The Design Issues Log is used to ensure that Day Ahead Market (DAM) design issues identified in the high level Design Strawman document or subsequently during the detailed design phase are adequately documented and followed for resolution. The log will be updated regularly and distributed to the DAM Working Group for comment prior to posting to the IMO Consultation/MEP/DAM website. Design issues included in this log are those items for which no approach for resolution has been conceived, or for which a proposed resolution has not been agreed. Questions regarding the high level design which are expected to be resolved as part of the detailed design are not included as issues in this log. However as the detailed design evolves, additional issues may be identified and will be added to this control mechanism.

Ref. #	Design Issue	Resolution	Status
1.	*DESIGN DISCUSSION – Whether participation will be entirely voluntary or mandated for certain participant types is still under evaluation. The decision will be affected by the designs of other programs, including Long Term Resource Adequacy. If mandatory participation were to be required, the participant types to which it would likely apply are indicated in the table.* • LECG has made the case that the DAM should be voluntary. Even in markets that are 'mandatory' (e.g. NYISO, where capacity suppliers are compelled to offer their capacity into the DAM), participants can remove themselves from the market. This can be accomplished by the manner in which they offer their physical resources at a high value (say, MMCP) to avoid being selected day-ahead or by submitting virtual bids that counteract their physical offer. Consequently, the DAM relies upon other drivers to encourage participation in the DAM, rather than mandating participation.		OPEN
2.	*DESIGN DISCUSSION - the issue of whether the fixed cost elements of the multi-part offer (bid for loads) should be cost or market-based has been discussed at length. While no firm conclusion has been reached, at this time we will assume they are to be market-based; however, an interim IMO pricing team initiative for the Real-Time Market (RTM) to provide spare generation on-line (SGOL) will have auditable cost based start-up and minimum generation costs. This will have to be factored into the decision for the DAM design.* • A market-based approach is consistent with the DAM Design Guiding Principle 7 (…use market mechanisms to the extent practicable). • A cost-based approach will be difficult and expensive to implement and maintain. • The SGOL program uses auditable cost-based start-up and minimum generation costs. However, SGOL differs fundamentally from the DAM. The DAM commits resources through a competitive process (calculation engine passes 1 and 2). SGOL does not employ such a process. • Proposal – the DAM design will implement a market-based approach for shut-down/start-up costs and minimum outage/minimum generation costs for loads/generators that submit 3-part bids/offers. • Dec. 10 – The DAM Design Strawman has been updated to reflect that this matter has been discussed by WG members (Dec 1 WG Meeting) that a market-based approach is favourable with the appropriate oversight. LECG has been requested to provide examples and experiences in other markets. The issue remains outstanding • During the May 5th DAMWG Design Strawman Review Session, a concern was raised by the WG members that represent generators challenged the market-based approach to the costs submitted as part of multi-part load bids. A future DAMWG session to be scheduled during the detailed design phase will address this concern.	• Reference Strawman Release 3.0 – Data Submission and Content, Physical Offers to supply energy. • Appropriate oversight of market-based multi-part offers will be accomplished through the market monitoring activities of the IMO Market Assessment Unit under the auspices of the Market Surveillance Panel.	CLOSED

Ref. #	Design Issue	Resolution	Status
3.	*DESIGN DISCUSSION – Whether there will be a transitional period, during which both DAM and real-time PBCs will be supported, is still under review.* • The DAM design presentation of Sept 10 2003 identified that PBCs could be submitted to the DAM or the RTM. • Restated at DAM WG Meeting November 10, 2003 – Confirm that DAM WG has same understanding on November 19	• PBCs will exist in both the DAM and RTM • Reference Strawman Release 3.0 – Products, Risk Management Instruments	CLOSED

4.	*DESIGN DISCUSSION – What amount of energy credit to give Self-Scheduling, Transitional Scheduling and Intermittent Generators in the Pass 2 commitment needs to be determined.*
	• The DAM design presentation of Sept 29 outlines 2 approaches for forecasting the output level of IGs/TSGs/SSGs:
	  • Based upon data provided by generators (with IMO using its forecasts to monitor generator projections to ensure that they are realistic)
	  • Based upon IMO forecasts
		• Reference Strawman Release 3.0 – IMO Input Pre-Market Data, Self-Scheduling, Transitional Schedule, Intermittent Generation Resources and Table 1	CLOSED

5.	*DESIGN DISCUSSION – While the pre-dispatch results (both public and market participant specific) are currently distributed to market participants, there is concern that knowledge of the DAM dispatch advisory schedules could give an information advantage to the larger market participants. Further discussion and investigation is required.* During DAMWG Meeting – June 17, the question of publishing Pass 4 results together with nodal prices based on the Pass 4 constrained dispatch was revisited. Concerns addressing the publication of multiple prices, including Pass 3 nodal prices, Pass 4 nodal prices and Pass 5 uniform prices were discussed supported by a presentation made by the IMO. The DAMWG recognized that the publication of an additional set of prices might create some level of confusion and potentially add workload to the IMO Training and Education and Customer Support groups. Additionally the DAMWG also acknowledged that it would be the participants responsibility to manage the use of this information.	• Reference DAM Strawman Release 3.0 – poses that informational nodal prices will be published as a result of calculation engine pass 3. Also advisory schedules produced by calculation engine pass 4 will be used by IMO Operations for security analysis and intertie pre-scheduling • This proposition was accepted by the DAMWG during the April 5, 6 session. • The proposition to publish Pass 4 Constrained schedules privately and associated Pass 4 nodal prices was revisited and agreed during the June 17 DAMWG meeting, to be included in the Detailed Design. Pass 3 Constrained Schedules and associated nodal prices will be published as originally included in Release 4.0 of the Strawman.	CLOSED

