



**Exhibit A:
May 1, 2017 Update to Nodal Exchange Contract
Specifications**

NODAL EXCHANGE CONTRACT SPECIFICATIONS

Henry Hub Monthly Natural Gas Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Natural Gas Financial Contract, Henry Hub
Contract Code	FRI
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot
Lot Size	2,500 MMBtu per month
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MMBtu
Minimum Tick	\$0.0001 per MMBtu
First Trading Day	The second to last business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. For example, when the Exchange is supporting 68 monthly contracts per contract series, the July 2017 contract would start trading on Oct 28th, 2011, which is the same day the Nov 2011 contract would no longer be traded. The second to last business day of May or December. In May, the new expiries in the 11th planning year (January – May) are available for trading; in December, the new expiries in the 11th calendar year (June – December) are available for trading.
Last Trading Day	The third business day prior to the first calendar day of the contract month
Contract Series	68 months-Current calendar/planning year plus 10 full calendar or planning years
Fixed Price	The traded price or the previous day's settlement price
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 Final Settlement Price will be a price in US Dollars per MMBtu equal to the monthly last settlement price for natural gas as published by the CME Group's New York Mercantile Exchange (NYMEX) for the month of production. Should the NYMEX monthly last settlement price be unavailable, the Final Settlement Price will be equal to the final settlement price of the Intercontinental Exchange (ICE) Henry Financial LD1 Fixed Price contract as published by ICE for the month.
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	4,000 Lots
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

NWPP MID-COLUMBIA Monthly Day Ahead On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, NWPP MID-COLUMBIA, Day Ahead
Contract Code	LMQ
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0700 – 2200 Monday through Saturday, Pacific Prevailing Time (PPT), excluding NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	Up to 69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price for each contract month shall be equal to the final settlement price for the Mid-Columbia Day-Ahead Peak Fixed Price Future (Contract Symbol: MDC), as reported by the Intercontinental Exchange (ICE Futures U.S.).
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	2381 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

NWPP MID-COLUMBIA Monthly Day Ahead Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, NWPP MID-COLUMBIA, Day Ahead
Contract Code	LMR
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0600 and HE 2300 – 2400, Monday through Saturday, PPT and all hours for Sunday and all NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	Up to 69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price for each contract month shall be equal to the final settlement price for the Mid-Columbia Day-Ahead Off-Peak Fixed Price Future (Contract Symbol: OMC), as reported by the Intercontinental Exchange (ICE Futures U.S.).
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	2109 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

CAISO TH_SP15_GEN-APND Monthly Day Ahead Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, CAISO TH_SP15_GEN-APND, Day Ahead
Contract Code	FQX
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0600 and HE 2300 – 2400, Monday through Saturday, PPT and all hours for Sunday and all NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LMP for all Off-Peak hours. These price files can be found at the following link or at successor location. <a href="http://oasis.caiso.com/mrtu-oasis/SingleZip?resultformat=6&queryname=PRC_LMP&market_run_id=DAM&grp_type=ALL&startdate=<yyyymmdd>&enddate=<yyyymmdd>">http://oasis.caiso.com/mrtu-oasis/SingleZip?resultformat=6&queryname=PRC_LMP&market_run_id=DAM&grp_type=ALL&startdate=<yyyymmdd>&enddate=<yyyymmdd>
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	6070 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

CAISO TH_SP15_GEN-APND Monthly Day Ahead On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, CAISO TH_SP15_GEN-APND, Day Ahead
Contract Code	FQW
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0700 – 2200 Monday through Saturday, Pacific Prevailing Time (PPT), excluding NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LMP for all On-Peak hours. These price files can be found at the following link or at successor location. <a href="http://oasis.caiso.com/mrtu-oasis/SingleZip?resultformat=6&queryname=PRC_LMP&market_run_id=DA M&grp_type=ALL&startdate=<yyyymmdd>&enddate=<yyyymmdd>">http://oasis.caiso.com/mrtu-oasis/SingleZip?resultformat=6&queryname=PRC_LMP&market_run_id=DA M&grp_type=ALL&startdate=<yyyymmdd>&enddate=<yyyymmdd>
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	6934 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

