



Power to Ontario. On Demand.

IESO SENIOR MANAGEMENT UPDATE

To: Stakeholder Advisory Committee

Date: June 3, 2009

Subject: **Market Design Change Studies – Schedule and Status**

Information Item

Introduction

The attached document outlines the expected schedule (deliverables and target dates) and status of priority market design change studies. This schedule may change once the IESO has completed its assessment of the impact of the Green Energy Act on the IESO's work program.

Description of Changes to the Schedule

The revised schedule and status of Market Design Change Studies (see attached) has been updated from the previous version provided to the Stakeholder Advisory Committee at its meeting on February 4, 2009 - refer to the briefing note available at:

http://www.ieso.ca/imoweb/pubs/consult/sac/sac-20090204-Item3_SAC_Update_Priorities_IESO_Studies_of_MDC.pdf

The changes include:

- Addition of new studies - Interim Changes to Generation Cost Guarantee Programs; Combined/Simple Cycle Modelling in Real-Time
- Addition of market design change studies that are underway but were not listed on the previous report – Economic Dispatch of Linked Wheels; Transmission Rights Market Review
- Revised study scopes – Surplus Baseload Generation included under SE-57 Embedded and Renewable Generation; Energy Forward Market study identified as a study separate from SE-73 Enhanced Day Ahead Commitment.
- Identification of the life-cycle for the proposed market design change.

Description of Life-Cycle Planning Model

The life-cycle planning model consists of five stages: issue identification/initial prioritization, problem definition, solution identification, cost-benefit analysis, project implementation. Each stage requires different resource requirements and different levels of IESO and stakeholder involvement. The end of each stage marks a decision point.

1. Issue identification and initial prioritization

Potential market design changes can originate from many sources, e.g. market rule amendment submission, MSP recommendation, etc. The IESO has developed a process for assigning priority to market design issues¹. Depending on its relative priority and resource availability, the issue advances to the next stage.

2. Problem definition

The objective of this stage is to clearly define the nature, source, and materiality of the problem. This may require assistance from consultants and/or stakeholders. The expected deliverable at the end of this stage is a discussion paper for stakeholder review and feedback.

3. Solution identification

The objective of this stage is to identify and define a reasonable range of solutions to the problem. While a full range of solutions should be considered, infeasible solutions would be discounted or ruled out. A report on feasible solutions would be drafted for stakeholder review and comment.

4. Cost-benefit analysis

The objective of this stage is to perform a cost-benefit analysis of the proposed solutions and provide that information in a report for stakeholder review and comment. At the end of this stage, the IESO would identify its preferred solution, solicit stakeholder feedback, and seek IESO Board approval where appropriate.

5. Project Implementation

Implement the recommended solution.

Going Forward

The IESO is still assessing how the Green Energy Act will affect its work program. The current schedule and status of market design change studies may change once that assessment is complete.

¹ At its meeting on October 8, 2008, the Stakeholder Advisory Committee reviewed the IESO's proposed model for prioritizing market design change studies – refer to http://www.ieso.ca/imoweb/pubs/consult/sac/sac-20081030-Item4_Proposed_Model_for_Establishing_Priorities.pdf



Power to Ontario. On Demand.

Market Design Change Studies - Status and Schedule

SE/MR	Initiative	2009									2010			SAC Involvement		
		Q2			Q3			Q4			Q1					
		Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar			
SE-57	Embedded and Renewable Generation													Potential for SAC feedback/advice		
	i) centralized forecasting	2) Problem Definition		3) Solution Identification	4) Cost-Benefit Analysis	decision										
	ii) dispatch priority	2) Problem Definition		3) Solution Identification	4) Cost-Benefit Analysis	decision	5) Project Implementation									
	iii) standards development	2) Problem Definition		2) Problem Definition		2) Problem Definition		2) Problem Definition		2) Problem Definition		2) Problem Definition				
Pending	Combined/Single Cycle Modelling in Real-Time	1) Issue Identification/Prioritization												Potential for SAC feedback/advice		
SE-61	Dispatch Methodology	2) Problem Definition		2) Problem Definition		2) Problem Definition		2) Problem Definition		2) Problem Definition		2) Problem Definition				Potential for SAC feedback/advice
SE-79	More Efficient Uniform Price	on hold												IESO to provide information updates		
SE-80 MR-00356	Interim Changes to Generation Cost Guarantee Programs	TP review of submission	4) Cost-Benefit Analysis	4) Cost-Benefit Analysis	4) Cost-Benefit Analysis	4) Cost-Benefit Analysis	4) Cost-Benefit Analysis	decision						None expected		
SE-67	Review of Operating Reserve and Market Schedule Policies	Schedule currently under review; revised schedule expected by end of Q2										Potential for SAC feedback/advice				
SE-72	CAOR	on hold												None expected		
SE-45 MR-00338	Economic Dispatch of Linked Wheels	4) Cost-Benefit Analysis			4) Cost-Benefit Analysis		4) Cost-Benefit Analysis		decision					None expected		
SE-18	Interties Set Price	on-hold												To be determined		
SE-68	Transmission Rights Market Review	on-hold												To be determined		
n/a	EFM	on hold												To be determined		
Completed Studies (Project in Implementation Phase)																
SE-73 MR-00348 MR-00349	Enhanced Day Ahead Commitment	TP Briefing	TP review of MR-00348				seek Board approval of MR-00348	TP Review of MR-00349						IESO to provide information updates		

