



Ontario Energy Board

Commission de l'énergie de l'Ontario

- 1) Monitoring Document on Bids and Offers**
- 2) Changes to Market Monitoring Reports**

Presentation to the Stakeholder Advisory Committee

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Chair, Market Surveillance Panel

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Monitoring Document Chronology

- Winter 2007 – Consultations on Draft Market Power Framework for the IESO-Administered Electricity Market
- October 27, 2009 – Publication of proposed Monitoring Document: Monitoring of Offers and Bids in the IESO-Administered Electricity Markets (see OEB website)
- November 18, 2009 – Deadline for receipt of comments



- Objectives:
 - to provide transparency regarding the Panel's approach to assessing possible exercises and abuses of market power
 - to aid in analysis & reporting of market outcomes, particularly in high priced hours
 - not for mitigating prices

- The Panel distinguishes the exercise of market power from abuse of market power
 - Abuse can lead to a formal investigation and report plus follow-up actions by OEB and IESO
- Abuse involves specific conduct which is anti-competitive (lessens or prevents competition)
 - e.g. exclusionary, collusive or predatory practices
- An exercise of market power is a necessary but not sufficient condition for finding abuse of market power
 - Exercise of market power is not proscribed by market rules (but may cause inefficient outcomes)
 - Systematic deviations from competitive outcomes will be reviewed for impediments to corrective competitive responses

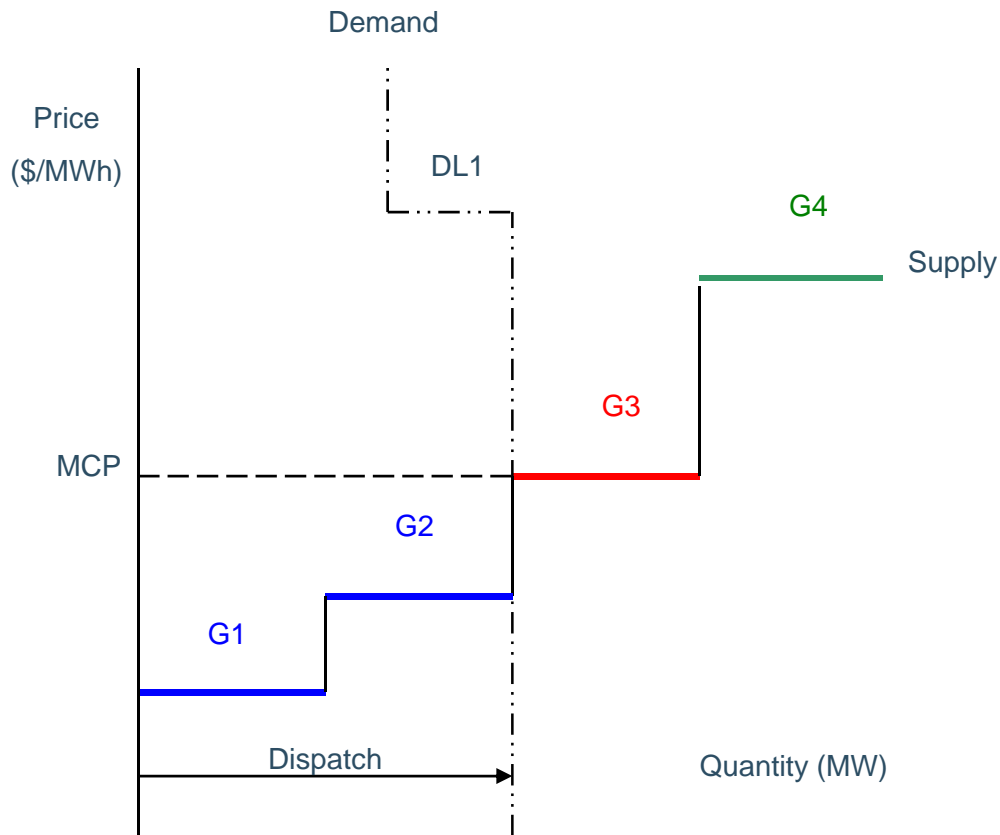
Relationship Between Market Power and Gaming

- Gaming is the exploitation of opportunities to profit or benefit from
 - defects in market design,
 - poorly specified rules or procedures, or
 - circumstances not covered by rules or proceduresand disadvantages the market as a whole
- In the extreme, gaming may involve fraud, deceit or manipulation of prices or uplift payments
- Gaming and market power are separate but not mutually exclusive issues
 - Can have either or both of an abuse of market power and gaming investigation