Ref. #	Design Issue	Resolution	Status
6.	*In order to optimize the performance of energy limited resources (especially run of river hydro-electric) the specific provisions in the DAM design will be required.* • IMO and OPG have had off-line discussions on this issue. A novel approach has been proposed: allow an energy-limited resource to submit offers in traunches of energy for the day (rather than a lamination for each hour). The 24-hour optimization of the DAM will use this energy most efficiently and allow the ELR owner to separate 'must-run' energy from 'price-sensitive' energy. • LECG presentation – November 19, 2003 – did not find general support within the working group. • ELRs will have the capability to specify a day-ahead energy-scheduling limit that will be honoured by the day-ahead market software.	• Reference DAM Strawman Release 3.0 – proposes that ELRs will be committed and dispatched using a second iteration of Pass 2 resulting in *Constrained Schedules* that will provide a lower limit for ELR schedules must be observed by Passes 3, 4 and 5 • This proposition was accepted by the DAMWG during the May 4, 5 session.	CLOSED
7.	*The day-ahead market will provide both pre-scheduling and multiple-hour block scheduling of external transactions.* • Under pre-scheduling, an external transaction may indicate in advance that it wishes to become a price-taker in the day-ahead market. The most extreme possible bid (+MMCP for exports, –MMCP for imports) would be reserved for such transactions to maximize the likelihood that they would be scheduled. This approach provides scheduling near-certainty to entities that wish to schedule transactions regardless of price (likely because they are fully hedged against congestion costs). Pre-scheduling could also be implemented after the day-ahead market, where entities that are scheduled (using normal bidding strategies) in the day-ahead market could be permitted to elect to convert their day-ahead schedules to pre-scheduled status for the real-time market. • Design Discussion – the DAM WG has a number of questions regarding this item. How would it work? What benefit is there for the market?	• Reference Strawman Release 3.0 – Calculation Engine, Treatment of Export bids and Import offers in the DAM • Details of the priority given to pre-scheduled transactions will be addressed as part of the detailed design effort.	CLOSED
8.	*DESIGN DISCUSSION - whether or not the DAM settlement timeline should follow the same weekly settlement cycle currently used for the transmission rights market is a detailed design decision that still has to be made. The DAM WG will engage in further discussions to examine the complex issues surrounding settlement timelines, payment timelines and prudential requirements as they contribute to the high-level design.* PART 1: • The specific timelines for DAM invoicing and payment have been established as part of the high-level design. PART 2: • The specific timeline for DAM first and second settlement will be defined as part of the detailed design.	• Reference Strawman Release 3.0 – Settlement, Timeline • A presentation regarding the specific timeline for first and second settlement was presented by the IMO during the June 17 DAMWG meeting. The DAMWG agreed that the timeline as proposed should be incorporated into the Detailed Design.	CLOSED

Ref. #	Design Issue	Resolution	Status
9.	*DESIGN DISCUSSION could be to look at a system that sees imports or exports paid the pre-dispatch market clearing price in the relevant intertie zone or a hybrid price based upon real-time prices. This is a complex and significant issue – we need to consider conditions and mechanisms under which imports, exports and quick start units (minimum run-time of an hour) might be able to set MCP in real-time.*	• Issue transferred to Market Pricing Working Group – Refer to: *Market Pricing WG Issue # 007* • *Noted by Day-Ahead Market working group.* • *Imports, exports and quick start units (that have a minimum run-time of an hour) would be able to set price in the proposed Day-Ahead Market. The resulting issue relates to considering those specific conditions and mechanisms under which such imports, exports, and quick start units might be able to set the Market Clearing Price in the Real Time Market.*	CLOSED
10.	*DESIGN DISCUSSION: As a general principle, a market participant should be able to structure their financial position through any combination of "virtual and physical" transactions. As we have seen however, there are at least two different views of how each type of transaction can be expressed. The mechanics of how this will ultimately be done is an important design discussion. Such a discussion would need to consider how each of the above equations might be sub-divided into component parts and when each component can be settled.* • In the November 10th DAM WG presentation, it was proposed that physical transactions for energy be settled in terms of an initial "first" settlement position consisting of DAM prices and quantities, followed by a "second" settlement position which balances DAM and real-time energy market quantities (referred to as "VIEW 2" in draft 2 of the DAM strawman). Please see November 10th presentation for further details. • Dec. 16 – The principle of allowing simultaneous usage of physical and virtual transactions has been preserved in the proposed settlements and prudential construct - subject to each market participant meeting the requisite prudential requirements.	• Reference Strawman Release 3.0 – Supporting Processes, Prudential Security	CLOSED
11.	*As with the Design Discussion concerning energy settlement, the two different views of operating reserve settlement affords the opportunity to combine settlement components in various ways and at various times:* • To be discussed during design discussions that address settlement and prudentials. The first installment of these discussions will take place Nov 10. • Dec. 16 – In the November 10th DAM WG presentation, it was proposed to divide the "first" and "second" settlement of DAM operating reserve transactions in the same manner as physical DAM transactions for energy. Please see November 10th presentation for further details.	• Reference Strawman Release 3.0 – Settlements, DAM position for each Class R of Operating Reserve	CLOSED

Ref. #	Design Issue	Resolution	Status
12.	*DESIGN DISCUSSION:* **PART 1:** *Can we consider a separation of uplift allocation? Is there a benefit to separating DA vs. RT uplifts, and allocating accordingly? For example, can IOG be applied only to RT quantities above the DA positions? Can we drive people to the DAM by giving them some certainty regarding uplifts? One point-of-view is that losses don't actually occur until real-time, so charging based on real-time values seems reasonable.* **PART 2:** *The financial impact on DAM is the potential to overcommit and possibly pay fixed costs for an extra unit - participants will pay for this 'overcommitment' so money in = money out. The goal: a reasonable way (from both the IMO and participant perspectives), to decommit such units in real-time if they are not needed.* PART 1: • LECG has provided some guidance on uplift allocation • Uplift allocation is In-scope of Settlement/Prudential/Market Clearing Design • Discussion of IOG uplift will likely come after initial discussions on November 10. • Discussion on allocation of uplift for losses will be deferred until more is learned from the discussion of nodal prices PART 2: • Do we need to cover de-commitment process in the design, or can this be covered later in procedures?	• Reference Strawman Release 3.0 – Settlements, Uplifts in the second settlement cycle also Settlements, Production Cost Guarantee • A presentation regarding decommitment and withdrawal process was presented by the IMO during the June 17 DAMWG meeting. The DAMWG agreed to the overall decommitment/withdrawal process with the exception of the four-hour timeline proposed for advance notice of withdrawal requests based on participant economics. The DAMWG requested that this notice period be consistent with the real-time mandatory window which is currently 2 hours. The modified proposal will be incorporated into the Detailed Design.	CLOSED
13.	*DESIGN DISCUSSION – for units that are committed in the DAM and are not economic in real-time (for whatever reason), are they automatically included in the pre-dispatch and real-time unconstrained calculations? That is, are they placed at 'the bottom of the stack' in determining real-time price and market schedules?* • Dec. 10 – Options for treatment of these resources were presented in LECG's presentation on November 19. The WG recognizes that a process and/or set of rules may be required. These will be further developed during the detail design.	• Reference Strawman Release 3.0 – Impact of the DAM on the RT Balancing Market	CLOSED

Ref. #	Design Issue	Resolution	Status
14.	*DESIGN DISCUSSION – pricing methodology for loads in the DAM/RTM.* *Dispatchable facilities (loads/generators) must pay/receive nodal prices, because they must be priced in a manner consistent with the dispatch.* *The working premise of the strawman is that remaining (non-dispatchable) loads would pay a 'uniform' price created by aggregating load node (i.e. a single load zone). However, there are other potential treatments for load in a nodal system:* • *Continue to aggregate load nodes, but create 2 or more load zones.* • *Allow appropriately metered loads to opt-out and pay a nodal price (as suggested by LECG in some of their presentations).* • *Require all loads to pay the nodal price.* *One could also envision a staged implementation of 2 or more methods for load.* • DAMWG acknowledged during strawman discussions (Aug 19) that a uniform load price with a single load zone was the most acceptable solution politically, and might be the first step in adopting a nodal solution. • Discussion of alternatives will be aided by analysis of historic data, which will show distribution of nodal prices across province and amongst potential load zones. • Decision for load pricing methodology may have an impact upon FTR design.	• (This issue is not applicable to the use of a uniform pricing methodology)	CLOSED

