<u>GDECS Phase 5- Proposed Clean-Up, Clarification and Corrections to Governing Documents</u> <u>For GDECS First Read – January 28, 2020</u>				
	Agreement, Attachment, Section, Title	Current Language	Proposed Revisions	Rationale
1.	Tariff, Attachment DD, section 5.14(h)(3)	The net energy and ancillary services revenue estimate for a combined cycle generator shall be determined in the same manner as that prescribed for a combustion turbine generator in the previous sentence, except that the heat rate assumed for the combined cycle resource shall be 6.722 MMbtu/Mwh, the variable operations and maintenance expenses for such resource shall be \$3.23 per MWh, the Peak-Hour Dispatch scenario for both the Day-Ahead and Real-Time Energy Markets shall be modified to dispatch the CC resource continuously during the full peak hour period, as described in section 2.46, for each such period that the resource is economic (using the test set forth in such section), rather than only during the four hour blocks within such period that such resource is economic, and the ancillary service revenues shall be \$3198 per MW-year.	The net energy and ancillary services revenue estimate for a combined cycle generator shall be determined in the same manner as that prescribed for a combustion turbine generator in the previous sentence, except that the heat rate assumed for the combined cycle resource shall be 6.722 MMbtu/Mwh, the variable operations and maintenance expenses for such resource shall be \$3.23 per MWh, the Peak-Hour Dispatch scenario for both the Day-Ahead and Real-Time Energy Markets shall be modified to dispatch the CC resource continuously during the full peak hour period, as described in Peak Hour Dispatch section 2.46, for each such period that the resource is economic (using the test set forth in such section), rather than only during the four hour blocks within such period that such resource is economic, and the ancillary service revenues shall be \$3198 per MW- year.	The existing reference to section 2.46 referenced in this section referred to the definition of Peak Hour Dispatch, which was previously located within Tariff, Attachment DD. This definitional section has since been removed and brought to the Tariff definition section. Accordingly, PJM is now deleting the reference to section 2.46 and replacing it with the Tariff defined term "Peak Hour Dispatch."
2.	Tariff, Attachment DD, section 5.4(b)	PJM shall conduct for each Delivery Year a First, a Second, and a Third Incremental Auction for the purposes set forth in section 2.34. The First Incremental Auction shall be	PJM shall conduct for each Delivery Year a First, a Second, and a Third Incremental Auction for the purposes set forth in section 2.34. The First Incremental Auction shall be	The existing reference to section 2.34 referenced in this section referred to the definition of Incremental

		conducted in the month of September that is	conducted in the month of September that is	Auction, which was
		twenty months prior to the start of the	twenty months prior to the start of the	previously defined within
		Delivery Year: the Second Incremental	Delivery Year: the Second Incremental	Tariff. Attachment DD.
		Auction shall be conducted in the month of	Auction shall be conducted in the month of	This definitional section has
		July that is ten months prior to the start of the	July that is ten months prior to the start of the	since been removed and
		Delivery Year: and the Third Incremental	Delivery Year: and the Third Incremental	brought to the Tariff
		Auction shall be conducted in the month of	Auction shall be conducted in the month of	definition section
		February that is three months prior to the	February that is three months prior to the start	Accordingly, PJM is now
		start of the Delivery Year.	of the Delivery Year.	deleting the reference to
				section 2.34. Since the term
				"Incremental Auction" is
				already included in the
				existing language, no
				additional term needs to be
				added in place of the
				reference to section 2.34.
	OA, Schedule	Market Sellers in the Day-ahead Energy	Market Sellers in the Day-ahead Energy	The revised language is
	1, section	Market shall submit offers for the supply of	Market shall submit offers for the supply of	intended to capture all
	1.10.1A(d),	energy, demand reductions, or other services	energy, demand reductions, or other services	committed Capacity
	Day-ahead	for the following Operating Day for each	for the following Operating Day for each	Resources, rather than
	Energy	clock hour for which the Market Seller	clock hour for which the Market Seller	referring to individual
	Market	desires or is required to make its resource	desires or is required to make its resource	instances of how a Capacity
	Scheduling	available to the Office of the Interconnection.	available to the Office of the	Resource may receive a
	_	Offers for the supply of energy may be cost-	Interconnection. Offers for the supply of	commitment.
2	OATT,	based, market-based, or both, and may vary	energy may be cost-based, market-based, or	
э.	Attachment	hourly. Offers shall be submitted to the	both, and may vary hourly. Offers shall be	For instance, the existing
	K-Appendix,	Office of the Interconnection in the form	submitted to the Office of the Interconnection	language does not make
	section	specified by the Office of the Interconnection	in the form specified by the Office of the	clear that a resource that
	1.10.1A(d),	and shall contain the information specified in	Interconnection and shall contain the	cleared in a BRA or IA, but
	Day-ahead	the Office of the Interconnection's Offer	information specified in the Office of the	is then fully replaced is not
	Energy	Data specification, this Section 1.10.1A(d),	Interconnection's Offer Data specification,	subject to the must-offer
	Market	Section 1.10.9B, Schedule 2 of the Operating	this Section 1.10.1A(d), Section	requirement in the energy
	Scheduling	Agreement, and the PJM Manuals, as	1.10.9B, Schedule 2 of the Operating	market and should instead
		applicable. Market Sellers owning or	Agreement, and the PJM Manuals, as	be allowed to elect to offer.

controlling the output of a Generation	applicable. Market Sellers owning or	
Capacity Resource that was committed in an	controlling the output of a Generation	
FRR Capacity Plan, self-supplied, offered	Capacity Resource that was is committed in	
and cleared in a Base Residual Auction or	an FRR Capacity Plan, self supplied, offered	
Incremental Auction, or designated as	and cleared in a Base Residual Auction or	
replacement capacity, as specified in	Incremental Auction, or designated as	
Attachment DD of the PJM Tariff, and that	replacement capacity, as specified in as a	
has not been rendered unavailable by a	Capacity Resource under Tariff, Attachment	
Generator Planned Outage, a Generator	DD or RAA, Schedule 8.1 of the PJM Tariff,	
Maintenance Outage, or a Generator Forced	and that has not been rendered unavailable by	
Outage shall submit offers for the available	a Generator Planned Outage, a Generator	
capacity of such Generation Capacity	Maintenance Outage, or a Generator Forced	
Resource, including any portion that is self-	Outage shall submit offers for the available	
scheduled by the Generating Market Buyer.	capacity of such Generation Capacity	
Such offers shall be based on the ICAP	Resource, including any portion that is self-	
equivalent of the Market Seller's cleared	scheduled by the Generating Market	
UCAP capacity commitment, provided,	Buyer. Such offers shall be based on the	
however, where the underlying resource is a	ICAP equivalent of the Market Seller's	
Capacity Storage Resource or an Intermittent	cleared UCAP capacity commitment,	
Resource, the Market Seller shall satisfy the	provided, however, where the underlying	
must offer requirement by either self-	resource is a Capacity Storage Resource or an	
scheduling or offering the unit as a	Intermittent Resource, the Market Seller shall	
dispatchable resource, in accordance with the	satisfy the must offer requirement by either	
PJM Manuals, where the hourly day-ahead	self-scheduling or offering the unit as a	
self-scheduled values for such Capacity	dispatchable resource, in accordance with the	
Storage Resources and Intermittent	PJM Manuals, where the hourly day-ahead	
Resources may vary hour to hour from the	self-scheduled values for such Capacity	
capacity commitment. Any offer not	Storage Resources and Intermittent	
designated as a Maximum Emergency offer	Resources may vary hour to hour from the	
shall be considered available for scheduling	capacity commitment. Any offer not	
and dispatch under both Emergency and non-	designated as a Maximum Emergency offer	
Emergency conditions. Offers may only be	shall be considered available for scheduling	
designated as Maximum Emergency offers to	and dispatch under both Emergency and non-	
the extent that the Generation Capacity	Emergency conditions. Offers may only be	