ERCOT HB NORTH Monthly Day Ahead Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, ERCOT HB_NORTH, Day Ahead
Contract Code	FVF
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0600 and HE 2300 – 2400, Monday through Friday, CPT and all hours for Saturday, Sunday, and all NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly Settlement Point Prices for all Off-Peak hours. These price files can be found at the following link or at successor location. http://mis.ercot.com/misapp/GetReports.do?reportTypeId=12331 ERCOT correction prices are found at a different location, and are currently posted at: http://mis.ercot.com/misapp/GetReports.do?reportTypeId=13044 (SPP file only)
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	6651 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

ERCOT HB NORTH Monthly Day Ahead On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, ERCOT HB_NORTH, Day Ahead
Contract Code	FVE
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0700 – 2200 Monday through Friday, Central Prevailing Time (CPT), excluding NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly Settlement Point Prices for all On-Peak hours. These price files can be found at the following link or at successor location. http://mis.ercot.com/misapp/GetReports.do?reportTypeId=12331 ERCOT correction prices are found at a different location, and are currently posted at: http://mis.ercot.com/misapp/GetReports.do?reportTypeId=13044 (SPP file only)
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	6982 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

ERCOT HB_NORTH Monthly Real Time Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, ERCOT HB_NORTH, Real Time
Contract Code	FOL
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0600 and HE 2300 – 2400, Monday through Friday, CPT and all hours for Saturday, Sunday, and all NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Real Time hourly 15-minute Settlement Point Prices for all Off-Peak hours. These price files can be found at the following link or at successor location. http://mis.ercot.com/misapp/GetReports.do?reportTypeId=12301 ERCOT correction prices are found at a different location, and are currently posted at: http://mis.ercot.com/misapp/GetReports.do?reportTypeId=13045 (SPP file only)
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	6651 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

ERCOT HB NORTH Monthly Real Time On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, ERCOT HB_NORTH, Real Time
Contract Code	FOK
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0700 – 2200 Monday through Friday, Central Prevailing Time (CPT), excluding NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Real Time hourly 15-minute Settlement Point Prices for all On-Peak hours. These price files can be found at the following link or at successor location. http://mis.ercot.com/misapp/GetReports.do?reportTypeId=12301 ERCOT correction prices are found at a different location, and are currently posted at: http://mis.ercot.com/misapp/GetReports.do?reportTypeId=13045 (SPP file only)
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	6982 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

ISONE .H.INTERNAL_HUB Monthly Day Ahead Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, ISONE .H.INTERNAL_HUB, Day Ahead
Contract Code	AAB
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0700 and HE 2400, Monday through Friday, EPT and all hours for Saturday, Sunday, and all NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LMP for all Off-Peak hours. These price files can be found at the following link or at successor location. <a href="http://www.iso-ne.com/histRpts/day-ahead-lmp/WW_DALMP_ISO_<yyyymmdd>.csv">http://www.iso-ne.com/histRpts/day-ahead-lmp/WW_DALMP_ISO_<yyyymmdd>.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	5695 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

ISONE .H.INTERNAL_HUB Monthly Day Ahead On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, ISONE .H.INTERNAL_HUB, Day Ahead
Contract Code	AAA
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0800 – 2300 Monday through Friday, Eastern Prevailing Time (EPT), excluding NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LMP for all On-Peak hours. These price files can be found at the following link or at successor location. <a href="http://www.iso-ne.com/histRpts/da-lmp/WW_DALMP_ISO_<yyyymmdd>.csv">http://www.iso-ne.com/histRpts/da-lmp/WW_DALMP_ISO_<yyyymmdd>.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	6834 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

MISO INDIANA.HUB Monthly Day Ahead Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, MISO INDIANA.HUB, Day Ahead
Contract Code	BFJ
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0600 and 2300-2400, Monday through Friday, EST, and all hours for Saturday, Sunday, and all NERC Holidays during Daylight Saving Time. No hours will be added or subtracted due to DST adjustments. For the rest of the year, Off-Peak
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly Ex Post LMP for all Off-Peak hours. These price files can be found at the following link or at successor location. <a href="https://www.misoenergy.org/Library/Repository/MarketReports/<yyyymmdd>_da_expost_lmp.csv">https://www.misoenergy.org/Library/Repository/MarketReports/<yyyymmdd>_da_expost_lmp.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	1680 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

MISO INDIANA.HUB Monthly Day Ahead On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, MISO INDIANA.HUB, Day Ahead
Contract Code	BFI
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0700 – 2200 Monday through Friday, EST, during Daylight Saving Time; for the rest of the year, On-Peak hours are 0800 – 2300, EST. All NERC Holidays are excluded.
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly Ex Post LMP for all On-Peak hours. These price files can be found at the following link or at successor location. <a href="https://www.misoenergy.org/Library/Repository/MarketReports/<yyyymmdd>_da_expost_lmp.csv">https://www.misoenergy.org/Library/Repository/MarketReports/<yyyymmdd>_da_expost_lmp.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	1924 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