Three Key Areas of Concern

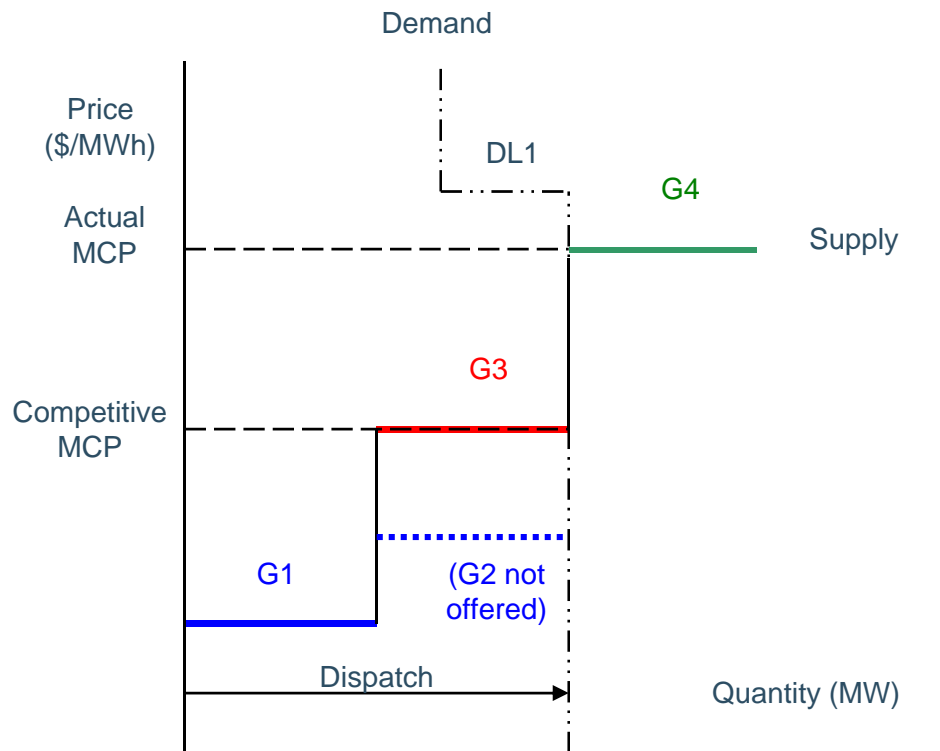
- Exercises of market power which raise prices above competitive levels usually involve:
 - Physical Withholding
 - Economic Withholding
 - Pricing-Up
- Lowering prices below competitive levels is also a possible concern but not addressed in this Monitoring Document

Competitive Market Case



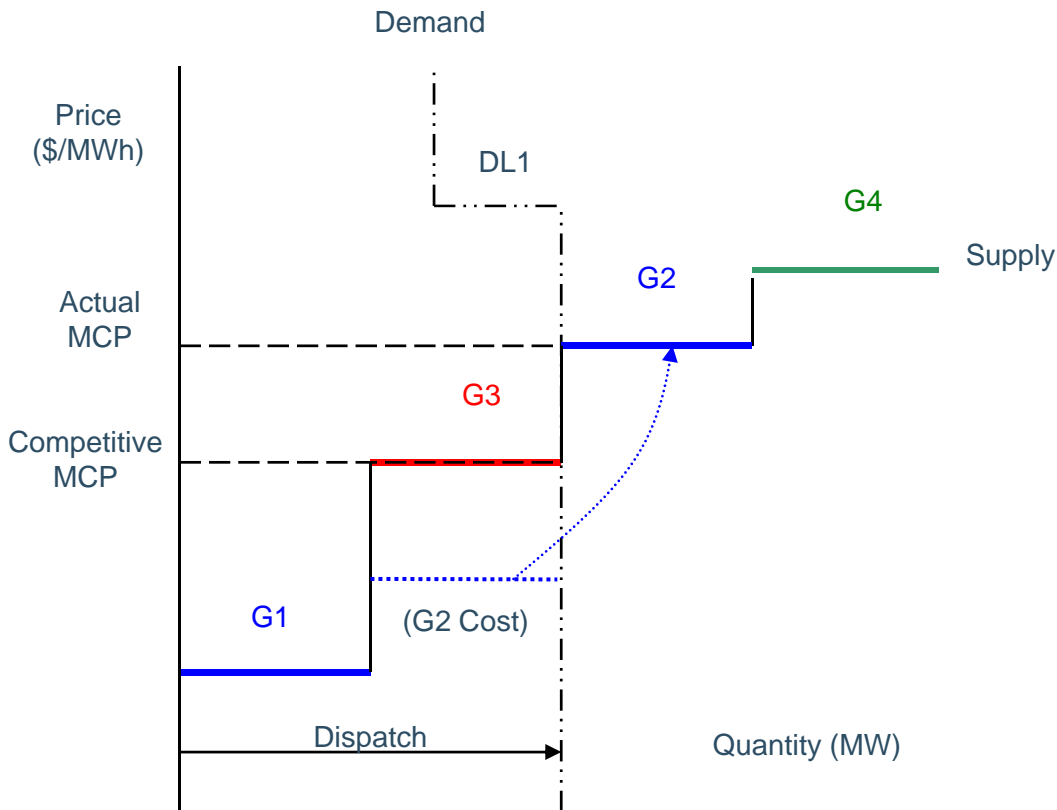
- Generators 1, 2 and 3 all bid their marginal cost.
 - only two are needed to meet the demand.
- Dispatchable Load
 - available at high prices
- Generator 1 and 2 are dispatched.
 - This is the efficient dispatch.
- Generator 3, the next MW of supply, sets the market clearing price.
 - This is the competitive price outcome.