Resource falls into at least one of the	designated as Maximum Emergency offers to	
following categories:	the extent that the Generation Capacity	
	Resource falls into at least one of the	
	following categories:	
following categories: The submission of offers for resource increments that have not cleared in a Base Residual Auction or an Incremental Auction, were not committed in an FRR Capacity Plan, and were not designated as replacement capacity under Attachment DD of the PJM Tariff shall be optional, but any such offers must contain the information specified in the Office of the Interconnection's Offer Data specification, Operating Agreement Schedule 1, sections 1.10.1A(d) and 1.10.9B, Operating Agreement, Schedule 2, and the PJM Manuals, as applicable. Energy offered from generation resources that have not cleared a Base Residual Auction or an Incremental Auction, were not committed in an FRR Capacity Plan, and were not designated as replacement capacity under Attachment DD of the PJM Tariff shall not be supplied from resources that are included in or otherwise committed to supply the Operating Reserves of a Control Area outside the PJM Region.	the extent that the Generation Capacity Resource falls into at least one of the following categories: The submission of offers for resource increments that have are not committed as a Capacity Resource eleared in a Base Residual Auetion or an Incremental Auction, were not committed in an FRR Capacity Plan, were not designated as replacement capacity under Tariff, Attachment DD or RAA, Schedule 8.1 of the PJM Tariff shall be optional, but any such offers must contain the information specified in the Office of the Interconnection's Offer Data specification, Operating Agreement Schedule 1, sections 1.10.1A(d) and 1.10.9B, Operating Agreement, Schedule 2, and the PJM Manuals, as applicable. Energy offered from generation resources that are not committed as a Capacity Resource have not cleared a Base Residual Auction or an Incremental Auction, were not committed in an FRR Capacity Plan, and were not designated as replacement capacity under Tariff, Attachment DD of the PJM Tariff or RAA, Schedule 8.1 shall not be supplied	
	RAA, Schedule 8.1 shall not be supplied from resources that are included in or otherwise committed to supply the Opperating Reserves of a Control Area	

		outside the PJM Region.	
4.	OA, Schedule 1, section 6.6(c) OATT, Attachment K-Appendix, section 6.6 (c)	Outside the PJM Region. (c) For the 2014/2015 through 2017/2018 Delivery Years, the following table specifies default parameter limited schedule values, by technology type, for generating units, no portion of which is committed as a Capacity Performance Resource: Parameter Limited Schedule Matrix Parameter Numinum Mainum Mainu	This section will be removed since the 2014/2015 through 2017/2018 Delivery Years have passed so this section is no longer relevant.
5.	RAA, Schedule 8.1.G.2, Capacity Resource	The FRR Entity's net Performance Shortfall among Capacity Performance Resources, if any, for each such PerformanceThe FRR Entity's net Performance Shortfall among Capacity Performance Resources, if any, for each such PerformanceThe FRR Entity's net Performance Shortfall among Capacity Performance Resources, if any, for each such PerformanceThe FRR Entity's net Performance Shortfall among Capacity Performance Resources, if any, for each such PerformanceThe FRR Entity's net Performance Resources, if any, for each such PerformanceThe FRR Entity's net Performance Resources, if any, for each such PerformanceThe FRR Entity's net Performance Resources, if any, for each such PerformanceThe FRR Entity's net Performance Resources, if any, for each such PerformanceThe FRR Entity's net PerformanceAssessment Interval shall be multiplied by a rate of 0.01667 MWs/PerformanceThe FRR Entity's net PerformanceState	The rate for an FRR Entity's net Performance Shortfall was not changed when PJM moved from hourly settlements to 5

Performance	Assessment Interval to establish the	Assessment Interval to establish the	minute settlements. This
	additional MW quantities of Capacity	additional MW quantities of Capacity	correction now reflects the
	Performance Resources or Seasonal Capacity	Performance Resources or Seasonal Capacity	5-minute interval.
	Performance Resources that such FRR Entity	Performance Resources that such FRR Entity	
	must add to its FRR Capacity Plan for the	must add to its FRR Capacity Plan for the	
	next Delivery Year. Notwithstanding the	next Delivery Year. Notwithstanding the	
	foregoing, the total additional MWs required	foregoing, the total additional MWs required	
	as a result of non-performance by the FRR	as a result of non-performance by the FRR	
	Entity's Capacity Performance Resources in	Entity's Capacity Performance Resources in	
	any Delivery Year shall not exceed a MW	any Delivery Year shall not exceed a MW	
	quantity equal to 0.5 times the MW quantity	quantity equal to 0.5 times the MW quantity	
	of the Capacity Performance Resources and	of the Capacity Performance Resources and	
	Seasonal Capacity Performance Resources	Seasonal Capacity Performance Resources	
	that were committed in the FRR Capacity	that were committed in the FRR Capacity	
	Plan for such Delivery Year. The FRR	Plan for such Delivery Year. The FRR	
	Entity's net Performance Shortfall among	Entity's net Performance Shortfall among	
	Base Capacity Resources, if any, for each	Base Capacity Resources, if any, for each	
	such Performance Assessment Interval shall	such Performance Assessment Interval shall	
	be multiplied by a rate of $[(0.01667)$	be multiplied by a rate of [(0.01667 0.00139	
	MWs/Performance Assessment Interval)	MWs/Performance Assessment Interval)	
	times (the Base Capacity Resource Clearing	times (the Base Capacity Resource Clearing	
	Price resulting from the RPM Auctions for	Price resulting from the RPM Auctions for	
	the Delivery Year for the LDA encompassing	the Delivery Year for the LDA encompassing	
	the Zone of the FRR Entity, weight-averaged	the Zone of the FRR Entity, weight-averaged	
	for the Delivery Year based on the prices	for the Delivery Year based on the prices	
	established and quantities cleared in such	established and quantities cleared in such	
	auctions, divided by the Net CONE	auctions, divided by the Net CONE	
	established for such LDA for the Delivery	established for such LDA for the Delivery	
	Year)] to establish the additional MW	Year)] to establish the additional MW	
	quantities of Capacity Performance	quantities of Capacity Performance	
	Resources or Seasonal Capacity Performance	Resources or Seasonal Capacity Performance	
	Resources that such FRR Entity must add to	Resources that such FRR Entity must add to	
	its FRR Capacity Plan for the next Delivery	its FRR Capacity Plan for the next Delivery	
	Year. Notwithstanding the foregoing, the	Year. Notwithstanding the foregoing, the	

		total additional MWs required as a result of	total additional MWs required as a result of	
		non-performance by the FRR Entity's Base	non-performance by the FRR Entity's Base	
		Capacity Resources in any Delivery Year	Capacity Resources in any Delivery Year	
		shall not exceed a MW quantity equal to [(0.5	shall not exceed a MW quantity equal to [(0.5	
		times the MW quantity of the Base Capacity	times the MW quantity of the Base Capacity	
		Resources that were committed in the FRR	Resources that were committed in the FRR	
		Capacity Plan for such Delivery Year) times	Capacity Plan for such Delivery Year) times	
		(the Base Capacity Resource Clearing Price	(the Base Capacity Resource Clearing Price	
		resulting from the RPM Auctions for the	resulting from the RPM Auctions for the	
		Delivery Year for the LDA encompassing the	Delivery Year for the LDA encompassing the	
		Zone of the FRR Entity, weight-averaged for	Zone of the FRR Entity, weight-averaged for	
		the Delivery Year based on the prices	the Delivery Year based on the prices	
		established and quantities cleared in such	established and quantities cleared in such	
		auctions, divided by the Net CONE	auctions, divided by the Net CONE	
		established for such LDA for the Delivery	established for such LDA for the Delivery	
		Year)].	Year)].	
	RAA, Article	"Planned Generation Capacity Resource"	"Planned Generation Capacity Resource"	The must-offer requirement
	1, Definitions	shall mean a Generation Capacity Resource,	shall mean a Generation Capacity Resource,	and mitigation of offer rules
		or additional megawatts to increase the size	or additional megawatts to increase the size	for Planned Generation
		of a Generation Capacity Resource that is	of a Generation Capacity Resource that is	Capacity Resource that
		being or has been modified to increase the	being or has been modified to increase the	cleared a RPM Auction is
		number of megawatts of available installed	number of megawatts of available installed	already described in this
		capacity thereof, participating in the	capacity thereof, participating in the	definition. The proposed
		generation interconnection process under	generation interconnection process under	deletion in the definition of
6.		Tariff, Part IV, Subpart A, as applicable, for	Tariff, Part IV, Subpart A, as applicable, for	Planned Generation
		which: (i) Interconnection Service is	which: (i) Interconnection Service is	Capacity Resource removes
		scheduled to commence on or before the first	scheduled to commence on or before the first	repetitive language.
		day of the Delivery Year for which such	day of the Delivery Year for which such	Further, the inclusion of
		resource is to be committed to RPM or to an	resource is to be committed to RPM or to an	this language in the existing
		FRR Capacity Plan; (ii) for any such resource	FRR Capacity Plan; (ii) for any such resource	location potentially allows
		seeking to offer into a Base Residual	seeking to offer into a Base Residual	new resources that cleared
		Auction, or for any such resource of 20 MWs	Auction, or for any such resource of 20 MWs	the RPM Auction to not
		or less seeking to offer into a Base Residual	or less seeking to offer into a Base Residual	post collateral once it clears