Ref. #	Design Issue	Resolution	Status
15.	*DESIGN DISCUSSION – Does the DAM allow "load offers" (i.e., will loads be paid for providing demand response?)?* The DAM supports demand response by allowing loads to sell out of their forward positions in real-time and, through two-settlement system, receive payment if the real-time price is greater than the DAM price. The DAM supports demand response by allowing price-sensitive non-dispatchable loads to directly participate in the DAM by bidding to buy energy. The DAM does not support payments for load not to consume - i.e. load offers Why? • Currently, it is not a policy of this market to pay loads to go away. Neither the IMO Board nor the Technical Panel has endorsed a policy that would pay loads to go away on a sustainable basis. • Currently, the IMO has received conditional approval for a Transitional Demand Response Program. This program is expected to have a 100MW max enrollment and is expected to be used for 2-3 years by loads as a transition to them becoming dispatchable. The IMO will seek final approval from the Board to further develop this transitional program. • If the IMO Board changes its policy regarding explicit demand response payments in the IMO-administered markets, this policy will be implement in the DAM as appropriate (this is analogous to OR - if the market policy for OR changes allowing non-dispatchable facilities to offer OR, then this would be implemented in the DAM as appropriate). • The DAMWG is not the forum to establish policy on Demand Response payouts.	• This issue was discussed by the DAMWG during the Design Strawman Review sessions April 27/28 and May 4/5	CLOSED

Ref. #	Design Issue	Resolution	Status
16.	*DESIGN DISCUSSION – Will Virtual Transactions attract uplift?* *Should Virtual Transactions bear a portion of the forecast load commitment uplift?* The forecast load uplift allocation issue is most easily explained through some simple examples. Starting with a base case solution where the cleared bid load is 19,000 MW and the forecast load is 20,000 MW. Several units are committed to meet the forecast load and the forecast load predicted by the IMO actually occurs. The units that are added in the forecast load pass require $2,000 in PCG costs. As stated this uplift is allocated to the actual metered load in real-time that was not covered by a cleared bid load schedule from the DAM. Thus each of the 1000 MW of difference between the bid load and forecast load are allocated a $2/MW charge. Now perturb the solution by adding in 500 MW more cleared bid load and 500 MW of cleared virtual generation. The Pass 1 solution clears with 19,500 physical load, the same 19,000 MW of physical committed capacity and 500 MW of virtual generation In Pass 2 the same additional units are committed as necessary to meet the forecast load and their uplift cost is still $2,000 as the additional virtual generation and additional load leave the supply demand balance in the same net position assuming that both are infra-marginal to the original clearing price. The $2,000 uplift is now allocated to the 500 MW of actual metered load not covered by cleared day-ahead schedules and the uplift charge is now $4/MW. Now perturb the solution by adding in 1000 MW more cleared bid load and 1000 MW of cleared virtual generation. The Pass 1 solution clears with 20,000 physical load, the same 19,000 MW of physical committed capacity and 1000 MW of virtual generation In Pass 2 the same additional units are committed as necessary to meet the forecast load and their uplift cost is still $2,000 as the additional virtual generation and additional load leave the supply demand balance in the same net position assuming that both are infra-marginal to the original clearing price. All the actual metered load is covered by a DAM schedule and there is no-one to allocate this cost to. The extreme and most disturbing case is where we perturb the solution by adding in 999 MW more cleared bid load and 999 MW of cleared virtual generation. The Pass 1 solution clears with 19,999 physical load, the same 19,000 MW of physical committed capacity and 999 MW of virtual generation In Pass 2 the same additional units are committed as necessary to meet the forecast load and their uplift cost is still $2,000 as the additional virtual generation and additional load leave the supply demand balance in the same net position assuming that both are infra-marginal to the original clearing price. The $2,000 of uplift cost would be allocated entirely to the 1 MW of load not covered by a cleared DAM load schedule. The need for the forecast load commitments is increased to the extent that virtual generation is scheduled in Pass One. Their impact has a 1 to 1 equivalence with underbid load and should be subject to the same causal relationship that currently allocates the forecast load uplifts.	• Incorporated into Release 3.0 and reviewed and agreed during the May 4/5 Design Strawman Review Session.	CLOSED

Ref. #	Design Issue	Resolution	Status
17.	*DESIGN DISCUSSION – Block-bidding for Ontario Loads* *The bidding constructs currently provided within the Strawman High-level Design do not allow load participation within the DAM that fully reflects the physical characteristics of the different load facilities currently described as price-sensitive load (dispatchable and non-dispatchable).* • At the April 27/28 Design Strawman Review Session, DAMWG members representing loads agreed to provide specific examples of the facilities that would require the load block-bidding functionality • At July 15 DAMWG Meeting loads expressed desire to have Price-sensitive block • At July 15 DAMWG Meeting question raised which remains open: • For a load with several price-responsive blocks, should DAM PCGs be evaluated for each block or as an aggregate of all blocks? • Single-hour and Multi-hour price-sensitive load bidding incorporated in the DAM detailed Design. See "Offers, Bids and Data Input" Issue 0.9 (IMO_DES_0010) • Price-sensitive Multiple-Block bidding under consideration for incorporation into DAM Detailed Design as part of Issue 2.0 targeted for release on or about 27 September 2004. During the October 28 DAMWG meeting the work group agreed to close this issue based on the block load bidding constructs incorporated into Issue 2.0 of the DAM Detailed Design.	• DAM Detailed Design incorporates Multi-hour bidding for Price-Sensitive Load. See "Offers, Bids and Data Input" Issue 0.9 (IMO_DES_0010) • This issue was discussed by the DAMWG on October 28 and agreed that it be closed.	CLOSED
18.	*DESIGN DISCUSSION – Load Bidding* • *Will price-sensitive, non-dispatchable loads be eligible for CMSC in DAM and RTM?* • *Three-part load bid (offer) vs. single-part load-bid at specific metered locations or generic across Ontario – What are the registration considerations?* • During the May 4/5 Design Strawman Review Session, LECG presented *Load Bidding in the DAM* and introduced the treatment of *price sensitive loads* and *price responsive loads.* The DAMWG agreed to have this treatment incorporated into the Strawman.	• Incorporated into Release 3.0 and reviewed and agreed during the May 4/5 Design Strawman Review Session.	CLOSED
19.	*DESIGN DISCUSSION – Does the PCG create an obligation to perform in RT?* • *What is this obligation?* • *How would this obligation be met?* • *What is the consequence for not meeting this obligation?* • *What portion of a PCG payment should a generator keep the in the event of a unit tripping off?* • *What portion of a PCG payment should be kept if a unit trips off part way through a multi-hour commitment?*	• A presentation, *Obligations Associated with PCG Payments,* was presented by LECG during the June 17 DAMWG meeting. The DAMWG agreed that the obligations and the proposed PCG payment recovery mechanisms should be incorporated into the Detailed Design.	CLOSED

