

Work S	Stream De	esign Element	Ontions	Ontions Overview	Common Practice	Considerations	Interdependent Flements	Preliminary Decision	Rationale	Slide Reference	Overview of Ontions not selected
Energy - D	DAM Off	fer Obligation (formerly	1) Retain existing DACP offer obligations (all internal resources must offer into the DAM in order to	Options initially proposed for this element were focused on mitigating the risk of	Option 2	There are no further high level design decisions for this element.	DE5: Virtual Transactions	2) No offer obligations for the DAM.	Financially binding DAM will incentivize greater and more efficient participation from all resources		1) Retaining an ADE under DAM could be less efficient as participants could simply circumvent the
	Ref	ference Quantity)	participate in real-time).	physical withholding through an offer obligation. Stakeholder feedback			DE10: Market Power Mitigation	Unless a resource has an offer obligation through the ICA DAM participation will be voluntary for all	through price certainty. DAM reliability measures will ensure sufficient physical resources are committed to meet forecast		ADE through higher offer prices or use virtual transactions to hedge their physical positions.
			2) No offer obligations for the DAM.	would better be managed after the fact. See Market Power Mitigation design				resources.	conditions in real-time.		309, 13, 2020. 23
				element for details.					Exercise of market power through physical withholding can be effectively managed after- the-fact.		
Energy - D	DAM Loa	ad Participation	<ol> <li>Provide non-dispatchable load (NDL) the option of becoming a PRL. The IESO continues to bid on behalf of all companying NDL that are not societated as PRL.</li> </ol>	The-time, introduction of a DAM provides an opportunity for NDLs to become price properties in the DAM without changing their NDL status is and time. PBLs		There are no further high level design decisions for this element.	DE13: Two Settlement for Load	1) Provide non-dispatchable load (NDL) the option of becoming a PRL. The IESO continues to bid on head of all completion NDL that are not contracted or DRL.	<ol> <li>Providing opportunities for NDL to participate in the DAM can increase the efficiency of scheduling and unit commitments if dru alread hide are consistent with their intentions in coal time.</li> </ol>		1A) This option was not selected as a less accurate load distribution may reduce price convergence and the officiency of DAM ophysical
			benan or an remaining NDE that are not registered as PKE.	could submit their own bids into the DAM and be eligible to receive financially				benan or an remaining NDC that are not registered as PRC.	and drift committinents in day arread bids are consistent with dren intendioris in rear-time.		Sept 20, 2018: 12
			A) IESO continues to forecast remaining NDL globally and manages forecast accuracy on a zonal basis	s. binding schedules, but continue to be non-dispatchable in real				While the PRL design will not preclude any NDL from becoming a PRL, the IESO expects the initial untake of DPL status will some from industrial transmission connected or embedded loads that satisfue	B) Zonal forecasting provides a more accurate load distribution which increases price convergence and officiency of DAM scheduling		
			B) IESO moves to zonal forecasting for NDL and manages forecast accuracy on a zonal basis.	The granularity of the NDL load forecast can impact the accuracy of the load				existing registration requirements. As the market and sector continue to evolve, load distributors and	cincing of boot schooling.		
				distribution. Increasing the granularity of the load forecast can: - Improve DAM to real-time price convergence and encourage efficient DAM				aggregators may also become PRL.			
				participation				B) IESO moves to zonal forecasting for NDL and manages forecast accuracy on a zonal basis.			
				<ul> <li>Reduce out-of-market payments through more efficient DAM scheduling</li> </ul>							
Energy - D	DAM Sup	pply Participation: Variable	1) IESO assumes responsibility for submitting offers into the DAM on behalf of VG resources.	Maintaining Option 1 under a DAM can be less efficient since deviations from	Option 2	There are no further high level decisions for this design element	N/A	2) VG assumes responsibility for submitting their own offers into the DAM if they choose to	Given the significant penetration of wind and solar in Ontario, a design in which variable generation		1) This option was not selected because it would be less efficient for the IESO to bear the
	Ger	eneration	2) VG assumes responsibility for submitting their own offers into the DAM.	Greater efficiencies can be realized if variable generation resources are exposed				participate in the DAM.	for them to meet existing and future system needs.		manage the cost or benefit of real-time deviations from DAM schedules.
				to two settlement and choose to submit their own forecast quantity into the DAM				If VG resources choose to participate in the DAM, they will have the option of electing the IESO's centralized forecast quantity as their own offer quantity on an hourly basis. How this option is			January 31, 2018: 28
				pron.				implemented will be determined during detailed design once a software vendor is known.			
								A) Channes to other existing VC-related submission processes are not required in transitioning to a			
								DAM:			
								<ul> <li>VG resources will continue to ensure their available capacity is up to date via the existing outage management process to support the accuracy of the IESO centralized VG forecast</li> </ul>			
								The IESO's centralized VG forecast will continue to be used to test if additional resources need to be			
								committed in the DAM reliability pass.			
								the DAM clears so the IESO's centralized VG forecast can continue to be used to support pre-dispatch			
								scheduling and real-time dispatch.			
Energy - D	DAM Reli	liability Input Parameters	1) Use existing DACP parameters	Reliability input parameters are required for the DAM so that resources can be scheduled to satisfy projected ancillary service and reliability requirements		There are no further high level design decisions for this element.	DE5: Virtual Transactions	Option 1 (pending detailed design)	There are no reliability input parameters unique to DAM that are not already considered by DACP. The potential for any new reliability parameters will be considered during detailed design.	anuary 31, 2018: 98-100	<ol> <li>This was option was not chosen since new parameters or modifications to existing parameters are not required.</li> </ol>
			2) Introduce new parameters and/or modify existing DACP parameters								January 31, 2018: 100
				Existing DACP reliability input parameters were reviewed to ensure they are compatible with a DAM and are consistent with parameters and IESO operating							
				practices in real-time							
Energy - D	DAM Virt	rtual Transactions	1) Include virtual transactions in the initial design and implementaiton of DAM.	Virtual transactions provide efficiency and disciplinary benefits in other	Option 1	There are no further high level decisions for this design element	DE4: Reliability Input Parameters	1) Virtual transactions will be implemented on Day 1 of DAM.	1) Support price convergence and a more efficient unit commitment by addressing strategic under or	luly 18, 2018: 22-29	2) This option has not been selected as it will not support price convergence at the start of DAM
			7) and do the second the fact that all second terms in the DAMA double has each back to be a second to the second terms of terms o	jurisdictions.			DE10: Market Power Mitigation		over bidding by physical participants.		July 19, 2018: 22
			<ol> <li>Include the capability for virtual transactions in the DAW design but enable them after the initial implementation of DAM.</li> </ol>	extent to which market participants are strategically under or overbidding in the				<ol> <li>implement virtual transactions at aggregate nodes.</li> <li>1bi) Limit the implementation and modelling of virtual transactions to settlement nodes.</li> </ol>	1a) Mitigates the potential for virtual transactions to:		
				DAM.				1bii) Virtual transactions will not be allowed at intertie zones. 1biii) An admin fee will be applied to each virtual transaction submitted and/or cleared in the DAM	<ul> <li>Profit from modeling differences between DAM and RTM without increasing overall market afficiency.</li> </ul>		
								1biv) A minimum bid/offer imposed on virtual transactions.	- Generate unreliable DAM results; and		
								1b) Nodal limits will be used to limit the net power injection or withdrawal cleared at each node.	<ul> <li>Cause delays/failures in the posting of DAM results</li> </ul>		
									1bi) Ensures virtual transactions are participating at locations that would increase overall market		
									efficiency and to help reduce impact on DAM software and solution time.		
									1bii) Intertie transactions are already in effect virtual transactions and would therefore provide		
									uneccessary functionality or liquidity to the DAM at the interties.		
									1biii & 1biv) To discourage 'fishing' activities that provide little market value and have a significant		
									impact on DAM software performance.		
									1bv) To prevent an infeasible amount of virtual transactions from clearing at a particular location and		
Energy - D	DAM Fur	nctional Passes	1) Apply Market Power Mitigation	While most jurisdictions carry out their reliability unit commitment (RUC) process		There are no further high level design decisions for this element.	N/A	1)	preventing the DAM engine from solving. Market power mitigation must be performed before setting final schedules and prices in markets with	anuary 31, 2018: 27-32	2) Performing a RUC after DAM was not selected since committing gas resources after DAM may
			Perform a RUC within the DAM	after DAM in the event load forecasts significantly change, they have experienced				Apply Market Power Mitigation	locational pricing. I Russian a RUC within DAM allows reliability based commitments to be reflected in DAM schedules.	May 23, 2018: 10-17	create reliability issues if gas resources have issues procuring fuel and transport later in the day.