MISO INDIANA.HUB Monthly Real Time Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, MISO INDIANA.HUB, Real Time
Contract Code	FJZ
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0600 and 2300-2400, Monday through Friday, EST, and all hours for Saturday, Sunday, and all NERC Holidays during Daylight Saving Time. No hours will be added or subtracted due to DST adjustments. For the rest of the year, Off-Peak
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Real Time hourly LMP for all Off-Peak hours. These price files can be found at the following link or at successor location. <a href="https://www.misoenergy.org/Library/Repository/MarketReports/<yyyymmdd>_rt_lmp_final.csv">https://www.misoenergy.org/Library/Repository/MarketReports/<yyyymmdd>_rt_lmp_final.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	1680 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

MISO INDIANA.HUB Monthly Real Time On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, MISO INDIANA.HUB, Real Time
Contract Code	FJY
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0700 – 2200 Monday through Friday, EST, during Daylight Saving Time; for the rest of the year, On-Peak hours are 0800 – 2300, EST. All NERC Holidays are excluded.
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Real Time hourly LMP for all On-Peak hours. These price files can be found at the following link or at successor location. <a href="https://www.misoenergy.org/Library/Repository/MarketReports/<yyyymmdd>_rt_lmp_final.csv">https://www.misoenergy.org/Library/Repository/MarketReports/<yyyymmdd>_rt_lmp_final.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	1924 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

NYISO HUD VL Monthly Day Ahead Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, NYISO HUD VL, Day Ahead
Contract Code	CXP
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0700 and HE 2400, Monday through Friday, EPT and all hours for Saturday, Sunday, and all NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LBMP for all Off-Peak hours. These price files can be found at the following link or at successor location. <a href="http://mis.nyiso.com/public/csv/damlbmp/<yyyymmdd>damlbmp_zone.csv">http://mis.nyiso.com/public/csv/damlbmp/<yyyymmdd>damlbmp_zone.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	2968 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

NYISO HUD VL Monthly Day Ahead On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, NYISO HUD VL, Day Ahead
Contract Code	CXO
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0800 – 2300 Monday through Friday, EPT, excluding NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LBMP for all On-Peak hours. These price files can be found at the following link or at successor location. <a href="http://mis.nyiso.com/public/csv/damlbmp/<yyyymmdd>damlbmp_zone.csv">http://mis.nyiso.com/public/csv/damlbmp/<yyyymmdd>damlbmp_zone.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	2968 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

NYISO WEST Monthly Day Ahead Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, NYISO WEST, Day Ahead
Contract Code	DEV
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0700 and HE 2400, Monday through Friday, EPT and all hours for Saturday, Sunday, and all NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LBMP for all Off-Peak hours. These price files can be found at the following link or at successor location. <a href="http://mis.nyiso.com/public/csv/damlbmp/<yyyymmdd>damlbmp_zone.csv">http://mis.nyiso.com/public/csv/damlbmp/<yyyymmdd>damlbmp_zone.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	1051 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

NYISO WEST Monthly Day Ahead On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, NYISO WEST, Day Ahead
Contract Code	DEU
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0800 – 2300 Monday through Friday, EPT, excluding NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LBMP for all On-Peak hours. These price files can be found at the following link or at successor location. <a href="http://mis.nyiso.com/public/csv/damlbmp/<yyyymmdd>damlbmp_zone.csv">http://mis.nyiso.com/public/csv/damlbmp/<yyyymmdd>damlbmp_zone.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	3810 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

PJM AEP-DAYTON HUB Monthly Day Ahead Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, PJM AEP-DAYTON HUB, Day Ahead
Contract Code	DLX
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0700 and HE 2400, Monday through Friday, EPT and all hours for Saturday, Sunday, and all NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LMP for all Off-Peak hours. These price files can be found at the following link or at successor location. <a href="http://www.pjm.com/pub/account/lmpda/<yyyymmdd>-da.csv">http://www.pjm.com/pub/account/lmpda/<yyyymmdd>-da.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	6535 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