Ref. #	Design Issue	Resolution	Status
20.	*DESIGN DISCUSSION – Posting prudentials for virtual market participation* *Currently, the formula for virtual market prudentials does not explicitly consider credit rating.* • *Will the proposed forms of collateral required to support virtual transactions (which are proposed to be limited to cash deposits or irrevocable letters of credit) impose an unnecessary burden upon participants with good credit ratings if all must post prudentials to meet the risk associated with the weakest potential participant?* • *Will the IMO consider the use of a credit risk assessment mechanism so that the collateral required for virtual transactions will include a participant's credit rating as an acceptable form of collateral?* During the May 27 DAMWG meeting, the IMO presented the relationship between DAM virtual and physical participation, virtual transactions default levy and "soft" prudentials for virtual transactions. There was near agreement to close this issue by DAMWG members based on the IMO presentation. However because unanimous agreement of all WG members could not be achieved, a proposal was made that the high-level design should remain as is and detailed design should progress on this basis with review and approval to be gained through the Technical Panel and the IMO Board. There is no other action to be taken by the IMO other than the completion of the detailed design. WG members agreed with this approach and the issue will remain open	•	OPEN

21.	*DESIGN DISCUSSION – Default levy for virtual participants*
	As proposed in the Design Strawman all virtual market participants shall share in the losses resulting from the default by a virtual trader.
	Should the default levy be applied to virtual market participants only, or should it be applied across all market participants? If virtual transactions in the DAM are thinly traded by a small number of participants, would there be an unfair burden on remaining virtual market participants if one of their numbers defaults? This may act as a disincentive to participate in the virtual market.
	During the May 27 DAMWG meeting, the IMO presented the relationship between DAM virtual and physical participation, virtual transactions default levy and "soft" prudentials for virtual transactions. The DAMWG members recognized the following:
	• Current IMO "Market Rules" (Ch. 2, section 8) allow for a "default levy" to recover unpaid amounts owing to the IMO that are not adequately covered by prudentials
	• Only applied after prudentials are exhausted and reasonable efforts have been made to recover funds owing from the defaulter
	• Two separate default levies are currently outlined in the rules:
	  • real-time market default levy: spread across all invoiced amounts for both buyers and sellers; and
	  • Energy Forward Market default levy (deferred): spread across all EFM quantities for both buyers and sellers
	Based on the above DAMWG members agreed to close this issue.
		• This issue was discussed by the DAMWG on May 27 and agreed that it be closed.	CLOSED

Ref. #	Design Issue	Resolution	Status
22.	*DESIGN DISCUSSION – Rules for submitting offers/bids in the RTM for energy that has been scheduled in the DAM* *Why are offers (bids) that have been scheduled in the DAM only allowed to be decreased (increased)? Why can't they be allowed to be increased or decreased without limit (NYISO is looking at allowing offers/bids to change without restriction following the DAM)?* • Proposal to remove price change restrictions included in the Strawman design addressed during the DAMWG meeting on 28 July 2004. DAMWG members did not reach consensus on this matter. Some DAMWG members supported the proposal, while others had concerns. It was agreed to keep this issue open for a period of time for more consideration. • Revisited during the DAMWG meeting on 10 August 2004. AMPCO and Ivaco representatives expressed support for removing the bid/offer restriction. Other WG members were polled and agreed the restriction should be removed. Based on the above DAMWG members agreed to close this issue. Restrictions to price revisions to real-time market dispatch data originally submitted to the DAM will be removed from the DAM detailed design.	• This issue was discussed by the DAMWG on August 10 and agreed that it be closed. The DAMWG agreed that the removal of price change restrictions should be incorporated into the DAM Detailed Design. *See "DAM and RTM Integration"* (IMO_DES_0015)	CLOSED
23.	*DESIGN DISCUSSION – Administrative pricing in RTM based on DAM Results (integration issue)* • *Should the current administrative pricing rules for the RTM be amended to consider DAM results (e.g. missing or incorrect prices auto-filled from DAM results)?* • *If RTM administrative prices are deemed by participants to be too low or too high (and therefore participants are entitled to apply for compensation)* This is a RTM issue and the DAM Project will not undertake resolution.	•	OPEN

Ref. #	Design Issue	Resolution	Status
24.	*DESIGN DISCUSSION – Hourly Committable Resources* *Since Hourly Committable Resources that do not get schedules are anticipated to be available in RT for reliability purposes, what mechanism will be used by the IMO to address reliability implications should these facilities not be able to get gas as a result of transportation arrangements?* • *How will the IMO address the minimum period required to arrange gas transportation?* • *How will the IMO address the possibility that gas may not be available at any price for those hourly committable resources that were not scheduled in the DAM but are expected to be available in RT for reliability purposes?* • During the DAMWG meeting on 28 July 2004 the eligibility criteria for being designated as an Hourly Committable Generation resource – minimum startup or turnaround time, runtime or downtime must all be 1 hour or less was discussed. Gas generators who cannot arrange gas transportation in that time frame are not eligible to register as Hourly Committable Generation. Hourly Commitable Generation resources who do not receive a DAM schedule will still be considered as "available" in the RTM. If gas generators are not able to arrange gas at any price, or any other generator is not available, then they must declare an unforced outage and IMO will manage reliability requirements as is done today. • Also clarified during the 28 July DAMWG meeting: designation as an Hourly Committable Generation resource is a participant election. This is a DAM design construct only—there is no change to operations in RTM. Based on the above DAMWG members agreed to close this issue.	• This issue was discussed by the DAMWG on July 28 and agreed that it be closed.	CLOSED
25.	*DESIGN DISCUSSION – Aggregated Resources* *Will aggregation of loads be considered as part of the DAM design?* During the October 14 DAMWG meeting the IMO presented the existing aggregation contents of the current market rules as well as the anticipated design for the DAM. The DAMWG members recognized the following: • Aggregation requirements for loads will not change with the DAM • Multiple loads in a facility can be aggregated into a single resource, as governed by Market Rules, Chapter 7, Section 2.3 • The IMO-Administered Markets are 'delivery point based' and as such the Day Ahead Market design does not intend to accommodate aggregation of loads that are not behind a single delivery point as represented in the Real Time Market • Loads including LSEs, Retail Marketers, Load Aggregators will be obligated to bid in at the delivery point level Base on the above the DAMWG members agreed to close this issue.	• This issue was discussed by the DAMWG on October 14 and agreed that it be closed.	CLOSED