			Calculate Settlement Ready Prices	and transport later in the day.				Calculate Settlement Ready Prices	and prices, increasing operational certainty and supporting day-ahead to real-time price convergence.		January 51, 2010. 46
			2) Apply Market Power Mitigation						Settlement ready prices need to be determined in order to provide participants with accurate financially binding schedules		
			Perform a RUC after DAM					A) The objectives for each of the functional passes will be similar to those already used in DACP			
								today. Input changes will only reflect design decisions for VG, PRL and virtual transactions:			
								Pass 1 will be subject to market power mitigation however will continue to determine unit			
								Pass 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet bid load. New inputs include a VG elected forecast and PRL bids since both VG and PRI will be resonable for submitting their own forecast and bids into the DAM. Virtual			
								Pass 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet bid load. New inputs include a VG elected forecast and PRL Mids since both VG and PRL will also be included if vitual transactions are included in the limital implementation of bids and offers will also be included if vitual transactions are included in the limital implementation of the include in the limit of the second			
								Pass 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet bol load. New inputs include a VG elected forecast and PRL bods since both VG and PRL will be responsible for submiting their own forecasts and bols to the DAM. Virtual to the other will also be included if virtual transactions are included in the initial implementation of PBas 2 will continue to seferm a RPL collement meeting and additional with commitments are need to PBas 2 will continue to seferm a RPL collement meeting and provided in the initial implementation of PBas 2 will continue to seferm a RPL collement meeting and the initial implementation of PBas 2 will continue to seferm a RPL collement meeting and the initial implementation of the rest of the initial implementation of the initial			
								Pass 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet bol load. New inputs include a VG elected forecast and PRL bds since bot VG and PRL will be responsible for submitting their own forecasts and bias to the DAM. Virtual bids and offers will also be included if virtual transactions are included in the initial implementation of DAM. Pass 2 will continue to pefrom a RUC to determine whether additional unit commitments are need to meet IESD forecasts. No long changes from current DACP required.			
F								Pas 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet bol load. New inputs include a VG elected forecast and PRL bids since both VG and PRL will be responsible for submitting their own forecasts and bids into the DAM. Virtual bids and offers will also be included if virtual transactions are included in the initial implementation of DAM. Pass 2 will continue to peform a RUC to determine whether additional unit commitments are need to meet ItSD forecasts. No long of changes from carrent DAC Prequised. Pass 3 will continue to determine final resources schedules however at settlement ready prices. As in Pass 1, new intoxin londer VS forecasts PL bids and virtual transactions.			
Energy - D	DAM	ationization of ELP- (F						Pas 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet bol load. New inputs include a VG elected forecast and PBL loads include both VG and PBL will be responsible for somniting their own forecasts and bias into the DAM. Virtual bids and offers will also be included if virtual transactions are included in the initial implementation of DAM. Pass 2 will continue to peform a RUC to determine whether additional unit commitments are need to meet IESD forecasts. No long changes from current DAC* required. Pass 3 will continue to determine final resources schedules however at settlement ready prices. As in Pass 3 will continue to determine final resources schedules however at settlement ready prices. As in Pass 1, here inputs include VG forecasts, PRL bids and virtual transactions.			2/6
	DAM Opt	stimization of ELRs (Formerly fer Resubmission for ELRs)	1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.	Cascade hydro systems have complex intertemporal relationships that are officials for ISOs to model because relationships vary between systems. A		There are no further high level design decisions for this element	SSM DE12- Price Setting Eligibility SSM DE 18: Make Whole Payments	Pass 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet bol load. New inputs include a VG elected forecast and PBL bols since bot VG and PBL will be responsible for submiting their own forecasts and bils into the DAM. Virtual bols and Offers will also be included if virtual transactions are included in the initial implementation of DAM. Pass 2 will continue to peform a RUC to determine whether additional unit commitments are need to meet IESD forecasts. No long of changes from current DAO'r required. Pass 1, we injoirs. No long of changes from current DAO'r required. Pass 1, we injoirs to determine final resources schedules towaver at settlement ready prices. As in Pass 1, per injoirs, PML bils of virtual transactions. 1) Do not retain the current DAO'r requires window for cascade hydro resources.	1) Not retaining the existing resubmission window supports a fair and competitive DAM process and eliminates additional opportunities for the exercise of market power.		N/A
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	DAM Opr Off	stimization of EURs (Formerly fer Resubmission for ELRs)	1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.	Cascade hydro systems have complex intertemporal relationships that are difficult for ISOs to mode because relationships switz between systems. A resubmission process wis incorporated into DAPs on the table resources could revise their differs prior to a second run of DAC? For fails acteduting. Retaining the resubmission window under a financially binding DAM would provide one group of participants the proteinatio to impore the financial positions but harm other."		There are no further high level design decisions for this element	SSM DE12: Price Setting Eligibility SSM DE18: Make Whole Payments SSM DE15: Reference Levels	Pas 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet bol load. New inputs include a VG elected forecast and PRL bids since both VG and PRL will be responsible for sometimizing ther own forecasts and bids into the DAM. Virtual bids and offers will also be included if virtual transactions are included in the initial implementation of DAM. Pass 2 will continue to pefform a RUC to determine whether additional unit commitments are need to meet IESD forecasts. No logal changes from current DACP required. Pass 3 will continue to determine final resources schedules however at settlement ready prices. As in Pass 1, new inputs, No logal changes, PL bids and virtual transactions. In lieu of a resubmission window, the DAM and predinpatch engines should be able to meet the following surface requirements that aim to capture additional hydro-electric operating (2) Ability to limit the number of resources stats. 12) Ability to limit the number of resources stats. 13) Ability to insigne function modified.	<ol> <li>Not retaining the existing resubmission window supports a fair and competitive DAM process and eliminates additional opportunities for the exercise of nariset power.</li> <li>Respecting additional phyto-electric operating parameters in the DAM and predispatch will increase the likelihood of dispatchable cascade hydro resources receiving a feasible day-shead schedule and improve the optimization of all resources.</li> </ol>		N/A
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	DAM Oph Offi	ximization of ELRs (Formerly fer Resubmission for ELRs)	1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.	Cascade hydro systems have complex intertemporal relationships that we difficult for ISDs to mode because relationships vary between systems. A result mission process was incorporated into DACP so that eligible resources could review their offers prior to a second run of DACP for final scheduling. Retaining the resultmission window under a financially binding DAM would provide one group of participants the potential to improve their financial positions but harm others'. In fleu of a resultmission window, additional operating characteristics may need to be respected in the DAB to increase the likelihood of dispatchable cascade hydro resource reserving a facuside bay-hand schedule.		There are no further high level design decisions for this element	SSM DE12: Price Setting Eligibility SSM DE 13: Make Whole Payments SSM DE15: Reference Levels	Pass 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet boll load. New inputs include a VG elected forecast and PBL block since bolt VG and PBL will be responsible for submiting their own forecasts and bis into the DAM. Virtual bolt and offers will also be included if virtual transactions are included in the initial implementation of DAM. constrained to plotnin a RC offer determine whether additional unit commitments are need to First 3 will continue to plotnin a RC offer determine whether additional unit commitments are need to First 3 will continue to determine final incorrect SubMark Sower at settlement ready prices. As in Pass 1, new inputs include VG forecasts, PRL bds and virtual transactions. 1 Do not retain the current DACP resubmission window for cascade hydro resources. In levo da resubmission window, the DAM and predigatch engines should be able to meet the following software requirements that that into capture additional hydro-electric operating characteristics: 13) Ability to inmit the number of resource statis 13) Ability to inmit the number of resource statis 13) Ability to limit the number of resource statis 13) Ability to limit the number of resource statis 13) Ability to limit the number of resource statis 10) Ability to specify multiple daily energy limits to represent quantities of water with different capacitarity routs 13) Ability to respecify threaded in the present guard to additional to advect and the state with different capacitarity routs 13) Ability to respecify threaded advector states 13) Ability to respecify threaded advector guard advector to respecific threaded advector states 13) Ability to respecific threaded advector 13) Ability to respecific threaded advector 13) Ability to respecific	<ol> <li>Not retaining the existing resubmission window supports a fair and competitive DAM process and eliminates additional opportunities for the exercise of market power.</li> <li>Respecting additional hydro-electric operating parameters in the DAM and predspatch will increase the likelihood of dispatchable cascade hydro resources receiving a feasible day-ahead schedule and improve the optimization of all resources.</li> </ol>		N/A
