NODAL EXCHANGE CONTRACT SPECIFICATIONS



Exhibit A: December 3rd, 2018 Addition to Nodal Exchange Contract Specification

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial On-Peak Power, PJM SUSQUEHA24 KVUNIT01, Day Ahead
Contract Code	LPM
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.
Last Trading Day	The third business day following the last calendar day of the month
<b>Contract Series</b>	69 months
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. http://dataminer2.pjm.com/feed/da_hrl_lmps
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	649 MW
Margin Unit	US Dollars

## PJM SUSQUEHA24 KVUNIT01 Monthly Day Ahead On-Peak Power Contract

	PJM SUS	QUEHA24 KVUNIT0	<b>1 Monthly Day</b>	Ahead Off-Peak	<b>Power Contract</b>
--	---------	-----------------	----------------------	----------------	-----------------------

ITEM	SPECIFICATION	
Contract Description	Monthly Cash Settled Financial Off-Peak Power, PJM SUSQUEHA24 KVUNIT01, Day Ahead	
Contract Code	LPN	
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.	
Last Trading Day	The third business day following the last calendar day of the month	
<b>Contract Series</b>	69 months	
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. http://dataminer2.pjm.com/feed/da_hrl_lmps	
Final Settlement (Payment) Date	The first business day following the Last Trading Day	
Position Limit	649 MW	
Margin Unit	US Dollars	

## PJM SUSQUEHA24 KVUNIT02 Monthly Day Ahead On-Peak Power Contract

「	
ITEM	SPECIFICATION
<b>Contract Description</b>	Monthly Cash Settled Financial On-Peak Power, PJM SUSQUEHA24 KVUNIT02, Day Ahead
Contract Code	LPO
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.
Last Trading Day	The third business day following the last calendar day of the month
<b>Contract Series</b>	69 months
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. http://dataminer2.pjm.com/feed/da_hrl_lmps
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	649 MW
Margin Unit	US Dollars

PJM SUS	QUEHA24 KV	<b>UNIT02 Monthl</b>	y Day Ahead	<b>Off-Peak Power</b>	<b>Contract</b>

· · · · · · · · · · · · · · · · · · ·		
ITEM	SPECIFICATION	
Contract Description	Monthly Cash Settled Financial Off-Peak Power, PJM SUSQUEHA24 KVUNIT02, Day Ahead	
Contract Code	LPP	
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.	
Last Trading Day	The third business day following the last calendar day of the month	
Contract Series	69 months	
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. http://dataminer2.pjm.com/feed/da_hrl_lmps	
Final Settlement (Payment) Date	The first business day following the Last Trading Day	
Position Limit	649 MW	
Margin Unit	US Dollars	

## PJM LACKAENG24 KVCTG1 Monthly Day Ahead On-Peak Energy + Congestion Contract

ITEM	SPECIFICATION		
<b>Contract Description</b>	Monthly Cash Settled Financial On-Peak Energy + Congestion PJM LACKAENG24 KVCTG1, Day Ahead		
Contract Code	LPQ		
Hours of Trading	As defined at http://www.nodalexchange.com		
Unit of Trading	1 lot, which is equal to 1 MW for each hour of the contract		
Lot Size	Variable, expressed in MWh. For each contract the Lot Size will equal 1 MW multiplied by the number of On-Peak hours within the month traded, so in a month with 336 On-Peak hours, the lot size equals 336 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 Seventh business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 49 months before the expiration date.		
Last Trading Day	The Sixth business day following the last calendar day of the month		
<b>Contract Series</b>	49 months		
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 Energy of PJM WESTERN HUB plus the day-ahead hourly Congestion price of LACKAENG24 KVCTG1 for all On-Peak hours in the contract month. These price files can be found at the following link or at successor location. http://dataminer2.pjm.com/feed/da_hrl_lmps		
Final Settlement (Payment) Date	The first business day following the Last Trading Day		
Position Limit	416 MW		
Margin Unit	US Dollars		

## PJM LACKAENG24 KVCTG1 Monthly Day Ahead Off-Peak Energy + Congestion Contract

ITEM	SPECIFICATION
Contract Description	Monthly Cash Settled Financial Off-Peak Energy + Congestion PJM LACKAENG24 KVCTG1, Day Ahead
Contract Code	LPR
Hours of Trading	As defined at http://www.nodalexchange.com
Unit of Trading	1 lot, which is equal to 1 MW for each hour of the contract
Lot Size	Variable, expressed in MWh. For each contract 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 Seventh business day of the launch month, which corresponds to the day the current expiring contract is no longer traded. The launch month is 49 months before the expiration date.
Last Trading Day	The Sixth business day following the last calendar day of the month
<b>Contract Series</b>	49 months
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 Energy of PJM WESTERN HUB plus the day-ahead hourly Congestion price of LACKAENG24 KVCTG1 for all Off-Peak hours in the contract month. These price files can be found at the following link or at successor location. http://dataminer2.pjm.com/feed/da_hrl_lmps
Final Settlement (Payment) Date	The first business day following the Last Trading Day
Position Limit	416 MW
Margin Unit	US Dollars