Ref. #	Design Issue	Resolution	Status
26.	*DESIGN DISCUSSION – Control Action Operating Reserve* *Will Control Action OR be offered in the DAM?* • Also refer to*: Market Pricing WG Issue #36* • Depending on resolution of the pricing issue #36, a policy decision regarding the DAM may or may not be required regarding application of the Real-time construct to the DAM • CAOR Offers can be accommodated within the current DAM detailed design	•	OPEN
27.	*DESIGN DISCUSSION – Market Compliance* *Market Compliance is not expressly addressed in the DAM Strawman. How will the Market Compliance requirements for the DAM be defined?* • Market Compliance oversight of the DAM will be dependent upon the development and approval of the associated Market Rules for the DAM. As such Market Compliance Requirements will be developed as part of the detailed design work	• Requirements for Market Compliance are addressed as part of the DAM Detailed Design. See *"Market Surveillance, Assessment and Compliance"* (IMO_DES_0020). • This issue was discussed by the DAMWG on September 15 and agreed that it be closed.	CLOSED
28.	*DESIGN DISCUSSION – Settlement of DAM positions for generation decommitted by the IMO for reliability.* *Issue opened during DAMWG meeting on 17 June 2004.* *For energy associated with a DA commitment for units decommitted by the IMO in RT for reliability purposes a financially binding obligation remains. Should participants be required to pay the incremental energy cost to meet their obligation when the IMO has decommitted the resource?* • De-commitment flags will be used to indicate resources de-committed between the DAM and RTM at the request of the IMO. A "Type 1" flag will indicate offers or bids removed at the request of the IMO. A "Type 2" flag will indicate generators constrained by the IMO below the as-offered minimum generation level. See "Settlements" (IMO_DES_0013) Section 3.5.3, Table 3-9 and Section 3.6.3, Table 3-14. • This issue was discussed by the DAMWG on September 15 and agreed that it be closed. However a new issue as raised regarding whether or not compensation should be given to market participants for costs associated with resource decommitment that were not originally represented to the IMO through DAM offers and bids.	• Incorporated into DAM Detailed Design. See *"Settlement"* (IMO_DES_0013) • This issue was discussed by the DAMWG on September 15 and agreed that it be closed.	CLOSED

Ref. #	Design Issue	Resolution	Status
29.	*DESIGN DISCUSSION – Window to submit Notices of Disagreement (NOD).* *Since the DAM introduces more settlement calculations, should the NOD submission window be increased? If the NOD submission window were to be increased, should the date for preparing final settlement statements be changed?* *Issue initially discussed during Technical Panel meeting on 15 June 2004. Addressed by DAMWG on 15 July 2004.* • During the DAMWG meeting on 28 July 2004 the results of the Commercial Reconciliation Sub-Committee (CRSC) meeting on July 26 were discussed. CRSC members generally agreed that the first settlement turnaround time of 4 days seems satisfactory although no clear position was stated by CRSC members on the level of detail required for first settlement data. In terms of the second settlement, a 4-day turnaround timeframe for submitting a Notice of Disagreement (NOD) is considered to be too short given the expected additional complexity of the DAM. Most favoured extending the NOD window to 6 days. One DAMWG member expressed support for increasing the NOD window to 6 days. • During the 26 August 2004 DAMWG meeting Overview Presentations of the Detailed Design the following summary of the Settlements Timelines was presented: – Results of the First Settlement process will be published 4 business days after the dispatch day – Interim Notice of Disagreement submission deadline extended to 16 business days after the dispatch day (goal is to return to 14 business days once the DAM is implemented and stabilized) – Interim final settlement statement date extended to 24 business days after the dispatch day (goal it to return to 20 business days once the DAM is implemented and stabilized) The above is incorporated as part of Issue 1.0 of the DAM Detailed Design. See "Settlement" (IMO_DES_0013)	• Extended timelines incorporated as part of the DAM Detailed Design. See *"Settlement"* (IMO_DES_0013) • This issue was discussed by the DAMWG on September 15 and agreed that it be closed.	CLOSED

Ref. #	Design Issue	Resolution	Status
30.	*Design Discussion – MSP treatment of energy-limited resources scheduled in DAM and offering into RTM* *Issue initially discussed during Technical Panel meeting on 13 July 2004.* *An energy-limited resource may be scheduled in the DAM to supply energy in specific hours. The resource may choose to offer energy in the RTM in hours other than DAM-schedule hours (e.g. offering OR in some RTM hour to honour DAM operating reserve schedules, which must be accompanied by corresponding RTM energy offers).* *If the energy-limited resource is scheduled in the RTM to supply energy in a RTM hour that differs from the DAM-scheduled hours, there is a risk that the energy-limited resource will not have the energy to supply in a DAM-scheduled hour. Therefore, the participant will have to buy-out of its DAM position at the RTM price for that hour. Consequently, the resource may raise its offer in RTM hours where it did not receive a DAM schedule to protect against the buy-out risk in those hours in which it received a DAM schedule but could not deliver because it already used the energy in some other hour.* *If an energy-limited resource increases its offer in RTM hours in which it didn't receive a DAM schedule (to cover buy-out risk in later hours), is subsequently scheduled but sees its RTM revenues clawed back through local market power rules, then the participant faces increased risks of losing money.* • OPG has proposed a solution requiring a "make-whole" payment • IMO considers that consultation may be required with MACD and MSP to have them recognize why DAM 'costs' (as reflected in an offer) may be different than RTM 'costs' During the October 14 DAMWG meeting, LECG presented a proposal regarding the need to anticipate ELRs bidding higher prices in the RTM to protect their DAM position. The following recommendation was proposed: • Protection in some form either through a "make-whole" payment or a bypass to the market power mitigation rules is needed to ensure the continued flexible participation of the ELRs in the DAM. The DAMWG requested that examples be prepared and existing market rules be reviewed to be better able to assess this recommendation. This work will be presented at the next DAMWG meeting. During the October 28 DAMWG meeting, LECG presented the requested examples providing the basis for the need for some form of protection. Review of the existing market rules indicated that the protection sought by the participants with regard to this issue is provided by Market Rules Appendix 7.6, Sections 1.4.3, 1.5.1, and 1.6.3. Based on the presentations prepared by LECG and the existing market rules the DAMWG agreed that this issue is closed.	• This issue was discussed by the DAMWG on October 28 and agreed that it be closed.	CLOSED