PJM AEP-DAYTON HUB Monthly Day Ahead On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, PJM AEP-DAYTON HUB, Day Ahead
Contract Code	DLW
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0800 – 2300 Monday through Friday, EPT, excluding NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LMP for all On-Peak hours. These price files can be found at the following link or at successor location. <a href="http://www.pjm.com/pub/account/lmpda/<yyyymmdd>-da.csv">http://www.pjm.com/pub/account/lmpda/<yyyymmdd>-da.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	7031 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

PJM AEP-DAYTON HUB Monthly Real Time Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, PJM AEP-DAYTON HUB, Real Time
Contract Code	FKB
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0700 and HE 2400, Monday through Friday, EPT and all hours for Saturday, Sunday, and all NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Real Time hourly LMP for all Off-Peak hours. These price files can be found at the following link or at successor location. <a href="http://www.pjm.com/pub/account/lmp/<yyyymmdd>_updated.csv">http://www.pjm.com/pub/account/lmp/<yyyymmdd>_updated.csv PJM secondary price source (as needed): <a href="http://www.pjm.com/pub/account/lmp/<yyyymmdd>.csv">http://www.pjm.com/pub/account/lmp/<yyyymmdd>.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	6535 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

PJM AEP-DAYTON HUB Monthly Real Time On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, PJM AEP-DAYTON HUB, Real Time
Contract Code	FKA
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0800 – 2300 Monday through Friday, EPT, excluding NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Real Time hourly LMP for all On-Peak hours. These price files can be found at the following link or at successor location. <a href="http://www.pjm.com/pub/account/lmp/<yyyymmdd>_updated.csv">http://www.pjm.com/pub/account/lmp/<yyyymmdd>_updated.csv PJM secondary price source (as needed): <a href="http://www.pjm.com/pub/account/lmp/<yyyymmdd>.csv">http://www.pjm.com/pub/account/lmp/<yyyymmdd>.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	7031 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

PJM N ILLINOIS HUB Monthly Day Ahead Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, PJM N ILLINOIS HUB, Day Ahead
Contract Code	ERN
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0700 and HE 2400, Monday through Friday, EPT and all hours for Saturday, Sunday, and all NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LMP for all Off-Peak hours. These price files can be found at the following link or at successor location. <a href="http://www.pjm.com/pub/account/lmpda/<yyyymmdd>-da.csv">http://www.pjm.com/pub/account/lmpda/<yyyymmdd>-da.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	5196 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

PJM N ILLINOIS HUB Monthly Day Ahead On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, PJM N ILLINOIS HUB, Day Ahead
Contract Code	ERM
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0800 – 2300 Monday through Friday, EPT, excluding NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LMP for all On-Peak hours. These price files can be found at the following link or at successor location. <a href="http://www.pjm.com/pub/account/lmpda/<yyyymmdd>-da.csv">http://www.pjm.com/pub/account/lmpda/<yyyymmdd>-da.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	5938 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

PJM N ILLINOIS HUB Monthly Real Time Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, PJM N ILLINOIS HUB, Real Time
Contract Code	FKD
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0700 and HE 2400, Monday through Friday, EPT and all hours for Saturday, Sunday, and all NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Real Time hourly LMP for all Off-Peak hours. These price files can be found at the following link or at successor location. <a href="http://www.pjm.com/pub/account/lmp/<yyyymmdd>_updated.csv">http://www.pjm.com/pub/account/lmp/<yyyymmdd>_updated.csv PJM secondary price source (as needed): <a href="http://www.pjm.com/pub/account/lmp/<yyyymmdd>.csv">http://www.pjm.com/pub/account/lmp/<yyyymmdd>.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	5196 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

PJM N ILLINOIS HUB Monthly Real Time On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, PJM N ILLINOIS HUB, Real Time
Contract Code	FKC
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0800 – 2300 Monday through Friday, EPT, excluding NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Real Time hourly LMP for all On-Peak hours. These price files can be found at the following link or at successor location. <a href="http://www.pjm.com/pub/account/lmp/<yyyymmdd>_updated.csv">http://www.pjm.com/pub/account/lmp/<yyyymmdd>_updated.csv PJM secondary price source (as needed): <a href="http://www.pjm.com/pub/account/lmp/<yyyymmdd>.csv">http://www.pjm.com/pub/account/lmp/<yyyymmdd>.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	5938 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