	Auction, a System Impact Study Agreement	Auction, a System Impact Study Agreement	an auction, even though the
	(or, for resources for which a System Impact	(or, for resources for which a System Impact	resource may not have
	Study Agreement is not required, has such	Study Agreement is not required, has such	reached commencement of
	other agreement or documentation that is	other agreement or documentation that is	interconnection service.
	functionally equivalent to a System Impact	functionally equivalent to a System Impact	
	Study Agreement) has been executed prior to	Study Agreement) has been executed prior to	
	the Base Residual Auction for such Delivery	the Base Residual Auction for such Delivery	
	Year; (iii) for any such resource of more than	Year; (iii) for any such resource of more than	
	20 MWs seeking to offer into a Base	20 MWs seeking to offer into a Base	
	Residual Auction for the 2019/2020 Delivery	Residual Auction for the 2019/2020 Delivery	
	Year and subsequent Delivery Years, a	Year and subsequent Delivery Years, a	
	Facilities Study Agreement (or, for resources	Facilities Study Agreement (or, for resources	
	for which a Facilities Study Agreement is not	for which a Facilities Study Agreement is not	
	required, has such other agreement or	required, has such other agreement or	
	documentation that is functionally equivalent	documentation that is functionally equivalent	
	to a Facility Studies Agreement) has been	to a Facility Studies Agreement) has been	
	executed prior to the Base Residual Auction	executed prior to the Base Residual Auction	
	for such Delivery Year; (iv) an	for such Delivery Year; and (iv) an	
	Interconnection Service Agreement has been	Interconnection Service Agreement has been	
	executed prior to any Incremental Auction	executed prior to any Incremental Auction for	
	for such Delivery Year in which such	such Delivery Year in which such resource	
	resource plans to participate; and (iv) no	plans to participate; and (iv) no megawatts of	
	megawatts of capacity have cleared an RPM	capacity have cleared an RPM Auction for	
	Auction for any prior Delivery Year. For	any prior Delivery Year. For purposes of the	
	purposes of the must-offer requirement and	must-offer requirement and mitigation of	
	mitigation of offers for any RPM Auction for	offers for any RPM Auction for a Delivery	
	a Delivery Year, a Generation Capacity	Year, a Generation Capacity Resource shall	
	Resource shall cease to be considered a	cease to be considered a Planned Generation	
	Planned Generation Capacity Resource as of	Capacity Resource as of the earlier of (i) the	
	the earlier of (i) the date that Interconnection	date that Interconnection Service commences	
	Service commences as to such resource; or	as to such resource; or (ii) the resource has	
	(ii) the resource has cleared an RPM Auction	cleared an RPM Auction for any Delivery	
	for any Delivery Year, in which case it shall	Year, in which case it shall become an	
	become an Existing Generation Capacity	Existing Generation Capacity Resource for	

		Resource for any RPM Auction for all subsequent Delivery Years.	any RPM Auction for all subsequent Delivery Years.	
7.	OA, Schedule 2, section 2.5(a)(iii)-(v), Information Required To Be Included in Fuel Cost Policies.	 (iii) Market Sellers shall report, for all of the generation resource's operating modes, fuels, and at various operating temperatures, the incremental, no load and start heat requirements, the method of developing heat inputs, and the frequency of updating heat inputs. (iv) A Fuel Cost Policy shall include any applicable unit specific performance factors, and the method used to determine them, which may be modified seasonally to reflect ambient conditions. (v) A Fuel Cost Policy shall include the cost-based Start Cost calculation for the generation resource, and identify for each temperature state the starting fuel (MMBtu), station service (MWh), start Maintenance Adder, and any Start Additional Labor Cost. 	 (iii) Market Sellers shall report, for all of the generation resource's operating modes, fuels, and at various operating temperatures, the incremental, no load and start heat requirements, the method of developing heat inputs, and the frequency of updating heat inputs when requested by the Office of Interconnection. (iv) Market Sellers A Fuel Cost Policy shall include any applicable unit specific performance factors, and the method used to determine them, which may be modified seasonally to reflect ambient conditions when requested by the Office of Interconnection. (v) Market Sellers A Fuel Cost Policy shall include the cost-based Start Cost calculation for the generation resource, and identify for each temperature state the starting fuel (MMBtu), station service (MWh), start Maintenance Adder, and any Start Additional Labor Cost when requested by the Office of Interconnection. 	The revised language clarifies that the Market Sellers have the obligation to provide certain information to PJM when requested. Market Sellers already include all of the heat inputs, performance factors, and start cost calculation in Cost Offer Assumption ("COA") module in Member Information Reporting Application ("MIRA") so it is no longer necessary to also be included in the Fuel Cost Policy. PJM retains the ability to obtain this information upon request.
8.	OA, Schedule 2, section 4.1, Maintenance Adders.	Maintenance Adders are expenses directly related to electric production and can be a function of starts and/or run hours. Allowable expenses may include repair,	Maintenance Adders are expenses directly related to electric production and can be a function of starts and/or run hours. Allowable expenses may include repair,	Market Seller may use all available maintenance history in calculating their Maintenance Adder. For

		replacement, and major inspection, and overhaul expenses including variable long term service agreement expenses. Maintenance Adders are calculated as the 10 or 20 year average cost of a unit's maintenance history, or all avaliable actual maintenance history if a unit has less than 10 years of maintenance history. The major inspection and overhaul costs listed below in sections (a)-(c) are not exhaustive. A Market Seller may include costs in cost-based offers if those costs are similar to the costs outlined in this provision, so long as they are variable costs that are directly attributable to the production of electricity.	replacement, and major inspection, and overhaul expenses including variable long term service agreement expenses. Maintenance Adders are calculated as the 10 or 20 year average cost of a unit's maintenance history, or all available available actual maintenance history if a unit has less than +20 years of maintenance history. The major inspection and overhaul costs listed below in sections (a)-(c) are not exhaustive. A Market Seller may include costs in cost- based offers if those costs are similar to the costs outlined in this provision, so long as they are variable costs that are directly attributable to the production of electricity.	example, a Market Seller may be allowed to use 12 years of actual expenses, rather than being limited to just 10 or 20 years. This section also includes a minor spelling correction.
9.	OA, section 18.17.5, Disclosure to New York ISO and New York ISO Market Advisor Concerning Facilities in PSE&G Zone. OATT, Attachment M-Appendix,	OA 18.17.5 Disclosure to New York ISO and New York ISO Market Advisor Concerning Facilities in PSE&G Zone. (a) Subject to the requirements of section 18.17.5(b) below, the Office of the Interconnection may release confidential information of Public Service Electric & Gas Company ("PSE&G"), Consolidated Edison Company of New York ("ConEd"), and their affiliates, and the confidential information of any Member regarding generation and/or transmission facilities located within the PSE&G Zone to the New York Independent System Operator, Inc. ("New York ISO"), the market monitoring unit of the New York ISO and the New York ISO Market Advisor to the	Delete Operating Agreement Section 18.17.15 and parallel Tariff, Attachment M- Appendix, I, E in their entirety.	On April 28, 2016, ConEd informed PJM that it was not exercising the rollover provisions of the TSAs pursuant to sections 2.2 and 2.3 of the PJM Open Access Transmission Tariff (PJM Tariff) and, therefore, the TSAs would terminate on April 30, 2017, by their terms. As a result, the ConEd Wheel terminated on April 30, 2017, the confidentiality provisions applicable to the ConEd Wheel in Operating