Ref. #	Design Issue	Resolution	Status
31.	*Design Discussion – Margin recovery payment for ramp-limited resources* *Issue initially discussed during Technical Panel meeting on 13 July 2004.* *Should the DAM design consider compensation for ramp-limited resources operating in real-time and unable to fulfil their DAM schedules due to real-time operating conditions outside their control? The NYISO has addressed this issue in Technical Bulletin 036.* <http://www.nyiso.com/services/documents/techbulletins/tb_036.pdf> *The following is an excerpt from this bulletin:* *" . . .Suppliers who are scheduled in the DAM are required to fulfill these schedules in real-time operation. Sometimes the real-time schedule for a unit does not permit the Supplier to meet its day-ahead contract due to real-time operating conditions beyond its control. For example, fixed output units (gas turbines) may be dispatched on to meet fast load pickups, or load fluctuations may cause a unit to be behind its day-ahead schedule due to ramp rate constraints.* *In cases such as these, Suppliers are required to purchase balancing energy in the Real-Time Market at Locational Based Marginal Pricing (LBMP) rates to fulfil their day-ahead contracts. When the Real-Time LBMP rate is greater than the day-ahead price, the Supplier's margin may be reduced or eliminated. In such cases, Suppliers are compensated to recover the margin expected from the day-ahead contract. . . ."* During the October 14 DAMWG meeting, LECG addressed the issue of compensation for ramp-limited resources as provided for by the NYISO Technical Bullet 036. LECG demonstrated the following: • Currently, there is no need for protection for this outcome as the 12 times ramp rate will likely allow the unconstrained schedule to reflect the economic operating point and the RT CMSC payments will perform the revenue protection that the NY construct has performed to date • If 12 times ramp rate in the RT market is reduced or removed, the DAM is operational and the concept of this type of protection is approved then: • *The protection would allow the resource the ability to but out of the difference between its RT unconstrained schedule and its DAM schedule at its DAM offer maintaining the observed profit position for that capacity in the DAM* *The protection works from the unconstrained schedule as the resource is protected by the CMSC between its binding constrained schedule and it unconstrained RT operating point* The disposition of 12 times ramp rate is being addressed by the Market Pricing Working Group as Issue #4. There are a number of potential positions that might be considered should the protections provided by 12 times ramp rate be eliminated. These include: • Protection at all times for IMO directed deviations from financially binding DAM schedules • Offset periods of profits for following dispatch below DAM schedules when price is low against the losses incurred as the price increased and the RT generation ramps up to match • Require generators to factor the risks of non-performance in to the offers submitted in RT The DAMWG recognized that no action can be taken by the DAM Project and asked that the issue remain open until the disposition of Market Pricing Issue #4 is known.		OPEN

Ref. #	Design Issue	Resolution	Status
32.	*Design Discussion – Two-Dimensional Energy Limited Resource Representation* *The two-dimensional energy limited resource representation allows a resource to specify multiple tranches of energy for dispatch on a single energy limited resource.* *The two-dimensional energy limited resource representation differs from the single daily energy limit in two respects. Firstly, the resource must provide energy limits for each of tranches of energy represented. Secondly, a number of additional validation rules are applied to the resources incremental energy offer to ensure that capacity is not withheld from the market.*	•	OPEN
33.	*Design Discussion – Outages Occurring in Mid-Hour* *Issue initially discussed during Technical Panel meeting No. 146 on 27 July 2004.* *How will the DAM handle outages of transmission elements or resources (dispatchable generators or price-responsive loads) that occur mid-hour (could be a removal from service or a return to service). Since the DAM schedules for the hour, how will constraints be altered (for transmission elements that are removed/returned mid-hour)? Can a resource be scheduled in the DAM in an hour in which it is leaving/returning to service?* Reference DAM Detailed Design: Offers, Bids, and Data Input (IMO_DES_0015, Issue 1.0) footnote #7. During the October 14 DAMWG meeting, LECG addressed the issue of handling of mid-hour outages. The following solution was proposed: • A rule that uses an "out for 1 minute – out for the hour" approach. There is no middle ground on this – either the equipment has to be in or out for the entire hour as required by the hourly DAM. • An alternative proposal might be to say, out of service for 30 minutes or more then out in the DAM, out of service for less than 30 minutes then in for the DAM The DAMWG selected the "out for 1 minute – out for the hour" approach and agreed to close this issue.	• This issue was discussed by the DAMWG on October 14 and agreed that it be closed.	CLOSED

Ref. #	Design Issue	Resolution	Status
34.	*Design Discussion – Modelling PGS* *Issue initially discussed during Technical Panel meeting No. 147 on 24 August 2004.* *OPG has a pumped storage facility at Beck. At times, when price is low (typically off-peak), it acts as a load and pumps water uphill. At other times, when the price is higher, it acts as a generator, letting water run downhill.* *There are separate resources for the load and for the generator. How will this be handled in the DAM, as both the load and the generator cannot be scheduled in the same hour?* During the November 9 DAMWG meeting, LECG presented an approach to the modelling of pumped storage generation. The presentation illustrated that the ultimate model is dependent on the capability of the vendor solution used for the DAM. Several vendor have proprietary solutions and the details of these solutions will not be made public in terms of the formulation of the DAM Calculation Engine. The modelling approach presented by LECG will be incorporated into the user and system requirements prepared by the IMO for procurement of the DAM Calculation Engine. The workgroup raised a question regarding how the energy limit for pumping (i.e. the reservoir capacity) is addressed. LECG will present the approach to this problem during the next workgroup meeting. During the November 23rd DAMWG meeting, LECG presented an approach to the energy limit for pumping that utilizes the algorithm that will be used for Energy Limited Resources. This approach will require additional dispatch data specifying pump efficiency. Determination of available reservoir capacity and other water management concerns will be the responsibility of the market participant when using this bid construct. The DAMWG agreed that the proposed ELR/pump efficiency construct would be beneficial and would likely be used by participants. It was agreed that the modelling approach and ELR/pump efficiency construct should be incorporated into the user and system requirements prepared by the IMO for procurement of the DAM Calculation Engine. Based on this solution the DAMWG agreed to close this issue.	• This issue was discussed by the DAMWG on November 23 and agreed that it be closed.	CLOSED
35.	*Design Discussion – Treatment of AGC in DAM* *Issue initially discussed at the DAMWG meeting on September 15.* *If AGC is not included in setting DAM price but is considered in RTM them a systemic bias exists that will raise the price in DAM. If there is an effect on price then this is an issue. Perhaps the tool should, at least, economically consider the minimum base point.* *The current proposal does not form the basis of good design and will be unsuccessful—recommend that some flexibility is required.* It is the intent of the IMO to consider a DAM design proposal for AGC that can allow participation of AGC resources in the DAM and allows flexibility for future AGC contract design. During the October 14 DAMWG meeting, LECG presented a high-level design to provide for AGC nominated generating units to be offered into the DAM. The DAMWG agreed with the high-level design and agreed to close the issue. Detailed design will be included as Issue 3.0 of the affected DAM Detailed Design documents.	• This issue was discussed by the DAMWG on October 14 and agreed that it be closed.	CLOSED