PJM WESTERN HUB Monthly Day Ahead Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, PJM WESTERN HUB, Day Ahead
Contract Code	FHL
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0700 and HE 2400, Monday through Friday, EPT and all hours for Saturday, Sunday, and all NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LMP for all Off-Peak hours. These price files can be found at the following link or at successor location. <a href="http://www.pjm.com/pub/account/lmpda/<yyyymmdd>-da.csv">http://www.pjm.com/pub/account/lmpda/<yyyymmdd>-da.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	7747 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

PJM WESTERN HUB Monthly Day Ahead On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, PJM WESTERN HUB, Day Ahead
Contract Code	FHK
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0800 – 2300 Monday through Friday, EPT, excluding NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LMP for all On-Peak hours. These price files can be found at the following link or at successor location. <a href="http://www.pjm.com/pub/account/lmpda/<yyyymmdd>-da.csv">http://www.pjm.com/pub/account/lmpda/<yyyymmdd>-da.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	8307 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

PJM WESTERN HUB Monthly Real Time Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, PJM WESTERN HUB, Real Time
Contract Code	FKF
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0700 and HE 2400, Monday through Friday, EPT and all hours for Saturday, Sunday, and all NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Real Time hourly LMP for all Off-Peak hours. These price files can be found at the following link or at successor location. <a href="http://www.pjm.com/pub/account/lmp/<yyyymmdd>_updated.csv">http://www.pjm.com/pub/account/lmp/<yyyymmdd>_updated.csv PJM secondary price source (as needed): <a href="http://www.pjm.com/pub/account/lmp/<yyyymmdd>.csv">http://www.pjm.com/pub/account/lmp/<yyyymmdd>.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	7747 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

PJM WESTERN HUB Monthly Real Time On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, PJM WESTERN HUB, Real Time
Contract Code	FKE
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0800 – 2300 Monday through Friday, EPT, excluding NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The fourth business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The third business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Real Time hourly LMP for all On-Peak hours. These price files can be found at the following link or at successor location. <a href="http://www.pjm.com/pub/account/lmp/<yyyymmdd>_updated.csv">http://www.pjm.com/pub/account/lmp/<yyyymmdd>_updated.csv PJM secondary price source (as needed): <a href="http://www.pjm.com/pub/account/lmp/<yyyymmdd>.csv">http://www.pjm.com/pub/account/lmp/<yyyymmdd>.csv
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	8307 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

SPP SPPSOUTH_HUB Monthly Day Ahead Off-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Power, SPP SPPSOUTH_HUB, Day Ahead
Contract Code	LLC
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of Off-Peak hours within the month traded, so in a month with 400 Off-Peak hours, the Lot Size equals 400 MWh. The definition of Off-Peak hours is Hour Ending (HE) 0100 – 0600 and HE 2300 – 2400, Monday through Friday, CPT and all hours for Saturday, Sunday, and all NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The Seventh business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The sixth business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LMP for all Off-Peak hours. These price files can be found at the following link or at successor location. https://marketplace.spp.org/web/guest/lmp-by-location
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	3401 MW
Margin Unit	US Dollars

NODAL EXCHANGE CONTRACT SPECIFICATIONS

SPP SPPSOUTH_HUB Monthly Day Ahead On-Peak Power Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, SPP SPPSOUTH_HUB, Day Ahead
Contract Code	LLA
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, based on 1 MW for each hour of the contract
Lot Size	Variable, expressed in megawatt hour (MWh). The Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 332 On-Peak hours, the Lot Size equals 332 MWh. The definition of On-Peak hours is Hour Ending (HE) 0700 – 2200 Monday through Friday, Central Prevailing Time (CPT), excluding NERC Holidays
Currency	US Dollars
Min Price Fluctuation	\$0.0001 per MWh
Minimum Tick	\$0.0001 per MWh
First Trading Day	The fourth business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 69 months before the expiration date. <u>The Seventh business day of June or January. In June, the new expiries in the 11th planning year (January – May) are available for trading; in January, the new expiries in the 11th calendar year (June – December) are available for trading.</u>
Last Trading Day	The sixth business day following the last calendar day of the month
Contract Series	69 months <u>Current calendar/planning year plus 10 full calendar or planning years</u>
Fixed Price	The traded price or the previous day's settlement price
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 final settlement price will be determined by the Exchange at approximately 3 pm EPT on the Last Trading Day. The final settlement price is the average of the Day Ahead hourly LMP for all On-Peak hours. These price files can be found at the following link or at successor location. https://marketplace.spp.org/web/guest/lmp-by-location
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	4115 MW
Margin Unit	US Dollars

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