Physical Withholding



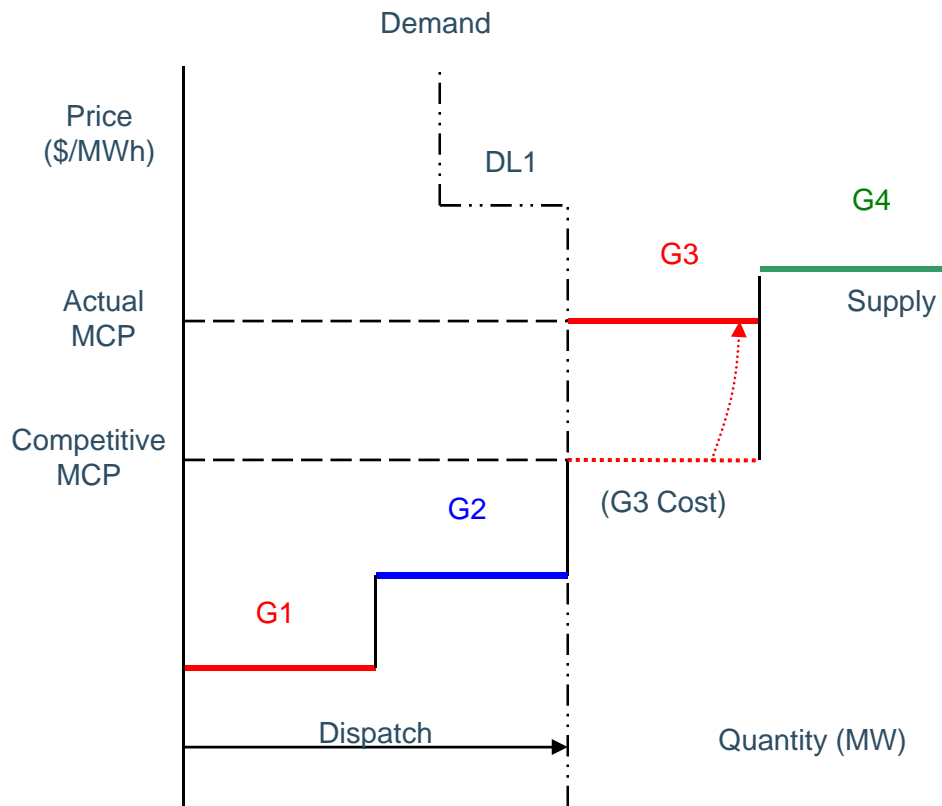
- Generators 1 & 2 are owned by the same firm. Generator 2 is available but does not submit an offer.
 - Generators 1 & 3 are dispatched.
 - Generator 4 sets MCP.
- The dispatch is inefficient.
 - Higher cost Generator 3 replaces Generator 2.
- Actual MCP is higher than Competitive MCP.