Ι	I, E	limited extent that the Office of the	Agreement Section
((applicable to	Interconnection or its Market Monitoring	18.17.15 and parallel IMM
t	the IMM)	Unit determines necessary to carry out the	provisions in the Tariff,
		responsibilities of the Office of the	Attachment M- Appendix,
		Interconnection, the New York ISO	I, E are no longer needed.
		and the market monitoring units of the Office	
		of the Interconnection and the New York ISO	
		under FERC Opinion No. 476 (see	
		Consolidated Edison Company v. Public	
		Service Electric and Gas Company, et al.,	
		108 FERC ¶ 61,120, at P 215 (2004)) to	
		conduct joint investigations to ensure that	
		gaming, abuse of market power, or similar	
		activities do not take place with regard to	
		power transfers under the contracts that are	
		the subject of FERC Opinion No. 476.	
		(b) The Office of the Interconnection may	
		release a Member's confidential information	
		pursuant to section 18.17.5(a) above to the	
		New York ISO, the market monitoring unit	
		of the New York ISO and the New York ISO	
		Market Advisor only if the New York ISO,	
		the market monitoring unit of the New York	
		ISO and the New York ISO Market Advisor	
		are subject to obligations limiting the	
		disclosure of such information that are	
		equivalent to or greater than the limitations	
		on disclosure specified in this section 18.17.	
		Information received from the New	
		York ISO, the market monitoring unit of the	
		New York ISO, or the New York ISO Market	
		Advisor under section 18.17.5(a) above that	
		is designated as confidential shall be	

protected from disclosure in accordance with	
this section 18.17.	
Tariff Attachment M. Annendix I F	
Market Monitoring.	
1 Subject to the requirements of section E 2	
the Market Monitoring Unit may release	
antidantial information of Public Service	
Electric & Cost Company ("DSE & C")	
Consolidated Edison Company of New York	
Consolidated Edison Company of New Fork	
("ConEd"), and their affiliates, and the	
confidential information of any Member	
regarding generation and/or transmission	
facilities located within the PSE&G	
Zone to the New York Independent System	
Operator, Inc. ("New York ISO"), the market	
monitoring unit of New York ISO and the	
New York ISO Market Advisor to the limited	
extent that the Office of the Interconnection	
or the Market Monitoring Unit determines	
necessary to carry out the responsibilities of	
PJM, New York ISO or the market	
monitoring units of the Office of the	
Interconnection and the New York ISO under	
FERC Opinion No. 476 (see Consolidated	
Edison Company v. Public Service Electric	
and Gas Company, et al., 108 FERC ¶	
61,120, at P 215 (2004)) to conduct joint	
investigations to ensure that gaming, abuse of	
market power, or similar activities do not	
take place with regard to power transfers	
under the contracts that are the subject of	
FERC Opinion No. 476.	

		2. The Market Monitoring Unit may release a Member's confidential information pursuant to section I.E.1 to the New York ISO, the market monitoring unit of the New York ISO and the New York ISO Market Advisor only if the New York ISO, the market monitoring unit of the New York ISO and the New York ISO Market Advisor are subject to obligations limiting the disclosure of such information that are equivalent to or greater than the limitations on disclosure specified in this Section I.E. Information received from the New York ISO, the market monitoring unit of the New York ISO, or the New York ISO Market Advisor under section I.E.1 that is designated as confidential shall be protected from disclosure in accordance with		
10.	OA, Schedule 1, section 5.3 (b), Unscheduled Transmission Service (Loop Flow). Tariff, Attachment K-Appendix, section 5.3 (b), Unscheduled Transmission	 b dosignated us connaction of an even protected from disclosure in accordance with this section I.E. 5.3 Unscheduled Transmission Service (Loop Flow). (b) With respect to payments by the Office of the Interconnection to the New York Independent System Operator for the installation and operation of phase angle regulating facilities at Ramapo to control or limit unscheduled transmission service (loop flow), each of the following Transmission Owners with revenue requirements under the PJM Tariff shall pay a share of the charges on a transmission revenue requirements ratio share basis: Allegheny Electric Cooperative, Inc., Atlantic City Electric Company, Baltimore Gas and Electric Company, 	Delete Operating Agreement Schedule 1, section 5.3 (b) and parallel provisions in Tariff, Attachment K-Appendix, section 5.3 (b) in their entirety.	On October 14, 2019, the PARs Facilities Agreement between members of the NYPP and certain "PJM classic" transmission owners and all obligations for payments under that agreement terminated ending the need for these Tariff and OA provisions (See Notice of Termination filed on November 8, 2019, in FERC Docket No. ER20- 345).

	Service (Loop	Delmarva Power & Light Company, Jersey		
	Flow).	Central Power & Light Company, Mid-		
	·	Atlantic Interstate Transmission, LLC (but		
		only with respect to transmission revenue		
		requirements associated with the		
		Metropolitan Edison Company Zone), PECO		
		Energy Company, Pennsylvania Power &		
		Light Company, Potomac Electric Power		
		Company, Public Service Electric and Gas		
		Company, Rockland Electric Company, and		
		UGI Utilities, Inc.		
	Tariff,	1.0 Parties. This Interconnection Service	Add to the end:	There are times when an
	Attachment	Agreement ("ISA") including the		ISA needs to be amended
	O, Form of	Specifications, Schedules and Appendices	[Use as/when applicable: This ISA amends	rather than superseded for
	Interconnecti	attached hereto and incorporated herein, is	the	example when the ISA is
	on Service	entered into by and		assigned and amended to
	Agreement,	between PJM Interconnection, L.L.C., the	{insert details to identify the agreement	permit the assignee to step
	1.0	Regional Transmission Organization for the	being amended, such as whether it is an	into the shows of the
		PJM Region (hereinafter "Transmission	Interim Interconnection Service Agreement,	IC/assignor.
		Provider" or "PJM"),	Interconnection Service Agreement, or	
			Interconnection Agreement, the effective date	
		("Interconnection Customer" [OPTIONAL:	of the agreement, the service agreement	
11.		or "[short name"]]) and	number designation, and the FERC docket	
			number, if applicable, for the agreement	
		("Interconnected Transmission Owner"	being amended.}]]	
		[OPTIONAL: or "[short name]"]). All		
		capitalized terms herein shall have the		
		meanings set forth in the appended		
		definitions of such terms as stated in Part I of		
		the PJM Open		
		Access Transmission Tariff ("Tariff"). [Use		
		as/when applicable: This ISA supersedes the		
		{insert details to identify the agreement		

		being superseded, such as whether it is an Interim Interconnection Service Agreement, Interconnection Service Agreement, or Interconnection Agreement, the effective date of the agreement, the service agreement number designation, and the FERC docket number, if applicable, for the agreement being superseded.}]]		
12.	OA, Definitions I- L	N/A	Intermittent Resource - shall mean a Generation Capacity Resource with output that can vary as a function of its energy source, such as wind, solar, run of river hydroelectric power and other renewable resources.	OA, Schedule 1, section 1.10.1A(d), and OATT, Attachment K-Appendix, section 1.10.1A(d) both refer to special rules related to Intermittent Resources. However, while the term "Intermittent Resource" is defined in the OATT, it is not defined in the OA. This revision would add the definition of "Intermittent Resource" that is currently in the OATT into the OA.
13.	OA, Schedule 1, section 1.7.17, Operating Reserves OATT, Attachment	 1.7.17 Operating Reserves. (a) The following procedures shall apply to any generation unit subject to the dispatch of the Office of the Interconnection for which construction commenced before July 9, 1996, or any Demand Resource subject to the dispatch of the Office of the Interconnection. 	1.7.17 Operating Reserves. (a) The following procedures shall apply to any generation unit subject to the dispatch of the Office of the Interconnection for which construction commenced before July 9, 1996, or any Demand Resource subject to the dispatch of the Office of the Interconnection.	 1.7.17(a) and (b) contain legacy language that is no longer relevant. The only pertinent language in this section is (c) and (d). PJM proposes to relocate

