unit | US Dollars |

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2033 <u>Future</u>

| ITEM | SPECIFICATION |
|----------------------------|--|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier I AEC") where an AEC is an electronic certificate issued by PJMGATS for qualifying generation. |
| Contract Code | PAQ |
| 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 the vintage year, plus two additional years. 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 Statues 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. |

| 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 | https://www.nodalexchange.com/files/autogenerated/Nodal_Rulebook_Appendix_ C-Limits_and_Levels.PDF |
| Margin Unit | US Dollars |

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2034 <u>Future</u>

| ITEM | SPECIFICATION |
|----------------------------|--|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier I AEC") where an AEC is an electronic certificate issued by PJMGATS for qualifying generation. |
| Contract Code | PAR |
| 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 the vintage year, plus two additional years. 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 Statues 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. |

| 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 | https://www.nodalexchange.com/files/autogenerated/Nodal_Rulebook_Appendix_ C-Limits_and_Levels.PDF |
| Margin Unit | US Dollars |

Pennsylvania Compliance Alternative Energy Certificate Tier 1 Vintage 2035 <u>Future</u>

| ITEM | SPECIFICATION |
|----------------------------|--|
| Contract Description | Physically delivered Pennsylvania Tier 1 Alternative Energy Certificates ("Pennsylvania Tier I AEC") where an AEC is an electronic certificate issued by PJMGATS for qualifying generation. |
| Contract Code | PAS |
| 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 the vintage year, plus two additional years. 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 Statues 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. |

| 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 | https://www.nodalexchange.com/files/autogenerated/Nodal_Rulebook_Appendix_ C-Limits_and_Levels.PDF |
| Margin Unit | US Dollars |