Economic Withholding



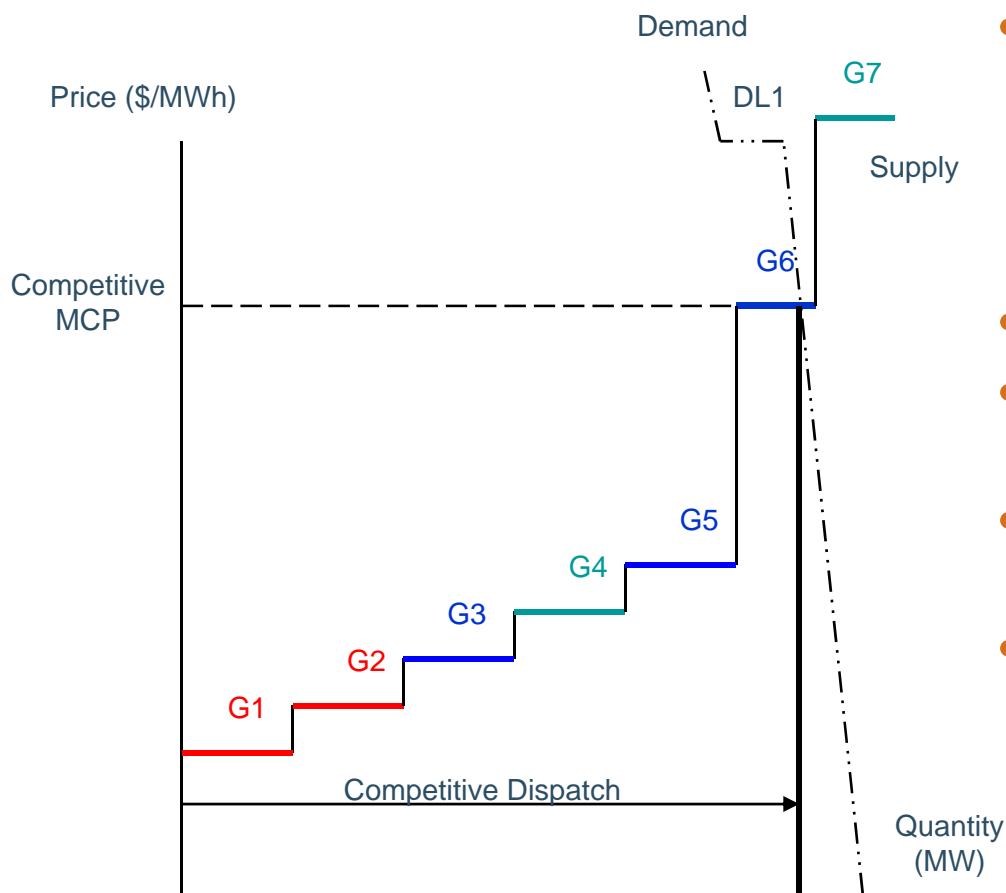
- Generators 1 & 2 are owned by the same firm.
- Generator 2 submits an offer above its marginal cost and the offer price of Generator 3.
 - Generators 1 & 3 are dispatched.
 - Generator 2 sets MCP.
- The dispatch is inefficient.
 - Higher cost Generator 3 replaces Generator 2.
- Actual MCP is higher than Competitive MCP.