K-Appendix,	(b) The Office of the Interconnection shall	(b) The Office of the Interconnection shall	(c) to 3.2.3 (e), in a new
section	schedule to the Operating Reserve and load-	schedule to the Operating Reserve and load	paragraph directly after the
1.7.17,	following objectives of the Control Zones of	following objectives of the Control Zones of	paragraph that begins with
Operating	the PJM Region and the PJM Interchange	the PJM Region and the PJM Interchange	"A Generation Capacity
Reserves	Energy Market in scheduling generation	Energy Market in scheduling generation	Resource that operates
	resources and/or Demand Resources pursuant	resources and/or Demand Resources pursuant	outside of its unit-specific
	to this Schedule. A table of Operating	to this Schedule. A table of Operating	parameters will not
	Reserve objectives for each Control Zone is	Reserve objectives for each Control Zone is	receive Operating Reserve
	calculated and published annually in the PJM	calculated and published annually in the PJM	Credits"
	Manuals. Reserve levels are probabilistically	Manuals. Reserve levels are probabilistically	
	determined based on the season's historical	determined based on the season's historical	PJM also proposes to
	load forecasting error and forced outage	load forecasting error and forced outage	relocate (d) to the end of
	rates.	rates.	3.2.3(a).
	(c) Nuclear generation resources shall not be	(c) [See comments in Rationale for	
	eligible for Operating Reserve payments	relocation] Nuclear generation resources	
	unless: 1) the Office of the Interconnection	shall not be eligible for Operating Reserve	
	directs such resources to reduce output, in	payments unless: 1) the Office of the	
	which case, such units shall be compensated	Interconnection directs such resources to	
	in accordance with Tariff, Attachment K-	reduce output, in which case, such units shall	
	Appendix, section 3.2.3(f) and the parallel	be compensated in accordance with Tariff,	
	provision of Operating Agreement, Schedule	Attachment K-Appendix, section 3.2.3(f) and	
	1, section 3.2.3(f); or 2) the resource submits	the parallel provision of Operating	
	a request for a risk premium to the Market	Agreement, Schedule 1, section 3.2.3(f); or 2)	
	Monitoring Unit under the procedures	the resource submits a request for a risk	
	specified in Tariff, Attachment M-	premium to the Market Monitoring Unit	
	Appendix, section II.B. A nuclear generation	under the procedures specified in Tariff,	
	resource (i) must submit a risk premium	Attachment M – Appendix, section II.B. A	
	consistent with its agreement under such	nuclear generation resource (i) must submit a	
	process, or, (ii) if it has not agreed with the	risk premium consistent with its agreement	

		Market Monitoring Unit on an appropriate risk premium, may submit its own determination of an appropriate risk premium to the Office of the Interconnection, subject to acceptance by the Office of the Interconnection, with or without prior approval from the Commission. (d) PJMSettlement shall be the Counterparty to the purchases and sales of Operating Reserve in the PJM Interchange Energy Market	under such process, or, (ii) if it has not agreed with the Market Monitoring Unit on an appropriate risk premium, may submit its own determination of an appropriate risk premium to the Office of the Interconnection, subject to acceptance by the Office of the Interconnection, with or without prior approval from the Commission. (d) PJMSettlement shall be the Counterparty to the purchases and sales of Operating	
		Market.	Reserve in the PJM Interchange Energy Market. <i>[See comments in Rationale for relocation]</i>	
14.	OA, Schedule 1, section 1.10.1A, Day-ahead Energy Market Scheduling. OATT, Attachment K-Appendix, section 1.10.1A, Day-ahead Energy Market Scheduling.	ix) Shall not exceed a demand reduction offer price of \$1,000/megawatt-hour, except when an Economic Load Response Participant, an Emergency Load Response participant, or a Pre-Emergency Load Response participant submits a cost-based offer that includes an incremental cost component that is above \$1,000/megawatt-hour, then its market-based offer must be less than or equal to the cost- based offer but in no event greater than \$2,000/megawatt-hour; and	 ix) Shall not exceed a demand reduction offer price of \$1,000/megawatt-hour, except when an Economic Load Response Participant, an Emergency Load Response participant, or a Pre-Emergency Load Response participant submits a cost-based offer that includes an incremental cost component that is above \$1,000/megawatt-hour, then its market-based offer must be less than or equal to the cost-based offer but in no event greater than \$2,000/megawatt-hour; and x) Shall not exceed an offer price as follows for Emergency Load Response participants with: 	This Commission-approved language was inadvertently dropped from the OA and OATT in the Order No. 831 compliance filing.

			a) a 30 minute lead time nursuant to Section	
			A 2 of Attachment DD-1 of the Tariff and the	
			parallel provision of Schedule 6 of the RAA.	
			\$1.000/megawatt-hour, plus the applicable	
			Reserve Penalty Factor for the Primary	
			Reserve Requirement, minus \$1.00;	
			b) an approved 60 minute lead time, pursuant	
			to Section A.2 of Attachment DD-1 of the	
			Tariff and the parallel provision of Schedule	
			6 of the RAA, \$1,000/megawatt-hour, plus	
			[the applicable Reserve Penalty Factor for the	
			Primary Reserve Requirement divided by 2]; and	
			c) an approved 120 minute lead time, pursuant to Section A.2 of Attachment DD-1 of the Tariff and the parallel provisions of Schedule 6 of the RAA, \$1,100/megawatt- hour.	
15.	OA, Schedule 1, section 1.10.3, Self- Scheduled Resources OATT, Attachment K-Appendix, section 1 10 3 Self-	(b) The offered prices of resources that are self-scheduled, or otherwise not following the dispatch orders of the Office of the Interconnection, shall not be considered by the Office of the Interconnection in determining Locational Marginal Prices.	(b) The offered prices of resources that are self-scheduled, or otherwise not following the dispatch orders of and not dispatchable by the Office of the Interconnection, shall not be considered by the Office of the Interconnection in determining Locational Marginal Prices.	Provides clarification to existing market rule that self-scheduled dispatchable resources can set price.

	Scheduled Resources			
16.	Scheduled Resources OA, Schedule 1, section 1.10.4, Capacity Resources OATT, Attachment K-Appendix, section 1.10.4, Capacity Resources	 1.10.3 Self-scheduled Resources. Self-scheduled resources shall be governed by the following principles and procedures. (a)Each Generating Market Buyer shall use all reasonable efforts, consistent with Good Utility Practice, not to self-schedule resources in excess of its Equivalent Load. [] (e) Hydropower units, excluding pumped storage units, may only be self- scheduled. 1.10.4 Capacity Resources. (a)A Generation Capacity Resource committed to service of PJM loads under the Reliability Pricing Model or Fixed Resource Requirement Alternative that is selected as a pool-scheduled resource shall be made available for scheduling and dispatch at the direction of the Office of the Interconnection. [] (c)A resource that has been self-scheduled shall not receive payments or credits for 	 1.10.3 Self-scheduled Resources. Self-scheduled resources shall be governed by the following principles and procedures. (a)Each Generating Market Buyer shall use all reasonable efforts, consistent with Good Utility Practice, not to self-schedule resources in excess of its Equivalent Load. [](e) Hydropower units, excluding pumped storage units, may only be self-scheduled. (f) A resource that has been self-scheduled shall not receive payments or credits for Start-up Costs or No-load Costs. 1.10.4 Capacity Resources. (a)A Generation Capacity Resource committed to service of PJM loads under the Reliability Pricing Model or Fixed Resource Requirement Alternative that is selected as a pool-scheduled resource shall be made available for scheduling and dispatch at the direction of the Office of the Interconnection. 	Transfers bullet to Self- scheduled Resource section. This does not belong in the Capacity Resources section.
		shall not receive payments or credits for Start-up Costs or No-load Costs.	(c)A resource that has been self scheduled	
	04.61.11		shall not receive payments or credits for Start up Costs or No load Costs.	
17.	1, section	(b) A Market Participant may adjust the schedule of a resource under its dispatch	(b) A Market Participant may adjust the schedule of a resource under its dispatch	during the Order No. 825

	1.10.9, Hourly Scheduling OATT, Attachment K-Appendix, section 1.10.9, Hourly Scheduling	control on an hour-to-hour basis beginning at 10:00 p.m. of the day before each Operating Day, provided that the Office of the Interconnection is notified not later than 65 minutes prior to the hour in which the adjustment is to take effect, as follows and as specified in section 1.10.9A of this Schedule:	control on an hour-to-hour basis beginning at 10:00 6:30 p.m. of the day before each Operating Day, provided that the Office of the Interconnection is notified not later than 65 minutes prior to the hour in which the adjustment is to take effect, as follows and as specified in section 1.10.9A of this Schedule:	Hourly Offers filing (ER16- 372).
18.	OA, Schedule 1, section 2.3, Determinatio n of System Conditions Using the State Estimator OATT, Attachment K-Appendix, section 2.3, Determinatio n of System Conditions Using the State Estimator	The Office of the Interconnection shall obtain a State Estimator solution every five minutes , which shall provide the megawatt output of generators and the loads at busses in the PJM Region, transmission line losses, and actual flows or loadings on constrained transmission facilities.	The Office of the Interconnection shall obtain a State Estimator solution at least every five minutes-, which shall provide the megawatt output of generators and the loads at busses in the PJM Region, transmission line losses, and actual flows or loadings on constrained transmission facilities.	Provided clarification regarding frequency of SE solution.
19.	OA, Schedule 1, section 2.6, Calculation of	For the Day-ahead Energy Market, day-ahead Locational Marginal Prices shall be	For the Day-ahead Energy Market, day-ahead Locational Marginal Prices shall be	This revision is designed to acknowledge that the Day-