Ref. #	Design Issue	Resolution	Status
36.	*Design Discussion – Compensation for Consequential Costs Associated with Resource Decommitment* *Issue initially discussed at the DAMWG meeting on September 15.* During discussion of Issue #28, there was an additional discussion with respect to compensating market participants for consequential costs beyond those directly represented to the IMO through DAM offers and bids associated with decommitment. During the October 28 DAMWG meeting, LECG presented the need for consequential costs would requirethe description of such costs in advance. The DAMWG members were requested to provide additional information regarding the following: • What are the specific costs that need to be covered? • In what situations are these costs incurred? • Are such costs able to be factored into bids/offers or otherwise protected against in some form? The workgroup agreed to consider this request and advise the DAM project. This issue was addressed during the November 9 DAMWG meeting seeking additional input from the workgroup member. Discussion focused on the need potentially to audit both the basis of consequential costs as well as profit that may have resulted from IMO resource decommitment. The workgroup members agreed to review these implications internally and address resolution of this issue at the next workgroup meeting. This issue was addressed again during the Novemver 23rd DAMWG meeting. Concern for consequential costs associated with resource de-commitment have focused on natural gas risks. The IMO presented the challenges to developing a solution for compensation of out-of-market costs. These challenges include determination of the cost of natural gas purchases; determination of profit as well as loss; storage capability and hedging, and resale capability and hedging. Meeting these challenges would likely include audit and development of IMO authority and capability to perform such audits. There was general agreement that the risks associated with consequential cost of de-commitment should be hedged by the participant and included in the offer price. However, workgroup members requested that some time was needed for internal review of the challenges presented by the IMO. It was agreed that this issue be discussed again during the next DAMWG meeting.	•	OPEN
37.	*Design Discussion – Representation of Self-Scheduling/Transitional/Intermittent Generators in the DAM* *Issue initially discussed at the DAMWG meeting on September 15.* *Self-Scheduling/Transitional/Intermittent generators represent approximately 1000 MWs that are not represented in the DAM and could therefore skew pricing results of Pass 5 in relation to RTM prices* During the October 14 DAMWG meeting, LECG presented an assessment, which demonstrated that the exclusion of Self-scheduled generators from Pass 5 would not create a bias in the DAM. Based on this presentation the DAMWG agreed to close this issue.	• This issue was discussed by the DAMWG on October 14 and agreed that it be closed.	CLOSED

Ref. #	Design Issue	Resolution	Status
38.	*Transition: Co-ordination of OEB's RPP and IMO's DAM Project with Respect to the Wholesale / Retail Market Interface* Question to OEB (September 23) by Corresponding Member of the DAMWG: *"…I believe there needs to be some active discussion as soon as possible to determine exactly how settlement transactions involving the combined impact of the IMO DAM and the Real Time markets will flow through LDCs via the OEB's Retail Settlement Code.* *Will the development of the new OEB RPP (Regulated Price Plan) include consideration of the IMO DAM project and ultimately how the interface between the Wholesale and Retail markets will need to change to accommodate this?* *Is there an active dialogue between your RPP working group (or another group at the OEB) and IMO DAM design team staff…?"* Related issue raised at the Technical Panel Meeting on September 7, 2004: *With the creation of additional uplifts for the allocation of DAM commitment costs, LDCs will require OEB permission before any new uplifts can be passed through to customers.* *The DAM can't open until <u>all</u> charges - including the reorganization of existing ones are properly accommodated in the Retail Settlement Code and/or the Standard Supply Service Code and the Electricity Distribution Rate Handbook and/or other OEB regulatory instruments.* Related issue raised at the Technical Panel Meeting on July 27, 2004: *Are changes required to the Distribution System Code to recognize DAM? This is something that the OEB would have to consider.* Update by IMO – 12 September 2004: Throughout the fall and winter of 2004/2005, the OEB is engaging stakeholders and other interested parties in consultation sessions and working groups to assist in developing the Regulated Price Plan for Electricity Consumers and the associated new code. These sessions provide an opportunity for the IMO to promote discussion on these DAM-specific issues.	•	OPEN

Ref. #	Design Issue	Resolution	Status
39.	*Design Discussion: CMSC exclusions for external transactions.* *This issue was raised at the Technical Panel meeting on October 5.* *The current provisions of the Settlement detailed design require transactions receiving DAM CMSC payments to submit a RTM bid/offer corresponding to the DAM transaction. Failure to submit the RTM offer corresponding to the DAM transaction would result in recovery of the DAM CMSC. (See Detailed Design Document, "Settlements," section 3.7.9 "pre-screening of Intertie Transaction Associations"). This provision does not address all possible problems, which may create double payments of CMSC for intertie transactions.* During the October 14 DAMWG meeting, LECG presented an assessment of all the potential problems regarding the payment of CMSC at interties. This assessment presented alternative solutions including the following: • Building specific settlement rules that limit the DAM constrained off and constrained on CMSC payments • Eliminating DAM CMSC payments for transactions above the level of that transactions RT market schedules (addresses constrained off payments only) • Using Market Surveillance (MAU/IMO) to identify instances where duplicate CMSCs have been paid and allow recovery or otherwise prevent payment The LECG assessment demonstrated that the use of settlement rules that imposed restrictions can not solve the double CMSC payment problems. The only viable solution is the use of careful monitoring and surveillance of bids, offers and CMSC settlement at the interties. The data available for such monitoring is highly transparent since intertie transactions are uniquely identified by a combination of market participant, intertie, and boundary entity used for the transaction. DAMWG acknowledged that a settlement rules solution is not feasible and that the alternative that provides for the monitoring, identification and recovery of duplicated CMSC payments is the preferred solution. Based on this preferred solution the DAMWG agreed to close this issue. The Detailed Settlement Design and draft Settlement rules amendment will be revised to reflect the preferred solution of monitoring and recovery.	• This issue was discussed by the DAMWG on October 14 and agreed that it be closed.	CLOSED

Ref. #	Design Issue	Resolution	Status
40.	*Design Discussion: Priority scheduling of external transactions.* *This issue was identified at the Technical Panel meeting on October 5.* *Should DAM scheduled transactions have an automatic scheduling priority in real-time?* During the October 14 DAMWG meeting, LECG provided a presentation on the scheduling priority of DAM scheduled external transactions and pre-scheduling of DAM and RTM external transactions. Discussion of this issue was not completed during the October 5 meeting and remains open pending consideration by the complete DAMWG at the next scheduled DAMWG meeting. During the October 28 DAMWG meeting, LECG presented an assessment of Priority Scheduling of External Transactions and the experience of New York with regard to priority scheduling of intertie transactions. There was general agreement by the DAMWG that priority scheduling of intertie transactions could effectively by achieved by the offers and bids submitted by the market participant. However, several workgroup members requested that some time was needed for internal review of the proposal presented by LECG. It was agreed that this issue and the proposed resolution be discussed during the next DAMWG meeting. This proposed resolution that priority scheduling of intertie transaction can effectively be achieved by the bids and offers submitted by the market participant was revisited during the November 9 DAMWG meeting. Those workgroup members who requested time for internal review of this proposal concurred that a priority scheduling mechanism as made available by the NYISO was not necessary for Ontario. The provision of a service for automatic translation of the bids/offers for cleared DAM intertie transactions to a +/- MMCP RTM bid/offers was also agreed to be service that the work group members did not see as needed. The DAMWG agreed to close this issue based on the above. Priority scheduling of DAM intertie transactions and a translation service for successful day-ahead bids/offers will not be required.	• This issue was discussed by the DAMWG on November 9 and agreed that it be closed.	CLOSED