Pricing-Up



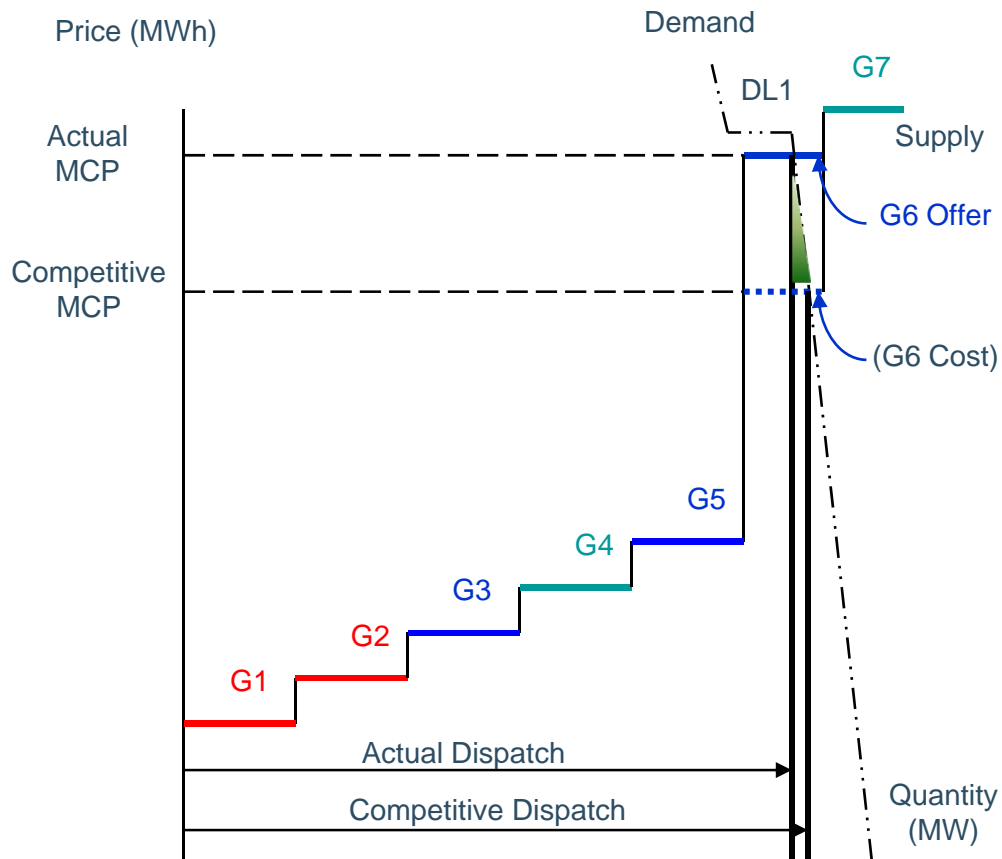
- Generators 1 & 3 are owned by the same firm.
- Generators 1, 2 & 4 offer at their respective marginal costs.
- Generator 3 offers above its marginal cost but below Generator 4's offer.
 - Generators 1 & 2 are dispatched.
 - Generator 3 sets MCP.
- The dispatch is efficient (if demand is totally inelastic).
- Actual MCP is higher than Competitive MCP.

Competitive Case – Price Set by Peaking Generator During Scarcity Conditions



- Demand is very high (and not totally inelastic).
 - Near scarcity (Dispatchable Load 1 is close to being marginal).
- Generators 1 to 5 are low cost.
- Generators 6 and 7 are high cost peaking units.
- Generators 3, 5 & 6 are owned by same firm.
- Generator 6 offers at its marginal cost
 - It is partially dispatched.
 - It also sets the 'high' MCP.
- This is the competitive outcome.

Pricing-Up Aggravating Scarcity



- Generator 6 prices up to just below the bid price of Dispatchable Load 1.
 - It is partially dispatched.
 - The above cost offer of next MW not dispatched sets MCP.
- The resulting price is 'high' in absolute terms and relative to the competitive benchmark.
- Dispatch is inefficient due to reduction in price-sensitive load and/or exports (shaded area).

Three Operational Tests for Exercises of Market Power

1. Conduct
2. Price Effect
3. Profit or Other Benefits

- Did physical withholding, economic withholding or pricing-up occur?
- Was there a credible alternative explanation?
 - Physical withholding due to normal planned or forced outages
 - Economic withholding or pricing up where there are operational reasons to avoid running unless needed