	Day-ahead	determined on the basis of the least-cost,	determined on the basis of the least-cost,	ahead Energy Market does
	Prices.	security-constrained dispatch, model flows	security-constrained dispatch, model flows	not consider PRD curves.
		and system conditions resulting from the load	and system conditions resulting from the load	Instead, PRD is bid into the
	OATT, Attachmont	specifications (including PRD Curves	specifications (including PRD Curves	Day-ahead Energy Market
	K-Appendix	properly submitted by Load Serving Entities	properly submitted by Load Serving Entities	using Price-Sensitive
	section 2.6.	for the Price Responsive Demand loads that	for the Price Responsive Demand loads that	Demand bids.
	Calculation of	they serve), offers for generation,	they serve), offers for generation,	
	Day-ahead	dispatchable load, Increment Offers,	dispatchable load, Increment Offers,	
	Prices.	Decrement Bids, offers for demand	Decrement Bids, offers for demand	
		reductions, and bilateral transactions	reductions, and bilateral transactions	
		submitted to the Office of the Interconnection	submitted to the Office of the Interconnection	
		and scheduled in the Day-ahead Energy	and scheduled in the Day-ahead Energy	
		Market.	Market.	
	0 4 0 1 1 1			
	OA, Schedule	(f) A Market Seller of a unit not defined in	(f) A Market Seller of a unit not defined m	Utilizes the existing LOC
		subsection (f-1), (f-2), or (f-4) hereof (or self-	subsection (f-1), (f-2), or (f-4) hereof (or self-	Deviation definition.
	Operating	scheduled, if operating according to Section	scheduled, if operating according to Section	
	Reserves 1	1.10.3 (c) hereof), the output of which is	1.10.3 (c) hereof), the output of which is	
		reduced or suspended at the request of the	reduced or suspended at the request of the	
	OATT,	Office of the Interconnection due to a	Office of the Interconnection due to a	
	Attachment	transmission constraint or other reliability	transmission constraint or other reliability	
20	K-Appendix,	issue, and for which the real-time LMP at the	issue, and for which the real-time LMP at the	
20.	section 3.2.3,	unit's bus is higher than the unit's offer	unit's bus is higher than the unit's offer	
	Operating	corresponding to the level of output	corresponding to the level of output requested	
	Reserves	requested by the Office of the	by the Office of the Interconnection (as	
		Interconnection (as indicated either by the	indicated either by the desired MWs of	
		desired MWs of output from the unit	output from the unit determined by PJM's	
		determined by PJM's unit dispatch system or	unit dispatch system or as directed by the	
		as directed by the PJM dispatcher through a	PJM dispatcher through a manual override),	
		manual override), shall be credited for each	shall be credited for each Real-time	

		Real-time Settlement Interval in an amount	Settlement Interval in an amount equal to the	
		equal to the product of (A) the deviation of	product of (A) the LOC Ddeviation of the	
		the generating unit's output necessary to	generating unit's output necessary to follow	
		follow the Office of the Interconnection's	the Office of the Interconnection's signals	
		signals and the generating unit's expected	and the generating unit's expected output	
		output level if it had been dispatched in	level if it had been dispatched in economic	
		economic merit order, times (B) the	merit order, times (B) the Locational	
		Locational Marginal Price at the generation	Marginal Price at the generation bus for the	
		bus for the generating unit, minus (C) the	generating unit, minus (C) the Total Lost	
		Total Lost Opportunity Cost Offer, provided	Opportunity Cost Offer, provided that the	
		that the resulting outcome is greater than	resulting outcome is greater than \$0.00. This	
		\$0.00. This equation is represented as (A*B)	equation is represented as $(A*B)$ - C.	
		- C.		
	OA. Schedule	(e) For each Real-time Settlement Interval	(e) For each Real-time Settlement Interval	The current explanation of
	1, section	and for determining the 5-minute	and for determining the 5-minute	LOC used in pricing is not
	3.2.3A,	Synchronized Reserve clearing price, the	Synchronized Reserve Market Celearing	consistent with how PJM
	Synchronized	estimated unit-specific opportunity cost for a	P o rice for each Real-time Settlement Interval.	uses LOC for pricing. The
	Reserve	generation resource will be determined in	the estimated unit-specific opportunity cost	current explanation
	ΟΛΤΤ	accordance with the following equation:	for a generation resource will be determined	describes a \$ value, not
	Attachment		in accordance with the following equation:	\$/MW value as it should.
	K-Appendix,	$(A \times B) + (C \times D)$		
21.	section	Where	$(A \times B) + (C \times D)$	
	3.2.3A,		Where	
	Synchronized	A = The Locational Marginal Price at the		
	Keselve	generation bus for the generation resource;	A = The Locational Marginal Price at the	
		B = The megawatts of energy used to provide	generation bus for the generation resource;	
		Synchronized Reserve submitted as part of	\mathbf{B} = The megawatts of energy used to provide	
		the Synchronized Reserve offer;	Synchronized Reserve submitted as part	
		C = The deviation of the set point of the	of the Synchronized Reserve offer;	

		generation resource that is expected to be	C = The deviation of the set point of the	
		required in order to provide Synchronized	generation resource that is expected to be	
		Reserve from the generation resource's	required in order to provide Synchronized	
		expected output level if it had been	Reserve from the generation resource's	
		dispatched in economic merit order; and	expected output level if it had been	
		D = The difference between the Locational	dispatched in economic merit orderThe	
		Marginal Price at the generation bus for the	Synchronized Reserve capability offered by	
		generation resource and the offer price for	the generation resource; and	
		energy from the generation resource (at the	$\frac{D - The}{Shall}$ be the difference between the	
		megawatt level of the Synchronized Reserve	Locational Marginal Price at the generation	
		set point for the resource) in the PJM	bus for the generation resource and the offer	
		Interchange Energy Market when the	price for energy from the generation resource	
		Locational Marginal Price at the generation	(at the megawatt level of the Synchronized	
		bus is greater than the offer price for energy	Reserve set energy dispatch point for the	
		from the generation resource.	resource) in the PJM Interchange Energy	
		The opportunity costs for a Demand	Market when the Locational Marginal Price	
		Resource shall be zero.	at the generation bus is greater than the offer	
			price for energy from the generation	
			resource.	
			The opportunity costs for a Demand	
			Resource shall be zero.	
	OA Schedule	(f)In determining the credit under subsection	(f)In determining the credit under subsection	Undated to be consistent
	1. section	(h) to a resource selected to provide. Tier 2	(b) to a resource selected to provide. Tier 2	with the Non-Synchronized
	3.2.3A,	Synchronized Reserve and that actively	Synchronized Reserve and that actively	Reserve I OC calculation
	Synchronized	follows the Office of the Interconnection's	follows the Office of the Interconnection's	and represent C as the area
22.	Reserve	signals and instructions the unit-specific	signals and instructions the unit-specific	"under the curve."
		opportunity cost of a generation resource	opportunity cost of a generation resource	
	OATT, Attachment	shall be determined for each Real-time	shall be determined for each Real-time	
	K-Appendix,	Settlement Interval that the Office of the	Settlement Interval that the Office of the	

section	Interconnection requires a generation	Interconnection requires a generation	
3 2 3 4	resource to provide Tion 2 Synchronized	resource to provide Tion 2 Symphronized	
Synchronized	resource to provide Ther 2 Synchronized	Presource to provide Ther 2 Synchronized	
Reserve	Reserve and shall be in accordance with the	Reserve and shall be in accordance with the	
Reserve	following equation:	following equation:	
Keseive	following equation: (A x B) + (C x D) Where: A = The megawatts of energy used by the resource to provide Synchronized Reserve as submitted as part of the generation resource's Synchronized Reserve offer; B = The Locational Marginal Price at the	following equation: (A x B) + [(B x C) – D]- + (C-x-D) Where: A = The megawatts of energy used by the resource to provide Synchronized Reserve as submitted as part of the generation resource's Synchronized Reserve offer; B =The Locational Marginal Price at the generation bus of the generation resource:	
	generation bus of the generation resource;	C = The deviation of the generation	
	C = The deviation of the generation resource's output necessary to follow the	resource's energy output necessary to follow	
	Office of the Interconnection's signals and	the Office of the Interconnection's signals	
	instructions from the generation resource's	and instructions from the generation	
	expected output level if it had been	had been dispatched in economic merit order:	
	dispatched in economic merit order; and $D = The difference between the Locational$	and	
	Marginal Price at the generation bus for the	D= The applicable offer for the deviation as	
	generation resource and the offer price for	described above in C.	
	energy from the generation resource (at the	D = The difference between the Locational	
	megawatt level of the Synchronized Reserve	Marginal Price at the generation bus for the	
	set point for the generation resource) in the	generation resource and the offer price for	
	PJM Interchange Energy Market when the	energy from the generation resource (at the	
	Locational Marginal Price at the generation	megawatt level of the Synchronized Keserve	
		set point for the generation resource) in the	