	DAM Opt Off	stimization of EURs (Formerly fer Resubmission for ELRs)	<ol> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> </ol>	Cascade hydro systems have complex intertemporal relationships that are difficult for ISOs to mode because relationships with texeen systems. A resubmission process wis incorporated into DAPs on the digite ensources out revise their offers prior to a second run of DAC for that scheduling. Betaining the resubmission window are fanceally bittering DAM would provide one group of participants the potential to improve their financial positions but harm others <sup>2</sup> . In line of a resubmission window, additional operating characteristics may need to be respected in the DAM to increase the likelihood of dispatchable cascade hydro resources receiving a feasible day-ahead schedule		There are no further high level design decisions for this element	SSM DE12- Price Setting Eligibility SSM DE 18: Make Whole Payments SSM DE15: Reference Levels	Pass 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet bol load. New inputs include a VG elected forecast and PRL block since bot VG and PRL will be respondie fore simplificities from forecasts and block into the DAM. Virtual block and offers will also be included if virtual transactions are included in the initial implementation of DAM. Pass 2 will continue to peform a RUC to determine whether additional unit commitments are need to meet RE3D forecasts. No single changes from carrent DAP required. Pass 3 will continue to determine final resources schedules however at settlement ready prices. As in Pass 1, new inputs, PL block and virtual transactions. ************************************	<ol> <li>Not retaining the existing resubmission window supports a fair and competitive DAM process and eliminates additional opportunities for the exercise of market power.</li> <li>Respecting additional hydro-electric operating parameters in the DAM and predispatch will increase the likelihood of dispatchable cascade hydro resources receiving a feasible day-ahead schedule and improve the optimization of all resources.</li> </ol>		N/A
	DAM Op Off	xtimization of ELRs (Formerly fer Resubmission for ELRs)	1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.	Cascade hydro systems have complex intertemporal relationships that are difficult for ISDs to model because relationships vary between systems. A resubmission process was incorporated into DAPs on the alighter ensources could revise their offers prior to a second run of DAP for final scheduling. Retaining the resubmission window under a financially binding DAM would provide one group of participants the patiential to improve their finance provide one group of participants the patiential to improve their finance in lieu of a resubmission window, additional operating characteristics may need to be respected in the DAM to increase the likelihood of dispatchable cascade hydro resources receiving a feesible day-ahead schedule.		There are no further high level design decisions for this element	SSM DE12: Price Setting Eligibility SSM DE 18: Make Whole Payments SSM DE15: Reference Levels	Pas 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet bol load. New inputs include a VG elected forecast and PRL Mok inclu- ded VG and PRL will be respondie for submiting their own forecasts and bol sub to be DAM. Writing to the submitted of the submitted in the most and the submitted forecast and PRL Mok included in the submitted of the submitted in the submitted for the most and provide the submitted forecast pass. 2 will controlled if without an analysis from current DACP regulate. Pass 3 will continue to perform a RUC determine whether work additional into committents are need to pass. 3 will continue to determine final resources schedules however at settlement ready prices. As in Pass 3 will continue to determine final resources schedules however at settlement ready prices. As in Pass 3 will continue to determine final resources schedules however at settlement ready prices. As in Pass 3 will continue to determine final resources schedules hybrid be able to meet the final or architemistic nequinements that and preclapatch engines should be able to meet the final will be unstand of process that 13) Abitity to imager must run conditions 13) Abitity to imager must run conditions 13) Abitity to imager must run conditions 13) Abitity to imager must run conditions 14) Abitity to imager must run conditions 15) Abitity to imager to the temperate the process datas 16) Abitity to imager to the temperate dependencies between two or more resources on a casade system 10) Abitity to imager to the temperate must be abitity of need these additional temperate thread additional who dense the base and the abitity for hybrid resources to additive to resources that the abitity for hybrid resources on 16) Abitity to imager. The design hould also maintain the abitity for hybrid resources however constant additional temperate the dense the base additional resources the additional temperate the dense resources not account the additional resource	1) Not retaining the existing resubmission window supports a fair and competitive DAM process and eliminates additional opportunities for the exercise of market power. Respecting additional hydro-decisic operating parameters in the DAM and profisipatch will increase the illebilitod of dipatchable cascade hydro resources receiving a feasible day-ahead schedule and improve the optimization of all resources.		N/A
	DAM Op Off	ximization of ELRs (Formerly fer Resubmission for ELRs)	1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.	Cascade hydro systems have complex intertemporal relationships that are difficult for ISDs to mode because relationships vary between systems. A resultmission process was incorporated into DACP so that eligible resources could review their offers prior to a second run of DACP for final scheduling. Retaining the resultmission window under a financially binding DAM would provide one group of participants the potential to improve their financial positions but have nothers'. In fleu of a resultmission window, additional operating characteristics may need to be respected in the DAM to increase the likelihood of dispatchable cascade hydro resources necessing a feasible day-ahead schedule.		There are no further high level design decisions for this element	SSM DE12- Price Setting Eigibility SSM DE 13: Make Whole Payments SSM DE15: Reference Levels	Pass 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet bul load. New inputs include a VG elected forecast and PRL bulks include body VG and PRL will be responsible for simplification or inforecasts and balls into the DAM. Virtual body and offers will also be included if virtual transactions are included in the initial implementation of DAM. Committee to plotn a RUC determine whether additional unit commitments are need to enses 1500 forecasts. No input changes from current DACP register. 130 and retain the current DACP residencies schedules however at settlement ready prices. As in Pass 3 will continue to determine final in accounters schedules however at settlement ready prices. As in Pass 3 will continue to determine final whether is however at settlement ready prices. As in Pass 3 will continue to determine final whether additional hydro-electric operating characteristics: 13) Ability to inmarke must not conditions: 13) Ability to inmarke must not conditions: 13) Ability to inmarke must not conditions: 14) Ability to inmarke the difference of resources states 15) Ability to respect intertemporal dependencies between two on more resources on a cascade proportiently costs 16) Ability to respect intertemporal dependencies between two on more resources on a cascade proportiently costs 16) Ability to respect intertemporal dependencies between two on more resources on a cascade proportiently costs 16) Ability to respect fortubiden regions: 17) Ability to respect fortubiden regions: 18) Ability to respect fortubiden regions: 18) Ability to respect fortubiden regions: 19) Ability to respect fortubiden regions: 19) Ability to respect fortubiden regions: 10) Ability to respect fortubiden regions: 10) Ability to respect fortubiden regions whether additional regionerent Stuting departs preservables any mititum or petitions any maintim more patitions to represent their hourly defers using monotonically increasing price-quarity pai	<ol> <li>Not retaining the existing resubmission window supports a fair and competitive DAM process and eliminates additional opportunities for the exercise of market power.</li> <li>Respecting additional hydro-electric operating parameters in the DAM and predispatch will increase the likelihood of dispatchable cascade hydro resources receiving a feasible day-ahead schedule and improve the optimization of all resources.</li> </ol>		N/A
Epergy - F	DAM Op off	timization of EURs (Formerly fer Resubmission for ELRs)	1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.     10 Encode DAM between 09:00 and 12:10 EST	Cascade hydro systems have complex intertemporal relationships that are difficult for ISDs to mode because relationships way between systems. A resubmission process wis incorporated into DAP's on the digite resources could revise their offers prior to a second run of DAC' for that scheduling. Retaining the resolutionships window users fanceally bitting DAM sould provide one group of participants the potential to improve their financial positions but harm others'. In lieu of a resubmission window, additional operating characteristics may need to be respected in the DAM to increase the likelihood of dispatchable cascade hydro resources receiving a feasible day-ahead schedule.		There are no further high level design decisions for this element	SSM DE12: Price Setting Eligibility SSM DE13: Make Whole Payments SSM DE15: Reference Levels	Pass 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet boll load. New inputs include a VG elected forecast and PBL block since both VG and PBL will be respondible for sometimiting their own forecasts and bias into the DAM. Virtual block and offers will also be included if virtual transactions are included in the initial implementation of DAM. Pass 2 will continue to perform a RUC to determine whether additional unit commitments are need to meet IESD forecash. No logic dramps from carrent DAC required. Pass 3 will continue to perform a RUC to determine whether additional unit commitments are need to meet IESD forecash. No logic dramps, PL blo sind virtual transactions. Pass 1, wei mipst, PL block with virtual transactions and unitable to determine final resources stateful transactions. In Bio da resubmission window, the DAM and predigatch engines should be able to meet the following software requirements that also to capture additional hydro-electric operating characteristics: 13) Ability to Inmange must run constituss 13) Ability to Inmange must run constituss 13) Ability to longent interengonal dependencies between two or more resources on a cascade system 10) Ability to soperity multiple daily energy limits to represent quantities of water with different capacitation will be required to determine the best way to meet these additional requirements during detailed edges. The design hould also maintain the ability for hydro-resources to respect there houry differe using a long and continue to be scheduled for energy and opparing resources any minimum or below any maximum operating calculated for energy and opparing resorve above any maximum operating calculated for energy and opparing resorve above any maximum or performant calculated for energy and opparing resorve above any maximum or performant calculated for energy and opparing to the calculated barries and additioned calculated barries above any maximum or performant ca	1) Not retaining the existing resubmission window supports a fair and competitive DAM process and eliminates additional opportunities for the exercise of market power. Respecting additional hydro-electric operating parameters in the DAM and predispatch will increase the likelihood of dispatchable cascade hydro resources receiving a feasible day-ahead schedule and improve the optimization of all resources. 20 Ensures the posting deadline of DAM schedules is utilized with the ass constitution deadline of	why 18, 2018; 34	N/A