Ref. #	Design Issue	Resolution	Status
41.	*Design Discussion: Intertie Curtailment Priority in real-time.* *Issue initially discussed during the DAMWG meeting on 14 October 2004 as a consequence of the consideration of priority scheduling for intertie transactions (reference Issue #40).* *Should the RTM prioritize the curtailment of RTM interchange to first reduce RTM transactions before curtailing transactions that were curtailed in the DAM?* During the October 28 DAMWG meeting, LECG presented the a proposal that all RTM intertie transactions would be curtailed before DAM intertie transactions are curtailed based on the financial obligation that attaches only the DAM intertie transactions. The DAMWG agreed to close this issue based on the agreed direction for priority treatment of DAM intertie transactions. The priority curtailment of DAM and RTM transactions will be reflected in the development of the affected Market Manuals and the necessary data capture required will be passed to the tools used by the operators making such priority curtailment decisions. During Technical Panel meeting #152 on November 2, 2004 the TP noted that the intended Market Manual changes should be reflected in the market facing sections of the affected DAM Detailed Design documents. The affected documents and sections will be revised to reflect priority curtailment of intertie transaction scheduled in the DAM. During the DAMWG review of Issue 3.0 of the Detailed Design concerns were raised with the exclusion of TLR events in the design of intertie curtailment priority; possible differing treatment in adjacent jurisdictions, and potential increased costs of CMSC resulting from the proposed design. The IMO agreed to review these concerns and advise the DAMWG on any impact on the proposed design.	• This issue was discussed by the DAMWG on October 28 and agreed that it be closed.	CLOSED
42.	*Design Discussion: Alternate disagreement process between Notice of Disagreement and Dispute Resolution.* *Issue initially discussed during the DAMWG meeting on 14 October 2004.* *Some members of the DAMWG voiced their opinion that a process for resolution of settlement disagreements (NODs) that remain open after the issuance of final settlement statements, which would not require the use of the dispute resolution process. Under the current market rules and DAM detailed design, NODs may remain open for 15 business days after the issuance of the final settlement statement. This is to allow time for dialogue between the IMO and market participant over the unresolved issue and for additional investigation to take place. If resolution is not reached after this point, the market participant may raise a settlements-related notice of dispute.*	•	OPEN

Ref. #	Design Issue	Resolution	Status
43.	*Design Discussion: Multiple Ramp Rates for Energy Limited Resources* *This issue was identified at the Technical Panel meetings on October 19 and November 2.* *As a result of use of effective uniform ramp rate in the two-step treatment of multiple energy ramp rates an energy limited resource could get a DAM schedule that it cannot meet. Alternative treatments may result in the resource not being used "in the best way" or "to the fullest".* During the November 23rd DAMWG meeting the IMO presented the compromises with using a one-step effective uniform ramp rate or a two-step multiple ramp rate for Energy Limited Resources. The ultimate design will be dependent on the capability of the solutions available from qualified software vendors. Three options were presented by the IMO to address the approach to design and procurement. The IMO recommended and the DAMWG agreed that an approach that identifies the use of multiple ramp rates for ELRs as a desired requirement for the software and provides for design and rules to reflect the successful vendor's software capability is the preferred approach. This approach will be incorporated into the user and system requirements prepared by the IMO for procurement of the DAM Calculation Engine. Based on the above the DAMWG agreed to close this issue.	• This issue was discussed by the DAMWG on November 23 and agreed that it be closed.	CLOSED
44.	*Design Discussion: Alignment of DAM Timeline with Natural Gas Market Timelines* *During the Technical Panel meeting on November 30 the TP requested that this issue be placed on the issues log.* *The timeline for closing of the DAM offer/bid window and subsequent posting of the DAM results as proposed in the detailed design does not provide the coordination with the timelines of the natural gas market desired by some generators.* The detailed design presented to the DAMWG on August 26th proposed the DAM Offer/Bid window to open at 06:00 EST and close at 10:00 EST with the publication of DAM results at 14:00 EST. This proposed timeline was addressed in detail during the September 15th DAMWG meeting and the bases for the proposed design which included DAM process time considerations, participant and IMO staffing considerations, gas nomination considerations, and consideration of coordination with other electricity markets were described. The objective in establishing the DAM timeline "to be as fair as practical to all entities" was acknowledged by the workgroup and the resulting need for compromise embodied in the detailed design timeline was accepted. At the request of a number of generators for which natural gas is the primary fuel the IMO conducted a conference on November 10th the discuss the need for better coordination between the proposed DAM timeline and the natural gas market timelines. During this meeting it was recognized that while the proposed DAM timeline had considered the nomination process for natural gas transportation certain aspects of transportation nomination were not fully understood and the timing of spot market purchasing of natural gas had not been identified. This incomplete understanding of the natural gas procurement and transmission processes is the source of the disagreement by some generators with the proposed DAM timeline. In particular it was noted that better coordination with the natural gas markets would be achieved if the results of the DAM could be known no later than one hour before noon of the pre-dispatch day. The IMO agreed to re-evaluate the proposed DAM timeline and develop alternatives for consideration by the DAMWG. These proposals are scheduled to be discussed during the December 16th DAMWG meeting.	•	OPEN

Ref. #	Design Issue	Resolution	Status
45.	*Design Discussion: Opening of the DAM Offer/Bid Window* *This issue was initially identified at the Technical Panel meeting on November 30.* *The current design of the DAM Offer/Bid window calls for a four-hour window, that is the window opens four hours before it closes the day before the dispatch day. Other jurisdictions such as New York open the window for bidding up to 14 days before the dispatch day. Can the DAM Offer/Bid window open a number of days before it closes rather than the current four hours?*	•	OPEN
46.	*Design Discussion: Use of dynamic versus fixed penalty factors for losses in the DAM calculation engine* *The use of dynamic loss factors was initially questioned in comments regarding the detailed design received on October 12. During the Technical Panel meeting on November 30 the TP requested that this question be recorded on the Issues Log.* *The detailed design for the DAM Calculation Engine calls for dynamic penalty factors determined for each hour dependent on the distribution of load and generation cleared. Penalty factors are currently fixed in the RTM to eliminate oscillations in real-time dispatch and pricing, and to allow market participants to use the fixed loss factors in setting their offers. The use of dynamic marginal loss factors in the DAM and fixed marginal loss factors in the RTM will lead to systematic differences between the DAM and RTM.* This issue was discussed during the November 9th DAMWG meeting regarding question 3.6 addressing the Calculation Engine Detailed Design Issue 1.0. The IMO agreed to more fully address the differences between the DAM and RTM. This issue is planned to be addressed during the DAMWG meeting scheduled for December 16th.	•	OPEN