		bus is greater than the offer price for energy	PJM Interchange Energy Market when the	
		from the generation resource.	Locational Marginal Price at the generation	
			bus is greater than the offer price for energy	
		The opportunity costs for a Demand	from the generation resource.	
		Resource shall be zero.		
			The opportunity costs for a Demand	
			Resource shall be zero.	
	OA, Schedule	(d) For each Real-time Settlement Interval	(d) For determining the 5-minute Non-	The current explanation of
	1, section $3.2.3 \times 0.01$	and for determining the 5-minute Non-	Synchronized Reserve Clearing Price for	LOC used in pricing is not
	Non-	Synchronized Reserve clearing price, the	each Real-time Settlement Interval-and for	consistent with how PJM
	Synchronized	unit-specific opportunity cost for a generation	determining the 5 minute Non Synchronized	uses LOC for pricing. The
	Reserve	resource that is not providing energy because	Reserve clearing price, the estimated unit-	current language describes
		they are providing Non-Synchronized	specific opportunity cost for a generation	a \$ value, not \$/MW value
	OATT,	Reserves will be determined in accordance	resource that is not providing energy because	as it should.
	Attachment	with the following equation:	they are providing Non-Synchronized	
	K-Appendix,		Reserves will shall be the difference between	
	section	$(A \times B) - C$	the determined in accordance with the	
23.	3.2.3A.001,		following equation:	
	Non- Synchronized	Where:		
	Reserve		$-(A \times B) - C$	
		A = The deviation of the generation		
		resource's output necessary to follow the	Where:	
		Office of the Interconnection's signals and		
		instructions from the generation resource's	A = The deviation of the generation	
		expected output level if it had been	resource's output necessary to follow the	
		dispatched in economic merit order;	Office of the Interconnection's signals and	
		B = The Locational Marginal Price at the	instructions from the generation resource's	
		generation bus for the generation resource;	expected output level if it had been	

		and	dispatched in economic merit order;	
		C = The applicable offer for energy from the	$\frac{1}{B-The}$ Locational Marginal Price at the	
		generation resource in the PJM Interchange	generation bus for the generation resource;	
		Energy Market.	and	
			C = T the applicable offer price for energy	
			from the generation resource (at the	
			megawatt level of the Non-Synchronized	
			Reserve assignment) in the PJM Interchange	
			Energy Market when the Locational Marginal	
			Price at the generation bus is greater than the	
			offer price for energy at the generation bus.	
	OA, Schedule	(e) In determining the credit under	(e) In determining the credit under	Clarification to describe the
	1, section	subsection (b) to a resource selected to	subsection (b) to a resource selected to	MW value associated with
	3.2.3A.001,	provide Non-Synchronized Reserve and that	provide Non-Synchronized Reserve and that	the offer.
24	Synchronized	follows the Office of the Interconnection's	follows the Office of the Interconnection's	
24.	Reserve	signals and instructions, the unit-specific	signals and instructions, the unit-specific	
		opportunity cost of a generation resource	opportunity cost of a generation resource	
	OATT,	shall be determined for each Real-time	shall be determined for each Real-time	
	Attachment	Settlement Interval that the Office of the	Settlement Interval that the Office of the	

	K-Appendix,	Interconnection requires a generation	Interconnection requires a generation	
	section	resource to provide Non-Synchronized	resource to provide Non-Synchronized	
	3.2.3A.001,	Reserve and shall be in accordance with the	Reserve and shall be in accordance with the	
	Non-	following equation:	following equation:	
	Synchronized Reserve			
		(A x B) - C	(A x B) - C	
		 Where: A = The deviation of the generation resource's output necessary to follow the Office of the Interconnection's signals and instructions from the generation resource's expected output level if it had been dispatched in economic merit order; B = The Locational Marginal Price at the generation bus for the generation resource; and C = The applicable offer for energy from the generation resource in the PJM Interchange Energy Market. 	 Where: A = The deviation of the generation resource's output necessary to follow the Office of the Interconnection's signals and instructions from the generation resource's expected output level if it had been dispatched in economic merit order; B = The Locational Marginal Price at the generation bus for the generation resource; and C = The applicable offer for the deviation as described above in A.energy from the generation resource in the PJM Interchange Energy Market. 	
	OA, Schedule	(c) A Market Seller providing Reactive	(c) A Market Seller providing Reactive	Clarification that the credit
	1, section	Services from either a steam-electric	Services from either a steam-electric	is calculated on a five-
25.	3.2.3B,	generating unit or combined cycle unit	generating unit or combined cycle unit	minute basis.
	Reactive	operating in combined cycle mode, where	operating in combined cycle mode, where	
	Services	such unit is pool-scheduled (or self-	such unit is pool-scheduled (or self-	

		scheduled, if operating according to Section	scheduled, if operating according to Section	
	OATT,	1.10.3 (c) hereof), and where the real time	1.10.3 (c) hereof), and where the real time	
	Attachment	LMP at the unit's bus is higher than the price	LMP at the unit's bus is higher than the price	
	K-Appendix,	offered by the Market Seller for energy from	offered by the Market Seller for energy from	
	3 2 3B	the unit at the level of output requested by the	the unit at the level of output requested by the	
	Reactive	Office of the Interconnection (as indicated	Office of the Interconnection (as indicated	
	Services	either by the desired MWs of output from the	either by the desired MWs of output from the	
		unit determined by PJM's unit dispatch	unit determined by PJM's unit dispatch	
		system or as directed by the PJM dispatcher	system or as directed by the PJM dispatcher	
		through a manual override) shall be	through a manual override) shall be	
		compensated for lost opportunity cost by	compensated for lost opportunity cost by	
		receiving a credit in an amount equal to the	receiving a credit for each Real-time	
		product of (A) the deviation of the generating	Settlement Interval in an amount equal to the	
		unit's output necessary to follow the Office	product of (A) the deviation of the generating	
		of the Interconnection's signals and	unit's output necessary to follow the Office	
		the generating unit's expected output level if	of the Interconnection's signals and	
		it had been dispatched in economic merit	the generating unit's expected output level if	
		order, times (B) the Real-time Price at the	it had been dispatched in economic merit	
		generation bus for the generating unit, minus	order, times (B) the Real-time Price at the	
		(C) the Total Lost Opportunity Cost Offer,	generation bus for the generating unit, minus	
		provided that the resulting outcome is greater	(C) the Total Lost Opportunity Cost Offer,	
		than \$0.00. This	provided that the resulting outcome is greater	
		equation is represented as (A^*B) - C.	than \$0.00. This	
			equation is represented as $(A*B)$ - C.	
	OA, Schedule	(d) A Market Seller providing Reactive	(d) A Market Seller providing Reactive	Clarification that the credit
	1, section	Services from either a combustion turbine	Services from either a combustion turbine	is calculated on a five-
26.	3.2.3B,	unit or combined cycle unit operating in	unit or combined cycle unit operating in	minute basis.
	Reactive	simple cycle mode that is pool scheduled (or	simple cycle mode that is pool scheduled (or	
	Services	self-scheduled, if operating according to	self-scheduled, if operating according to	