Energy - D	DAM Opt Off	stimization of EURs (Formerly fer Resubmission for EURs) bmission and Posting Deadlines	1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM. 1) Do not retain the current DAM between 0500 and 12.30 DFT. 1) Decute DAM between 0500 an	Cascade hydro systems have complex intertemporal relationships that are difficult for ISOs to mode because relationships why between systems. A resubmission process wis incorporated into DAPs on the alighter encourses could revise their offers prior to a second run of DAC? For final scheduling. Retaining the resubmission window under a financially binding DAM would provide one group of participants the potential to improve the financial positions but harm other: In lieu of resubmission window, additional operating characteristics may need to be respected in the DAM to increase the likelihood of dispatchable cascade hydro resources receiving a feasible day-shead schedule.		There are no further high level design decisions for this element There are no further high level design decisions for this element.	SSM DE12- Price Setting Eligibility SSM DE 15: Make Whole Payments SSM DE15: Reference Levels DE12: Reporting Obligations	Pas 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet boll load. New inputs include a VG elected forecast and PRL Mok inclu- ded VG and PRL will be respondie for submiting their own forecasts and boll sub to PAM. Virtual to Pass 2 will controlled if virtual transactions are included in the initial implementation of Data 2 will controlled if virtual transactions are included in the initial implementation of Data 2 will controlled if virtual transactions are included in the initial implementation of Data 2 will controlled in the instruments of the owner at settlement ready prices. As in Pass 3 will continue to determine their ensources schedules however at settlement ready prices. As in Pass 3 will continue to determine their ensources schedules however at settlement ready prices. As in Pass 3 will continue to determine their ensources schedules and price detection operating and the current DACP residentiation window. The DAM and predispatch engines should be able to meet the Pass 1 and continue that am to captere additional hydro-detectic operating therateristics: 13) Ability to image must run conditions 13) Ability to image must run conditions 13) Ability to image the number of present stats 13) Ability to image to the temporal dependencies between two or more resources on a cascade system 10) Ability to image to the temporal dependencies between two or more resources on a cascade system 11) Ability to image to the temporal dependencies between two or more resources on a cascade system 13) Ability to image to the temporal dependencies between two or more resources on a cascade system 14) Ability to image to the temporal dependencies between two or more resources on a cascade system 15) Ability to image to the temporal dependencies between two or more resources on a cascade system 14) Ability to image to the temporal dependencies between two or more resources on a cascade system 15) Ability to image to the temporal depende	1) Not retaining the existing resubmission window supports a fair and competitive DAM process and eliminates additional opportunities for the exercise of market power. Respecting additional hydro-decisic operating parameters in the DAM and predispatch will increase the intellector of dispatchable accade three resources receiving a feesible day-ahead schedule and improve the optimization of all resources. 2A) Ensures the posting deadline of DAM schedules is aligned with the gas nomination deadline of 14 (200 EFF all year long, also provides participants more time to inform their dispatch data during a feesible day.	uły 15, 2018: 34	N/A  1) This option was not selected as gas nomination deadline and normal business hour alignment would not be maximized for the entire year considering EST and EPT are equal from November
Energy - D	DAM Opin	stimization of ELRs (Formerly (er Resubmission for ELRs)	<ol> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Execute DAM between 19:00 and 12:30 EST</li> <li>Execute DAM between 19:00 and 13:30 EPT</li> </ol>	Cascade bydro systems have complex intertemporal relationships that are difficult for ISDs to model because relationships vary between systems. A resubmission process was incorporated into DAPs on that eligible reasources could revise their offers prior to a second run of DAPs for final scheduling. Retaining the resubmission window under a financially binding DAM would provide one group of participants the potential to improve their financial positions but have no their. In list of resubmission window, additional operating characteristics may need to be respected in the DAM to increase this listichood of dispatchable cascade hydro resources receiving a feasible day-ahead schedule.		There are no further high level design decisions for this element	SSM DE12: Price Setting Eligibility SSM DE13: Make Whole Payments SSM DE15: Reference Levels DE13: Reporting Obligations	As 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet boll load. New inputs include a Vi effected forecast and PRL Moki since hold Vi Qia and PRL will be responsible for sistemiting their own forecasts and beins to the DAM. Virtual to an offer a will also be included if wirtual transactions are included in the initial implementation of DAM. The Statistical Control of the statistical and the statistical procession of the Statistical to an output to plot and RCD determine healther additional unit commitments are need to the Statistical Control of the statistical statistical transactions. and Statistical Control Control Control DACP registering and a resubmission window, the DAM and predigatch engines should be able to meet the following software requirements that the locature additional hybro-detertic operating classical control Control Control DACP registering and a resubmission window, the DAM and predigatch engines should be able to meet the following software requirements that that in to patrue additional hybro-detertic operating classical control for the control of the plant in the optical additional hybro-detectic constraints on the statistical and the statistical statistical and the	1) Not retaining the existing resubmission window supports a fair and competitive DAM process and eliminates additional opportunities for the exercise of market power. Respecting additional hydro-electric operating parameters in the DAM and predispatch will increase the likelihood of dispatchable cascade hydro resources receiving a feasible day-shead schedule and improve the optimization of all resources. 24) Ensures the posting deadline of DAM schedules is slighted with the gas nomination deadline of a layer for a single day in the posting deadline of DAM schedules is slighted with the gas nomination deadline of a layer for a la	uly 18, 2018: 34	N/A   1) This option was not selected as gas nomination deadline and normal business hour alignment triving March.
Energy - C	DAM OP ON DAM Sub	Rimization of ELRs (Formerly fer Resubmission for ELRs) bruission and Posting Deadlines	<ol> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>I) Execute DAM between 09:00 and 12:30 EST</li> <li>Execute DAM between 10:00 and 12:30 EST</li> <li>Execute DAM between 10:00 and 13:30 EPT</li> </ol>	Cascade hydro systems have complex intertemporal relationships that are diffault for ISDs to mode because relationships way between systems. A revise their offers prior to a second run of DACP for final scheduling. Betaining the revises their offers prior to a second run of DACP for final scheduling. Betaining the revises their offers prior to a second run of DACP for final scheduling. The second prior to a second run of DACP for final scheduling. The second prior to a second run of DACP for final scheduling. In lieu of a resubmission window, additional operating characteristics may need to be respected in the DAM to increase the likelihood of dispatchable cascade hydro resources receiving a feesible day-aheed schedule DAM submission and posting deadlines typically consider the timing of neighboring electricity markets and natural gas markets.		There are no further high level design decisions for this element There are no further high level design decisions for this element.	SSM DE12: Price Setting Eligibility SSM DE13: Make Whole Payments SSM DE15: Reference Levels DE12: Reporting Obligations	Ass 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet bul load. New inputs include a VG elected forecast and PBL bulks since both VG and PBL will be responsible for submiting their own forecasts and balls into the DAM. Virtual balls and offers will also be included if virtual transactions are included in the initial implementation of DAM. Pass 2 will continue to peform a RUC to determine whether additional unit commitments are need to meet RUG forecasts. No long of changes from current DACP required. The Pass 1, new inputs include VG forecasts, PBL bulks and virtual transactions. Pass 1 we inputs include VG forecasts, PBL bulks and virtual transactions. 1 Do not retain the current DACP required bulks and virtual transactions. 1 All Da not retain the current DACP required bulks and virtual transactions. 1 All bills to inmit the number of resource states 1 All bills to inmit the number of resource states 1 All bills to inmit the number of resource states 1 All bills to inspect intertemporal dependencies between two or more resources on a cascade asystem 1 All bills to inspect intertemporal dependencies between two or more resources on a cascade system 1 All bills to inspect intertemporal dependencies between two or more resources on a cascade system 1 All bills to propect forbidden negions: 1 All bills to propect forbidden negions: 1 All bills to propect forbidden negions: 1 All bills to propect forbidden negions: 2 All bills to bills the system starter requirements that be bet way to meet these additional preparaments daring detailed degis, the design should be additional system and continue to be checkedide for negionary and operating reserve above any minimum or paints and balls that to 2 All bills the two states the should be rements. 2 All bills the two will open at 06:00 EPT and close at 10:00 EPT.	<ol> <li>Not retaining the existing resubmission window supports a fair and competitive DAM process and eliminates additional opportunities for the exercise of market power.</li> <li>Respecting additional hydro-electric operating parameters in the DAM and predispatch will increase the likelihood of dispatchable cascade hydro resources receiving a feasible day-ahead schedule and improve the optimization of all resources.</li> <li>Ensures the posting deadline of DAM schedules is aligned with the gas nomination deadline of 14.00 EFT all year long, also provides participants more time to inform their dispatch data during normal bacines bours which are also in EFT.</li> <li>Maintains existing DACP window which provides sufficient time for participants to inform and</li> </ol>	uly 18, 2018: 34	N/A  1) This option was not selected as gas nomination deadline and normal business hour alignment would not be maximized for the entire year considering EST and EPT are equal from November through March.