Legend 1) Issue Identification/Prioritization 2) Problem Definition 3) Solution Identification 4) Cost-Benefit Analysis 5) Project Implementation

<u>SE/MR</u>	<u>Initiative Description</u>	
SE-57	Embedded and Renewable Generation	Scope: centralized renewable energy forecasting system; dispatch priority during times of low demand; ; development of standards specific to renewable resources to facilitate maximum penetration
Pending	Combined/Single Cycle Modelling in Real-Time	Scope: Will address multiple minimum constraints; compliance aggregation vs. pseudo units vs. plant aggregation; integrating units that ramp from zero to minimum load pointing between 5 min and 1 hour
SE-61	Dispatch Methodology	Scope: The future will see new resources with different characteristics from the existing resources in Ontario and the IESO needs to ensure that the market maintains sufficient drivers to guarantee reliable and efficient load-following and dispatch capability.
SE-79	More Efficient Uniform Price	Scope: To examine options for a more efficient uniform price determination in Ontario. Differences between the physical scheduling and the 'market schedule' used to determine prices lead to many market inefficiencies, e.g. energy prices do not accurately reflect the cost of supplying demand, complex 'side payments' to address differences between the two schedules.
SE-80 MR-00356	Interim Changes to Generation Cost Guarantee Programs	Scope: Change aspects of the existing real-time and day-ahead generation cost guarantee programs that are resulting in economically inefficient market outcomes. Proposed rule amendments include: basing guarantee calculation on offer price; 'raising the bar' on eligibility requirements; removing operating reserve revenues from the cost guarantee calculation, revising the definition of minimum generation block run-time.
SE-67	Review of Operating Reserve and Market Schedule Practices & Policies	Scope: Review of the following aspects of the current OR policies and practices - reducing the OR requirement when OR is activated; reducing the OR requirement when receiving Northeast Power Coordinating Council (NPCC) shared activation of reserve; excluding energy received from NPCC shared activation of reserve from market demand; excluding curtailed exports for adequacy from the market schedule; excluding curtailed imports for surplus baseload generation from the market schedule
SE-72	Control Action Operating Reserve (CAOR) Study	Scope: 1) To determine whether the current pricing principle and structure of CAOR standing offers is correct and/or interfering with market participant operating reserve offers and 2) to identify the market and pricing impact of the removal of CAOR from predispatch in September 2008.
SE-45 MR-00338	Economic Dispatch of Linked Wheels	Scope: To consider changes to the market rules and the dispatch and scheduling optimizer to enable the economic dispatch and scheduling of linked wheels. At the request of the Technical Panel, a Working Group of the inter-jurisdictional traders, with IESO support, was formed in August 2008 to develop a recommended design.
SE-18	Interties Set Price	Scope: To review whether prices are being calculated appropriately and fairly given that intertie transactions are treated differently in real-time price determination compared to pre-dispatch price determination. Since intertie transactions cannot be dispatched on a 5-min basis, they are currently excluded from setting real-time MCP. However, since intertie transactions can be scheduled/dispatched within the timeframe of the pre-dispatch sequence (1 hr), they can set the pre-dispatch price.
SE-68	Transmission Rights (TR) Market Review	Scope: Review of the following aspects of the TR Market - market design (terms of the rights, funding model, etc.); TR clearing account; confidence level.
n/a	Energy Forward Market (EFM)	Scope: As part of SE-21 (EDAC), an EFM was considered. While proceeding with an EFM was not included in the IESO Board decision on EDAC, the Board directed the IESO to continue to explore an EFM with stakeholders. The EFM Technical Support Group indicated that resources should not be allocated to development of an EFM if this would delay other important initiatives.

Completed Studies (Project in Implementation Phase)

SE-73 MR-00348 MR-00349	Enhanced Day Ahead Commitment	Scope: To complete the detailed design of EDAC which includes operations-related systems and processes, optimization engine, and settlement related systems and processes. MR-00348 addresses market rule amendments related to 24-hr optimization and 3-part offers. MR-00349 will address market rule amendment related to EDAC settlement guarantees.
-------------------------------	-------------------------------	---