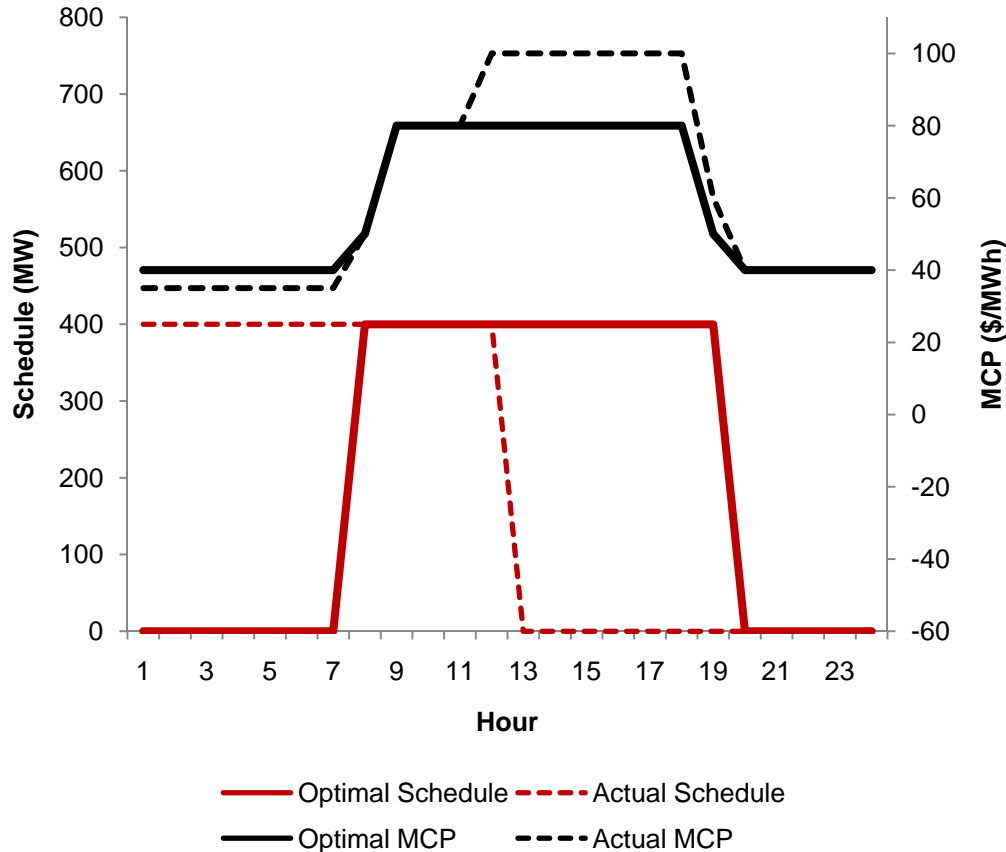
- Did the withholding or pricing-up have a material impact on the market price?
- No fixed materiality threshold
- Case-by-case assessment of:
 - Magnitude of increase above competitive level
 - Duration

- Did the market participant profit or otherwise benefit from the withholding or pricing-up?
- Starting point is participant's profit for actual offer strategy versus profit in absence of withholding or pricing-up
- Any other relevant factors also considered
 - Contract or regulated prices
 - Other payments through various market programs

- Non-Energy limited resources generally include
 - Fossil
 - Baseload Hydro
 - Nuclear
 - Wind
 - Self-scheduled & intermittent generation
- Relevant costs are marginal production costs and average incremental costs from start-up

- Energy-limited resources include
 - Peaking hydro with limited water
 - Fossil or other units with output restrictions
- Energy-limited resources cannot run in every hour
 - Must choose when to make generation available to the market
 - Relevant cost is opportunity cost (ie. revenue available in best alternative hour)

Withholding by Energy Limited Generation



- Hydro facility has 12 hours of water.
- Efficient usage is to run during 12 highest price hours on-peak (HE 8-19).
- Actual usage has unit producing at start of day, including lowest price hours.
- With actual production, no water is available for generation after HE12.
- Early production causes water to be withheld from highest value use later in the day.

- Imports
 - Voluntary, so physical withholding not pursued
 - Pricing-up in pre-dispatch would lead to same volume in real-time and not affect MCP
 - Economic withholding is theoretically possible (not usually expected to be an issue but could be where importer has other supply resources)
- Dispatchable Loads and Exports
 - Generally do not benefit from higher prices (unless there is a sufficiently large associated generation portfolio)

Planned Changes to Monitoring Reports

- August 26 – Announcement of pending changes at SAC
- September 24 – Consultation initiated on proposed changes
- October 5 – Deadline for comments

Summary of Proposed Changes

- Comprehensive winter report covering annual period
 - Similar to current report structure
 - Less statistical detail in ch. 1
 - Summary reporting on high / low / anomalous hours in ch. 2
 - More limited analytical material in ch. 3
- Shorter summer report
 - Focus only on anomalous events and new matters over the six-month period

- Three responses received
 - Transparency of market outcomes should remain an important objective
 - No major concerns about proposed changes
 - Exception is tables from Statistical Appendix that cannot be reproduced using other sources of data should continue to be published
- Panel will proceed with planned changes for May-October 2009 report
 - Panel will publish a subset of the current Appendix annually