Energy - E	DAM Opt Off	stimization of EURs (Formerly fer Resubmission for ELRs) bmission and Posting Deadlines	<ol> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> </ol>	Cascade hydro systems have complex intertemporal relationships that are difficult for IGDs to model because relationships vary between systems. A resubmission process was incorporated into DAPs on the digite resources could revise their offers prior to a second run of DACP for final scheduling. Retaining the revisionships window area fanaccially botting DAM sould provide one group of participants the potential to improve their financial positions but harm others'. In line of a resubmission window, additional operating characteristics may need to be respected in the DAM to increase the likelihood of dispatchable cascade hydro resources receiving a fessible day-ahead schedule.		There are no further high level design decisions for this element There are no further high level design decisions for this element.	SSM DE12: Price Setting Eligibility SSM DE 18: Make Whole Payments SSM DE15: Reference Levels DE12: Reporting Obligations	Pas 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet boll load. New inputs include a VG effected forecast and PRL Mok incre- bold VG and PRL will be respondie for submiting their own forecasts and boll sub to PAM. Virtual to PRL 2 will controlled if virtual transactions are included in the initial implementation of DRL 2 will controlled if virtual transactions are included in the initial implementation of DRL 2 will controlled if virtual transactions are included in the initial implementation of DRL 2 will controlled to determine their effect worker at settlement ready prices. As in PRL 3 will controlled to determine their encourses that deble showever at settlement ready prices. As in PRL 3 will controlled to determine their encourses that deble showever at settlement ready prices. As in PRL 3 will controlled to determine their encourses that deble showever at settlement ready prices. As in PRL 4 will be an encourse that the answer to a settlement ready prices. As in PRL 4 will be an encourse that the answer to ADA represent prices and ab able to meet the following primeries requirements that aim to capture additional hydro-dectric operating with a determine the number of reasones thats 13) Ability to impact intertemporal dependencies between two or more resources on a cascade system. 10) Ability to impact intertemporal dependencies between two or more resources on a cascade system. 11) Ability to impact intertemporal dependencies between two or more resources on a cascade system. 12) Ability to impact intertemporal dependencies between two or more resources on a cascade system. 13) Ability to impact intertemporal dependencies between two or more resources on a cascade system. 14) Ability to impact indicate regions 15) Ability to impact indicates regions that ability for hydro-executes to reduce during detailed design. The design houdd also maintain the ability for hydro-executes to reduce during detailed design. The desig	1) Not retaining the existing resubmission window supports a fair and competitive DAM process and eliminates additional opportunities for the exercise of market power. Respecting additional phytic-electric operating parameters in the DAM and predispatch will increase the likelihood of distributable casced hyticor resources receiving a feasible day-ahead schedule and improve the optimization of all resources. 2A) Ensures the posting deadline of DAM schedules is aligned with the gas nomination deadline of 1400 EPT all year long, also provides participants more time to inform ther dispatch data during normal basiness hours which are also in EPT. 2B) Maintaine essibility DAD window which provides sufficient time for participants to inform and submit offers before the DAM state-security at 1000 EPT.	uly 18, 2018: 34	N/A  1) This option was not selected as gas nomination deadline and normal business hour alignment would not be maximized for the entire year considering EST and EPT are equal from November through March.
Energy - C Energy - C	DAM Opt off DAM Sub	stimization of ELRs [Formerly fer Resubmission for ELRs] bmission and Posting Deadlines tation of Operational	1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Execute DAM between 09:00 and 12:30 EFT 2) Execute DAM between 10:00 and 13:30 EPT 1) Cuarantee NGS resources will be disputched to at least their MLP in real-time for all DAM	Cascade bydro systems have complex intertemporal relationships that are     difficult for ISDs to model because relationships vary between systems. A     resubmission process was incorporated into DACP so that eligible resources could     revise their of length of DACP of final activationships     devise their of length of DACP of final activationships     devise their of length of DACP of final activationships     devise their of length of DACP of final activations,     devise their of length of DACP of final activations     positions but have mother:         The top 4 resubmission window under a financially binding DAM would     provide one group of participants the potential to improve their financial     positions but have mother:         The top 4 resubmission window,         additional operating characteristics may need         to be respected in the DAM to ionarea         bised of secularized activative the likelihood of devised being of         hydro resources receiving a flassible day-ahead schedule DAM submission and positing deadlines typically consider the timing of         neighboring electricity markets and natural gas markets. Days-ahead commitments for NDS resources provide a higher degree of certainty	Option 2	There are no further high level design decisions for this element There are no further high level design decisions for this element. There are no further high level design decisions for this element	SSM DE12: Price Setting Eligibility SSM DE 18: Make Whole Payments SSM DE15: Reference Levels DE12: Reporting Obligations	As 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet boll load. New inputs include a Vie dieted forecast and PRL Mok inclu- dod Vie and PRL will be respondie for submiting their own forecasts and bolls into the DAM. Virtual to an offens will also be included if with all transactions are included in the initial implementation of an energy of the start and transactions are included in the initial implementation of the start and the distribution of the distribution of the distribution of the distribution meet IESO forecasts. No input charges from current DAC regulated that a view inputs include VI forecasts, PRL bids and virtual transactions. <b>1</b> : One relation the current DACP residentias window for cascade hydro resources. <b>1</b> : One relation the current DACP residentias window for cascade hydro resources. <b>1</b> : One relation the current DACP residentias window for cascade hydro resources. <b>1</b> : One transaction conditions: <b>1</b> : One transactions window, the DAM and predisplich engine shall be able to meet the looking software requirements that that no capture additional hydro-description (and areality) to respect instructions are the software instruc- tions and a meadment of account additional hydro-description (and areality) to respect for thicken regions: <b>1</b> : Ability to respect for bidden regions: <b>1</b> : Ability to respect biddent biddent bidden bidden	<ol> <li>Not retaining the existing resubmission window supports a fair and competitive DAM process and eliminates additional opportunities for the exercise of market power.</li> <li>Respecting additional hydro-electric operating parameters in the DAM and predispatch will increase the likelihood of dispatchable cascade hydro resources receiving a feasible day-ahead schedule and improve the optimization of all resources.</li> <li>Ensures the posting deadline of DAM schedules is aligned with the gas nomination deadline of I add DEPT all year long, also provides participants more time to inform their dispatch data during normal business hours which are also in EPT.</li> <li>Balanian existing DACP window which provides sufficient time for participants to inform and submit offer before.</li> <li>Moving away from the existing approach used in DACP:</li> </ol>	wy 18, 2018: 34	N/A
Energy - C Energy - C	DAM Opt Off DAM Sub DAM initi	timization of ELBs (Formerly fer Repubmission for ELBs) bmission and Posting Deadlines tiation of Operational mmitments	1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Do not retain the current DACP resubmission window for cascade hydro resources under DAM.  1) Execute DAM between 09:00 and 12:30 EST 2) Execute DAM between 09:00 and 13:30 EPT  1) Guarantee NQS resources will be dispatched to at least their MLP in real-time for all DAM scheduled hours (current approach under DACP).	Cascade hydro systems have complex intertemporal relationships that are     difficult for IGS1 is model because relationships samp between systems. A     resubmission process was incorporated into IGGP so that eligible resources could     revise their offers prior to a second run of DAGP for final scheduling.     Retaining the resubmission window under a financially binding DAM would     provide one group of participants the potential to improve their financial     positions but harm other.     In lieu of a resubmission window, additional operating characteristics may need     to be respected in the DAM to increase the likelihood of dispatchable cascade     hydro resources receiving a feesible day-ahead schedule  DAM submission and posting deadlines typically consider the timing of     neighboring electricity markets and natural gas markets.  Day-shead commitments for NGS resources provide a higher degree of certainty     of when they can expect to be dispatched in real-line. They are used to:     -inform the IGSD and participants then NGS resources provide a higher degree of certainty	Option 2	There are no further high level design decisions for this element There are no further high level design decisions for this element. There are no further high level design decisions for this element	SSM DE12: Price Setting Eligibility SSM DE13: Make Whole Payments SSM DE15: Reference Levels DE12: Reporting Obligations	Ass 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet bul load. New inputs include a VG elected forecast and PBL bulks include bulk of VG and PBL will be repossible for submiting their own forecasts and balk into the DAM. Virtual bulk and offers will also be included if virtual transactions are included in the initial implementation of DAM. Constraints to phorm a RUC determine whether additional unit commitments are need to the SB 3 will contain to phorm a RUC determine whether bowever at settlement ready prices. As in PBB 3 will contain to determine final incourses schedules however at settlement ready prices. As in PBB 3 will contain to determine final incourses schedules however at settlement ready prices. As in PBB 3 will contain to determine final incourses schedules however at settlement ready prices. As in PBB 3 will contain the current DACP resubmission window for cascade hydro resources. In Bio da resubmission window, the DAM and predingatch regines should be able to meet the following schware requirements that that in to patrue additional hydro-electric operating characteristics: 10. JAbility to inmange must run conditions 11. JAbility to inmange must run conditions 11. JAbility to inspace forbidden regions: 11. JAbility to respect forbidden regions: 12. Jability to respect forbidden regions: 13. Jability to respect forbidden regions: 13. Jability to respect forbidden regions: 14. Jability to respect forbidden regions: 14. Jability to respect forbidden regions: 15. Jability to respect forbidden regions: 15. Jability to respect forbidden regions: 16. Jability to respect forbidden regions: 17. Jability to respect forbidden regions: 18. Jability to respect fo	<ol> <li>Not retaining the existing resubmission window supports a fair and competitive DAM process and eliminates additional opportunities for the exercise of market power.</li> <li>Respecting additional hydro-electric operating parameters in the DAM and predispatch will increase the likelihood of dispatchable cascade hydro resources receiving a feasible day-ahead schedule and improve the optimization of all resources.</li> <li>Ensures the posting deadline of DAM schedules is aligned with the gas nomination deadline of 14:00 EFT all year long, also provides participants more time to inform their dispatch data during normal bacines booms which are also in EFT.</li> <li>Maintaine esisting pDCP window which prodes sufficient time for participants to inform and submit offers before the DAM starts execution at 10:00 EFT.</li> <li>Moving away from the solidin paports with DAP:</li> <li>more efficient for EFUC to determine whether incremental commitment decisions are required as real-line approaches.</li> </ol>	wy 18, 2018: 34 anway 31, 2018: 59-66	N/A  1) This option was not selected as gas nomination deadline and normal business hour alignment would not be maximized for the entire year considering EST and EPT are equal from November through March.  1) This option was not selected as it would be a less effectent mechanism for managing intradary changes to DMM schedules as real-time approaches.