	ΟΛΤΤ	Section 1.10.3 (c) hereof), operated as	Section 1.10.3 (c) hereof), operated as	
	Attachment	requested by the Office of the	requested by the Office of the	
	K-Appendix.	Interconnection, shall be compensated for	Interconnection, shall be compensated for	
	section	lost opportunity cost, limited to the lesser of	lost opportunity cost for each Real-time	
	3.2.3B,	the unit's Economic Maximum or the unit's	Settlement Interval, limited to the lesser of	
	Reactive	Generation Resource Maximum Output, if	the unit's Economic Maximum or the unit's	
	Services	the unit output is reduced at the direction of	Generation Resource Maximum Output, if	
		the Office of the Interconnection and the real	the unit output is reduced at the direction of	
		time LMP at the unit's bus is higher than the	the Office of the Interconnection and the real	
		price offered by the Market Seller for energy	time LMP at the unit's bus is higher than the	
		from the unit at the level of output requested	price offered by the Market Seller for energy	
		by the Office of the Interconnection as	from the unit at the level of output requested	
		directed by the PJM dispatcher, then the	by the Office of the Interconnection as	
		Market Seller shall be credited in a manner	directed by the PJM dispatcher, then the	
		consistent with that described $1 - \frac{1}{2} = \frac{1}{2} + \frac{1}{2} = \frac{1}{2} + \frac{1}{2} = \frac{1}{2} + \frac{1}{2} +$	Market Seller shall be credited in a manner	
		above in Section 3.2.3B(c) for a steam unit or	consistent with that described $2.2 \text{ P}(z)$ for a strong unit or	
		a combined cycle unit operating in combined	above in Section 3.2.3B(c) for a steam unit of	
		cycle mode.	a combined cycle unit operating in combined	
			cycle mode.	
	OA, Schedule	(f) A Market Seller providing Reactive	(f) A Market Seller providing Reactive	Correcting a reference to
	1, section	Services from either a steam-electric	Services from either a steam-electric	hourly that was missed in
	3.2.3B,	generating unit, combined cycle unit or	generating unit, combined cycle unit or	the Order No. 825 Hourly
	Services	combustion turbine unit, where such unit is	combustion turbine unit, where such unit is	Offers filing (ER16-372).
27	Services	pool scheduled (or self-scheduled, if	pool scheduled (or self-scheduled, if	
21.	OATT,	operating according to Section 1.10.3 (c)	operating according to Section 1.10.3 (c)	
	Attachment	hereof), and where the real time LMP at the	hereof), and where the real time LMP at the	
	K-Appendix,	unit's bus is lower than the price offered by	unit's bus is lower than the price offered by	
	section	the Market Seller for energy from the unit at	the Market Seller for energy from the unit at	
	э.2.3В,	the level of output requested by the Office of	the level of output requested by the Office of	

	Reactive	the Interconnection (as indicated either by the	the Interconnection (as indicated either by the	
	Services	desired MWs of output from the unit	desired MWs of output from the unit	
		determined by PJM's unit dispatch system or	determined by PJM's unit dispatch system or	
		as directed by the PJM dispatcher through a	as directed by the PJM dispatcher through a	
		manual override), shall receive a credit	manual override), shall receive a credit	
		hourly in an amount equal to {(AG -	hourly in an amount equal to {(AG -	
		LMPDMW) x (UB - URTLMP)} where:	LMPDMW) x (UB - URTLMP)} where:	
		AG equals the actual output of the unit;	AG equals the actual output of the unit;	
		LMPDMW equals the level of output for the unit determined according to the point on the scheduled offer curve on which the unit was operating corresponding to the real time LMP at the unit's bus and adjusted for any Regulation or Tier 2 Synchronized Reserve assignments;	LMPDMW equals the level of output for the unit determined according to the point on the scheduled offer curve on which the unit was operating corresponding to the real time LMP at the unit's bus and adjusted for any Regulation or Tier 2 Synchronized Reserve assignments;	
		UB equals the unit offer for that unit for which output is increased, determined according to the lesser of the Final Offer or Committed Offer;	UB equals the unit offer for that unit for which output is increased, determined according to the lesser of the Final Offer or Committed Offer;	
		URTLMP equals the real time LMP at the unit's bus; and	URTLMP equals the real time LMP at the unit's bus; and	
		where UB - URTLMP shall not be negative.	where UB - URTLMP shall not be negative.	
28	OATT,	"New Service Queue" shall mean all	"New Service Queue" shall mean all	The definition for "New
∠٥.	Definitions L-	Interconnection Requests, Completed	Interconnection Requests, Completed	Service Queue" was not

	M-N	Applications, and Upgrade Requests that are received within each six-month period ending on April 30 and October 31 of each year shall collectively comprise a New Services Queue.	Applications, and Upgrade Requests that are received within each six-month period ending on April 30March 31 and October 31September 30 of each year shall collectively comprise a New Services Queue.	updated 2 years ago in connection with the filings made in Docket No. ER16- 2518. In this docket PJM made several changes to the queue, including the timing of the windows. The changes were described in the filing letter (dated August 31, 2016), captured in other places in the Tariff, and captured in the Manuals. The Commission accepted this filing on October 7, 2016.
29.	OA, section 10.4, Duties and Responsibiliti es	xv) Consult with the standing or other committees established pursuant to Section 8.6(a) on matters within the responsibility of the committee;	xv) Consult with the standing or other committees established pursuant to Operating Agreement, sSection 8.6(a) on matters within the responsibility of the committee;	Because the reference to Operating Agreement, section 8.6(a) does not exist, an updated cross- reference is provided.
30.	OA, section 14B	 14A TRANSMISSION LOSSES 14A.1 Description of Transmission Losses 14A.2 Inclusion of State Estimator Transmission Losses 14A.3 Other Losses 15. ENFORCEMENT OF OBLIGATIONS 	 14A TRANSMISSION LOSSES 14A.1 Description of Transmission Losses 14A.2 Inclusion of State Estimator Transmission Losses 14A.3 Other Losses 14B. BILLING AND PAYMENT 14B.1 Billing Procedure 14B.2 Payments 	Section 14B of the OA is not represented in the Table of Contents.

			14B.3 Interest on Unpaid Balances 14B.4 Additional Billing and Payment Provisions With Respect to	
			15. ENFORCEMENT OF OBLIGATIONS	
	RAA, Article 4	ARTICLE 4 ADDITION OF NEW PARTIES	ARTICLE 4 ADDITION OF NEW PARTIES	Correct cross-reference.
31.		Each Party agrees that any entity that (i) is or will become a Load Serving Entity, (ii) complies with the process and data requirements set forth in Schedule 1, and (iii) meets the standards for interconnection set forth in Schedule 2 shall become a Party to this Agreement and shall be listed on Schedule 16 of this Agreement upon becoming a party to the Operating Agreement, and execution of a counterpart of this Agreement.	Each Party agrees that any entity that (i) is or will become a Load Serving Entity, (ii) complies with the process and data requirements set forth in RAA, Schedule 1, and (iii) meets the standards for interconnection set forth in RAA, Schedule 2 shall become a Party to this Agreement and shall be listed on RAA, Schedule 16 17of this Agreement upon becoming a party to the Operating Agreement, and execution of a counterpart of this Agreement.	
	OA Schedule	4.Juris diction.	4. Jurisdiction.	Conforming to standard
	10, section 4	The Parties agree that (i) any dispute or	The Parties agree that (i) any dispute or	naming convention.
		conflict requesting the relief in sections 3.1,	conflict requesting the relief in Operating	
32.		and 3.2(a) above shall be submitted to FERC	Agreement, Schedule 10, sections 3.1, and	
		for hearing and resolution; (ii) any dispute or	Operating Agreement, Schedule 10, section	
		conflict requesting the relief in section $3.2(c)$	3.2(a) above shall be submitted to FERC for	
		court of competent jurisdiction for hearing	conflict requesting the relief in Operating	

		and resolution; and (iii) jurisdiction over all other actions and requested relief shall lie in any court of competent jurisdiction.	Agreement, Schedule 10, section 3.2(c) above-may be submitted to FERC or any court of competent jurisdiction for hearing and resolution; and (iii) jurisdiction over all other actions and requested relief shall lie in any court of competent jurisdiction.	
33.	OA, Schedule 10	[left justified] RECITALS	[centered] RECITALS	To center heading to keep formatting consistent
34.	OA, Schedule 10, section 1 Heading	DEFINITIONS.	DEFINITIONS Definitions.	To keep formatting consistent
35.	OA, Schedule 10, section 5	If to PJM: General Counsel 2750 Monroe Blvd. Audubon, PA 19403 Vincent.Duane@pjm.com	If to PJM: General Counsel 2750 Monroe Blvd. Audubon, PA 19403 Vincent.Duane@pjm.comGeneralCounsel@p jm.com	To change notice address to general law department email address to avoid further changes due to departures or changes in personnel.