Energy - E Energy - E	DAM Opt Off DAM Sub DAM Inter	timization of EURs (Formerly fer Resubmission for ELRs) bmission and Posting Deadlines tuation of Operational mmitments	<ol> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Execute DAM between 09:00 and 12:30 EST</li> <li>Execute DAM between 00:00 and 13:30 EPT</li> <li>Guarantee NQS resources will be dispatched to at least their MLP in real-time for all DAM scheduler DACP.</li> <li>Cascantee NQS resources will be dispatched to at least their MLP in real-time for only their DAM.</li> </ol>	Cascade hydro systems have complex intertemporal relationships that are difficult for ISOs to mode because relationships with between systems. A resubmission process wis incorporated into DAP's on the digite ensources could revise their offers prior to a second run of DAC' for that scheduling. Betaining the resubmission window user a finaccially botting DAM sould provide one group of participants the potential to improve their financial positions but harm other. In line of a resubmission window, additional operating characteristics may need to be respected in the DAM to increase the likelihood of dispatchable cascade hydro resources receiving a fessible day-ahead schedule. DAM submission and posting deadlines typically consider the timing of neighboring electricity markets and natural gas markets. Day-ahead commitments for NDS resources provide a higher degree of certainly of when they can expect to be dispatchable in real-time. They are used to tast an near-line and an automation NDS resources will be signaled to tast an near-line and an automation NDS resources will be signaled to tast an near-line, and	Option 2	There are no further high level design decisions for this element There are no further high level design decisions for this element. There are no further high level design decisions for this element	SSM DE12: Price Setting Eligibility SSM DE 15: Make Whole Payments SSM DE15: Reference Levels DE12: Reporting Obligations	<ul> <li>Res 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet boll load. New inputs include a VG effected forecast and PRL Mok incredent VG and PRL will be responde for submitting their own brockness and bolls into the DAM. Virtual to an unclude of virtual transactions are included in the install implementation of DAR. 2 will controlled for distance transmits that one discovery and submet to the town will be responde to the ensures whether additional unclude mitments are need to the install implementation of DAR. 2 will control to determine their leasources schedules however at settlement ready prices. An or PRS 3 will continue to determine the later leasources includes however at settlement ready prices. An or PRS 3 will continue to determine the later leasources schedules however at settlement ready prices. An or PRS 3 will continue to determine the later leasources schedules however at settlement ready prices. An or PRS 3 will continue to determine the later leasources schedules and without transactions.</li> <li>a) Dan on trafkain the cumber of forecasts. PRL bids and prefixed prices. And the ability for prices.</li> <li>a) Bidling to limb termined of dependencies between two or more resources on a cascade stream.</li> <li>a) Bidling to limb termined to determine the best way to meet these additional requirements during detailed exigs. The design hould also maintain the ability for hydro-resources or present ther howy of fore suiting remeasing price-quarking para ad continue to be scheduled for energy and operating receare values grained and the price share the ability of hydro-resources or present ther howy of fore suiting remeasing increascarking bairs and continue to be scheduled to renergy and operating receare above any maximum or below any maximum operating restrictions immose the howy of fore suiting remeasing here.</li> <li>a) Dischedules the there software remainments.</li> <li>b) submission window will open at 06.00 EPT and class at 10</li></ul>	1) Not retaining the existing resubmission window supports a fair and competitive DAM process and eliminates additional opportunities for the exercise of market power. Respecting additional hydro-decisit operating parameters in the DAM and predispatch will increase the likelihood of dipatchale cacade hydro resources receiving a feasible day-ahead schedule and improve the optimization of all resources.  2A) Ensures the posting deadline of DAM schedules is aligned with the gas nomination deadline of 1400 EFT all year long, also provides participants more time to inform their dispatch data during normal business hours which are also in EFT.  2A) Ensures the posting deadline of DAM schedules is aligned with the gas nomination deadline of 1400 EFT all year long, also provides participants more time to inform their dispatch data during normal business hours which are also in EFT.  2A) Marianian cesting IOACP window with provides sufficient time for participants to inform and summ offers before the DAM dards execution at 10:00 EFT.  3. A more efficient of EUL to determine which incremental commitment decisions are required as real-line approache.  3. Sinks a balance between providing market participants and the IEO with sufficient operational	uly 18, 2018: 34 anuary 31, 2018: 59-66	N/A   I) This option was not selected as gas nomination deadline and normal business hour alignment would not be maximized for the entire year considering EST and EPT are equal from November through March.  I) This option was not selected as it would be a less efficient mechanism for managing intraday changes to DAM schedules as real-time approaches. January 31, 2018: 65
Energy - E Energy - E	DAM Opt Off DAM Sub DAM Inter	stimization of ELBs [Formerly fer Resubmission for ELBs] bmission and Posting Deadlines tation of Operational mmtments	<ol> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Do not retain the current DACP resubmission window for cascade hydro resources under DAM.</li> <li>Execute DAM between 09:00 and 12:30 EFT</li> <li>Execute DAM between 09:00 and 12:30 EFT</li> <li>Execute DAM between 10:00 and 13:30 EFT</li> <li>Guarantee NGS resources will be dispatched to at least their MLP in real-time for all DAM scheduled hours (current approach under DACP).</li> </ol>	Cascade bydro systems have complex intertemporal relationships that are     difficult for ISDs to model because relationships vary between systems. A     resubmission process was incorporated into DAPs on that eligible resources could     revise their offlex prior to a second on DAPs for final steaduling.     Relaining the resubmission window under a financially binding DAM would     provide one group of participants the potential to improve their financial     positions bulk arms other.     In the of a resubmission window, under a financially binding data resubmission window,     the the DAM to increase the likelihood of dispatchabe cascade     hydro resources receiving a feasible day-ahead schedule     DAM submission and posting deadlines: typically consider the timing of     neighboring electricity markets and natural gas markets.     Day-ahead commitments for NQS-resources provide a higher degree of certainly     e-altern in the G2D commitments for NQS-resources provide a higher degree of certainly     e-altern in the G2D commitments for NQS-resources provide a higher degree of certainly     e-altern in the G2D commitments for NQS-resources provide a higher degree of certainly     e-altern in the G2D commitments for NQS-resources provide a higher degree of certainly     e-altern in the G2D commitments for NQS-resources provide a higher degree of certainly     e-altern in the G2D commitments for NQS-resources provide a higher degree of certainly     e-altern in the G2D commitments for NQS-resources provide a higher degree of certainly     e-altern in the G2D commitments for NQS-resources provide a higher degree of certainly     e-altern in the G2D commitments for NQS-resources provide a higher degree of certainly     e-altern in the G2D commitments for NQS-resources provide a higher degree of certainly	Option 2	There are no further high level design decisions for this element.	SSM DE12: Price Setting Eligibility SSM DE 18: Make Whole Payments SSM DE15: Reference Levels DE12: Reporting Obligations	As 1 will be subject to market power mitigation however will continue to determine unit commitments needed to meet boll load. New inputs include a Vie dieted forecast and PRL Mok inclu- dod Vie and PRL will be respondie for submiting their own forecasts and bolls into the DAM. Writes the PRL and PRL a	<ol> <li>Not retaining the existing resubmission window supports a fair and competitive DAM process and eliminates additional opportunities for the exercise of market power.</li> <li>Respecting additional hydro-decific operating parameters in the DAM and predispatch will increase the likelihood of displaylable accould hydro-decific operating and the sensible day shead schedule and improve the optimization of all resources.</li> <li>Excurses the posting deadline of DAM schedules is aligned with the gas nomination deadline of the optimization of all resources.</li> <li>Ensures the posting deadline of DAM schedules is aligned with the gas nomination deadline of anomal balaness hours which are also in ETF.</li> <li>Bained anise existing BACP window which provides sufficient time for participants to inform and solumit offers before the DAM schedules is aligned to the provide sufficient time for participants to inform and solumit offers before the DAM schedules in aligned account and too DEP:</li> <li>Investing BACP window which provides sufficient time for participants to inform and solumit offers before EDUC to determine whether incremental commitment decisions are required as real-time approaches.</li> </ol>	why 18, 2018: 34 January 31, 2018: 59-66	N/A    I) This option was not selected as gas nomination deadline and normal business hour alignment would not be maximized for the entire year considering EST and EPT are equal from November through March.  I) This option was not selected as it would be a less effectent mechanism for managing intraday changes to DMA schedules area-time approaches.  I) This option was not selected as it would reduce operational certainty for all market participants an the ESD.



Work Stream	Design Element	Ontions	Ontions Quantieur	Common Practico	Considerations	Interdenendent Flomente	Droliminany Decision	Patienale	Clida Reference	Quarties of Options not selected
Energy - DAM	Market Power Mitigation	Determine elements of market power mitigation for the DAM:	<ol> <li>The data sources for reference prices used to mitigate energy offers in the real- tion of the matching of the mitigate energy offers in the real- tion of the matching of the mitigate energy offers in the real- tion of the matching of the mitigate energy of the matching of</li></ol>	- All	There are no further high level design decisions for this element	SSM DE13: Mitigation Process	Apply all of the identified mitigation elements in the DAM:	<ol> <li>Experience in other jurisdictions has shown that virtual transactions can be used in many ways to a standard and the standard standard and the standard standard</li></ol>	Shue Reference	N/A. All options presented are common to all other DAMs.
		1) Use day anead source data to inform UAW reference levels where they differ from those used in real-time.     2) Implement a mitigation design for post-DAM uneconomic production.	<ol> <li>The two settlement system introduces the potential for participants to</li> </ol>			SSM DE14: Timing of Application SSM DE15: Reference Levels ERUC DE9: Commitment Cost Mitigation	A) The IESO will perform ex-post mitigation for instances where virtual transactions have been used for divergence of prices between day-ahead and real-time.	exercise market; power (e.g. causing divergence between day-anead and rear-time prices to maximize FTR payments to holders)		
		<ol> <li>Implement a mitigation design for phylical withholding.</li> </ol>	increase two-settlement margins with uneconomic offers when they have the ability to influence constraints in real-time.				B) Offers will be mitigated for uneconomic production when the resource is contributing to congestion and the applicable conduct and impact thresholds are met.	<ol> <li>Exercising market power via post-DAM uneconomic offers are a legitimate risk given Ontario has n congested areas (e.g. Northwest, Northeast, Southwest)</li> </ol>		
			<ol> <li>Participants can exercise market power by physically withholding all or some of their supply in order to raise DAM prices and profits for other resources within their porfolio.</li> </ol>				C) Physical withholding for both energy and operating reserve will be tested after the fact based on a resource's reference quantity for both products.	<ol> <li>Mitigating for physical withholding helps ensure market outcomes are consistent with those that would result under competitive participation.</li> </ol>		
							Reference quantities will be determined after-the-fact in consultation with the market participant, w vary for different resource technologies and account for fuel source uncertainty. This approach ensures that participants can effectively manage their offer strategies under the two-settlement system within an acceptable level of risk.			
							Energy Reference Quantity = Installed Capacity less the most restrictive of Reportable Outages or No Outage Reportable Operating Restrictions	1		
							Operating Reserve Reference Quantity = Most Restrictive Ramp Rate Capability x the Operating Reserve Product (10 min or 30 min); Cannot be greater than the established Energy Reference Quantity.			
							A settlement adjustment will apply if determined that physical witholding was used to exercise market power.			
							Settlement Adjustment = Energy or Operating Reserve Quanitity Withheld x Locational Price Earned	2y		
Energy - DAM	Price-Setting Eligibility/Operatin Restrictions	g 1) Consistent price setting eligibility between DAM and real-time where practicable.	Price settling eligibility should generally be consistent between DAM and real- time. However, there will be some schedules that should be able to set prices in		There are no further high level design decisions for this element	DE15: Make Whole Payments	the Quantity Withheld x Multiplier for # of occurences within a period of time. Multiplier has yet to 1A) The following resources will be eligible to set DAM prices even though they will be unable to in real-time:	1A) Resources that are only to set DAM prices: - Supports consistency between DAM prices and DAM schedules		N/A. Price setting eligibility proposed is considered best practice in other DAMs.
			the DAM but not in real-time because the schedules for these resources can vary in DAM but not in real-time.				Imports and Exports Hourly Demand Response Frice Responsive Load	<ul> <li>Reduces dispatch up and dispatch down out of market payments that must be funded by uplift</li> <li>18) Resource parameters that will not be able to set neither DAM or RT prices:</li> </ul>		
			It is efficient for resources that can be dispatched in the DAM to be eligible to set DAM prices. Imports and Exports, HDR, PRL and Virtual Transactions all meet				Virtual Transactions	Are considered non-dispatchable in both DA and RT.     Support DA to RT price convergence.		
			this criterion.				The following resources parameters will be ineligible to set DAM and RT prices: • NQS start-up and minimum load costs • Operating restrictions such as forbidden regions			
Energy - DAM	Reporting Obligations	<ol> <li>Introduce new reporting obligations and/or modify existing DACP reporting obligations to satisfy DAM needs.</li> </ol>	DAM information reported by ISOs are typically used by market participants to form bids and offers before DAM and make operational plans after DAM.		There are no further high level design decisions for this element	DE8: Submission and Posting Deadlines	New or modified reporting information will include:	For new or modified reporting information:	July 18, 2018: 45-48	N/A
			The DAM will require new or modified reporting obligations relative to DACP because of an increase in the financial significance of DAM forecasts and				<ol> <li>Publicly available settlement ready Locational Marginal Prices (LMP)</li> <li>Publicly available marginal values for binding constraints (i.e. cost savings of relaxing a constrain by 1 MW).</li> </ol>	1A) Locational pricing information on congestion and losses will inform market participant offers into the real-time market or future DAMs. 1B) including marginal values for system constraints can inform investment decisiosn and encourage		
			schedules.				1C) Privately available Market Power Mitigation (MPM) related information 1D) Publicbly available aggregate summaries of submitted and cleared virtual transactions	resources to increase their dispatchability. 1(1) Disclosure of MPM violations and replacement dispatch data used can help participants inform		
							The following information will cease publishing:	(I) Improves transparency and is consistent with the approach following with all other resource types.		
							1E) Availability Declaration Envelope (ADE) related information. 1F) ELR resubmission window related information.	For information that will cease publishing:		
								1E & EF) No longer required as the ADE and ELR resubmission will not be retained under a DAM.		
Energy - DAM	Two Settlement for Load	<ol> <li>Dispatchable Load, Price Responsive Load (PRL), non-dispatchable Load (NDL) and hourly demand response (HDR)resources will be exposed to two settlement</li> </ol>	Parties responsible for bidding into DAM should bear the responsibility of those bids.	Option 1	There are no further high level design decisions for this element	DE2: Load Participation	<ol> <li>Dispatchable Loads and PRLs will submit their own bids into the DAM and be exposed to two settlement upon receiving a DAM schedule</li> </ol>	<ol> <li>Parties responsible for submitting their own bids into the DAM should bear the financial responsibility for those bids.</li> </ol>		N/A
							2) The IESO will submit DAM bids on behalf of NDL participants. NDL participants will only be expose to day-ahead prices and a settlement if they actually consume in real-time. NDL participants will be exposed to a modified two-settlement.	d 2) It is reasonable to assume that a NDL would not have bid into the DAM if they did not consume. A modified settlement approach is necessary for NDL participants considering the IESD uses a top-down approach in forecasting Ontario load has little to no visibility for how much energy NDL participants may actually expect to consume at their location.		
							<ol> <li>HDR bids submitted into the DAM will be exposed to a DAM settlement and a real-time balancing settlement.</li> </ol>	3) Exposing HDR bids to DAM and real-time balancing settlements is efficient because, like other dispatchable load resources, they would be incentivized to bid in their marginal benefit of consumation in both DAM and real-time.		
Energy - DAM	Two Settlement for Supply	<ol> <li>All supply resources (dispatchable generators, self-scheduling generators, variable generators and imports) will be exposed to two settlement upon receiving a DAM schedule.</li> </ol>	d Parties responsible for offering into the DAM should bear the financial responsibility of those offers.	Option 1	There are no further high level design decisions for this element	N/A	<ol> <li>All supply resources (dispatchable generators, self-scheduling generators, variable generators and imports) will be exposed to two settlement upon receiving a DAM schedule.</li> </ol>	Provide efficient incentives for the participation of suppliers in both the day-ahead and real-time market for energy and operating reserve.	January 31, 2018: 20-26	N/A. Standard two-settlement is common to all supply pariticipants in a DAM.
Energy - DAM	Make Whole Payments	1) Provide DAM make whole payments for one or more of the following conditions:	Properly designed makewhole payments incent efficient participation in the DAM by providing dispatchable resources assurance that they will at least recover the payment of constraints that the payments are set of the payments of the pay	1A	There are no further high level design decisions to be made for this element.	DE9: Initiation of Operational Commitment	ts A1) Self Schedulers, Non-Dispatchable Loads and Virtual Transactions will not be eligible for make whole payments.	A1) Self schedulers are non-dispatchable price takers who submit forecast schedules that do not reflect a resource's costs. Non-Dispatchable Loads are also price takers that the IESO submits forecast		1B) This option was not chosen as it would be unlikely for NQS resources in Ontario to artifically reduce their ramp rates to avoid high balancing costs. It is also not a best practice amongst all other instruction.
		<ul> <li>A) DAM energy and operating reserve revenues are less than DAM offer costs</li> <li>B) Day-ahead margin assurance payments (DAMAPs).</li> </ul>	as-bid costs of covering their DAM schedules. DAMAPs are typically designed to incent ramp-limited resources to maintain	Secondary Uptions - Treatment of NQS Ramp in DAM: Option 2			A2) All NQS resources will be eligible for a make whole payment if their energy, operating reserve an commitment costs are not covered by the energy and operating reserve revenues earned over their	schedules for. Virtual transactions are purely financial instruments that do not have production costs d A2) NQS resources are scheduled based on minimum load requirements and start-up and speed no		jurisductions. May 23, 2018: 37-38
		Secondary Options - Real Time Make Whole Payment Design: 1) Real-time make whole payment guidelines	flexible offers in the real-time market. Secondary Options - Real-Time Make Whole Payment Design:				entire DAM schedule, however NQS resources must actually come online in order to qualify for a ma whole payment covering start-up and speed-no-load costs as follows: Start-up costs will be fully covered if online within 30 min of their first DAM-scheduled hour: partiall	e load costs in addition to their incremental energy and operating reserve costs. Start-up and speed-no- load cost eligibility rules are current practice for DACP and common practice in all other jurisdictions. This additional eligibility criteria also reduce uplift as costs can only be recovered if they are actually		Secondary Options - Treatment of NQS Ramp in DAM: 2) This option was not chosen as it could increase the potential for overcommitment and increased unlift.
		Secondary Options - Treatment of NQS Ramp in DAM: 1) Include ramping energy in a NQS resource's financially binding DAM schedule and make whole calculation	Make whole payment calculations should overpayments when dispatch up and down events occur in both DAM and real-time.				covered if the resource comes online between 30 and 90 min; and not covered if the resource comes online after 90 min.	being incurred.		Sept 20, 2018: 62
		carculation. 2) Do not include ramping energy in a NQS resource's financially binding DAM schedule and make whole calculation.	Secondary Options - Treatment of NQS Ramp in DAM: Ontario has a greater amount of NQS units with long start-up times relative to				speed-no-load costs will either be runy or partially covered based on the number of nourly intervals energy was actually delivered.	As j Unike RQS resources, all remaining supply and load resources are only scheduled based on their incremental energy and operating reserve costs		
			other jurisdictions. Consideration should be given to including ramp energy in a NQS resource's DAM schedule to reduce the potential for overcommitment and increased uplift.				A3] All remaining supply and load resources, including imports and exports, will be eligible for a mak whole payment in every hour that their energy and operating reserve costs are not covered by their revenues.	<ul> <li>B) Unlikely for NQS unlis to artifically reduce their ramp rates to avoid high balancing costs given thei dispatch turnaround times relative to slower moving coal-fired generators in other jurisdictions.</li> <li>DAMAPs would also present potential for gaming strategies.</li> </ul>	r	
							B) DAMAP will not be included in the DAM make whole payment design Secondary Options - RT Make Whole Payment Design:	Secondary Options - RT Make Whole Payment Design: A) Provides correct incentive for resources to follow IESO dispatch instructions even if they are dispatched to a less economic option		
							The following real-time make whole payment guidelines will be used for energy and OR:     A) When not scheduled in DAM:	B) Avoid make-whole payments that result in overpayment and create unnecessary uplifts C) Prevents market participants from benefiting from their own non-compliance with dispatch intervention.		
							A remote payments should bring the resource back to its operating provide to constrained- down events.     - RT make-whole payment should bring the resource back to its operating cost for constrained-up	Instituctions D) Including balancing revenues and costs for operating reserve, avoids over or under compensation while also ensuring a resource remains incentivized to follow its dispatch.		
							events. B) When scheduled in DAM, RT make-whole payments should take into account interactions betwee DAM and RT make-whole payments	Secondary Options - Treatment of NQS Ramp in DAM: 1) Supports price convergence between DAM and RT by aligning DAM scheduling outcomes with RT		
Energy - DAM	Uplift Recovery	<ol> <li>Allocate the following uplift components to real-time loads and/or exports:</li> <li>A) DAM make whole payments</li> </ol>	All US ISOs allocate most of the DAM uplift to real-time loads and exports rather than to DAM participants in order to incentivize load participation in the DAM.	Option 2	There are no further high level design decisions for this element	DE15 Make Whole Payments	<ol> <li>Allocate the following uplift components to real-time loads and exports:</li> <li>A) DAM make whole payments</li> </ol>	Will not discourage loads and exports from participating in the DAM.	March 27, 2018: 83-88 May 23, 2018: 40-51	<ol> <li>This option was not selected as it would not discourage PRLs from strategically underbidding in the DAM and increasing costs for other PRLs that have not underbid.</li> </ol>
		B) DAM operating reserve payments     J Option 1 however allocate a portion of DAM make whole payments to DAM participants that	Causally connecting a portion of uplift costs to DAM participants that specifically contributed to these costs can be complex.				B) DAM operating reserve payments Price Responsive Loads (PRLs) will be charged a portion of make-whole payments generated in the	Charging PRLs a portion of make-whole payments generated in reliability pass incentivizes more efficient participation. PRLs could otherwise strategically underbid in the DAM and increase costs for other PRLs that have not strategically underbid.		May 23, 2018: 50
		specifically contributed to those costs.					reliability pass of DAM when they have underbid in the DAM relative to their real-time consumption Virtual supply transactions will be charged a portion of make-whole generated in the reliability pass	Charging virtual supply transactions a portion of make-whole generated via reliability pass prevents of PRLS from revertine to using virtuals in attempt to underbid in the DAM.		
Epergy - DAM	Einancial Transmission Bights	11 Sattle external ETPs at DAM mines	External ETBs should be settled at DAM revises in order to provide a bedge for	Ontion 1	There are no further high level design derisions for this element	N/A	DAM for every MW cleared in the DAM.	ETER must be certiled based on DAM prices in order to provide a bedge for connection charges on day.	January 21 2018- 01-02	2) This ontion was not chosen as real-time connection charnes are already bedred by a participant's
Encieft Down	inancia natampion regito	2) Continue to settle external FTRs at real-time prices.	congestion charges on day-ahead schedules (real-time congestion charges are already hedged by a participant's DAM schedule).					ahead schedules.	201001 y 32, 2020. 32 33	DAM schedule. Day ahead to real-time congestion rent differences are typically managed through uplift.
Energy - DAM	Market System Failure	For Day-Ahead Market Failures:	All ISOs need both operating and settlement rules that apply in the event of	Vary between Jurisdiction	There are no further high level design decisions for this element	N/A	For a DAM Failure:	For a DAM Failure:	July 18, 2018: 54, 57-58	January 31, 2018: 92-93 For DAM Failure:
		1A) Usectare UAM a failure if delayed results cannot be published by 15:30 EPT and issue out-of-mart NQS resource reliability commitments for the next day by 13:30 EPT. 18) Do not issue DAM results (always defer to ERUC for unit commitments and real-time for prices). 10) Use one one of the senile (broke) of operating defersion of the senile (broke) of the	ket market system failure. The settlement rules should be designed to avoid creating large windfall losses or profite (hanelite for individual suppliars or power commence				1A) Declare DAM a failure if delayed results cannot be published by 15:30 EPT and issue out-of-mark NQS resource reliability commitments for the next day by 18:30 EPT.	t1A) Trying to preserve DAM results prior to declaring it a failure provides greater price and operational certainty over out-of-market actions and allows the IESO to coordinate DAM results with epithybors before 1500 EET. Numere timeland due short out of a provide action action action action action action.		1B) This option was not selected as there is a reliability risk associated with just-in-time commitments using only the pre-dispatch process
		For Real-Time Market Suspensions or Failures:	The approaches used in other ISOs can be considered for Ontario.				For a RTM Suspension:	recomposed a score a score r nowever, unitery way aneso out-or-market actions are required if DAM were to inevitably fail.		1C] This option was not selected as yesterday's DAM results for today may not be reflective of forecast conditions and dispatch data for tomorrow
		<ul> <li>AN Maintain current administrative scheduling and pricing methodologies;</li> <li>Use Day-Ahead market schedules and prices</li> </ul>					cA) Maintain existing admin scheduling and pricing methodologies, i.e. the RTM administered price will be determined from real-time prices of the corresponding hour or hours from the 4 most recent business days (or non-business days, as the case may be)	For KIM suspension: 2A) Aligned with existing administrative pricing guidelines when there is a RTM suspension:		For RTM Supension or Failure (No Suspension): N/A as any of recommended methods would be appropriate.
							For RTM Failure (No Suspension), use one of the following options that it best suited for the conditions of the failure.	<ul> <li>Fair and reasonable to suppliers and consumers</li> <li>Understandable, transparent and administratively simple</li> <li>Only try to reflect a current market price if grid operations are based to some extent on market-</li> </ul>		July 19, 2018: 56
							2A) Maintain existing admin scheduling and pricing methodoligies, i.e use the most recent price that was successfully generated before or after the failure: or	based information and signals For RTM Failure (No Suspension):		
							28) Apply the DAM price calculated for the corresponding hour of the market failure; or 2C) Recalculate market prices and scheduled using offline studies	2A, 2B or 2CJ Any of the recommended methods can be used to provide a reasonable approximation of what the arcelet orice should have been abused the follow		
								or while the meriprice should have been absent the failure.		