# PWU Interrogatory #001

**Ref:** Ex. A2-T2-S1, Attachment 1, page 3 states:

> Recognizing the scope and complexity of the challenges we face this year, a number of changes are being made to the business planning process. These improvements include:
> - Earlier roll out of process instructions
> - Two step process for top-down establishment of OM&A targets
> - Improving the transparency of plans – e.g. through benchmarking and gap analyses
> - Increased management oversight during the process
> - Earlier approval of the corporate plan (to facilitate preparation of the OEB application)

**Issue Number: 1.2**
**Issue:** Are OPG's economic and business planning assumptions for 2011 - 2012 an appropriate basis on which to set payment payments?

***Interrogatory***

Please describe the business planning process used for the business plan that formed the basis for OPG's 2008-2009 Payment Amounts application (EB-2007-0905). Please include a description of the process used to establish OM&A budgets in that business plan.

***Response***

The Business Planning and Budgeting Process that formed the basis for OPG's 2008 – 2009 Payment Amounts application is described in EB-2007-0905, Ex. A2-T2-S1. The 2007 – 2011 Business Planning Information and Instructions filed in EB-2007-0905, Ex. L-14-45, Attachment 2 includes the process used to establish OM&A budgets.

**PWU Interrogatory #002**

**Ref:** A news release from Ontario Power Generation posted on May 26, 2010 states:

> [Toronto): Ontario Power Generation (OPG) is proceeding with a lower rate application to the Ontario Energy Board (OEB).
>
> The proposal, if accepted by the OEB, would result in an increase to the average residential bill of about $1.86 per month. OPG delayed filing its application last month so that it could find a way to lower its requested rate by more than 30 per cent.
>
> "We wanted to do more to reduce the impact of our request on ratepayers" said Tom Mitchell, OPG's President and CEO. "Last year, we found $90 million of internal savings and deferred out application. This year, we sharpened our pencils to shave our current rate application while still allowing OPG to produce safe, clean, reliable, low-cost electricity for Ontario."

**Issue Number: 1.2**
**Issue:** Are OPG's economic and business planning assumptions for 2011 - 2012 an appropriate basis on which to set payment payments?

***Interrogatory***

Please describe in detail all changes made to the business planning assumptions related to the reductions in the proposed payment amounts.

***Response***

Please see response to the interrogatory in Ex. L-4-001, part c).

# PWU Interrogatory #003

**Ref:** A news release from Ontario Power Generation posted on May 26, 2010 states:

> [Toronto): Ontario Power Generation (OPG) is proceeding with a lower rate application to the Ontario Energy Board (OEB).
>
> The proposal, if accepted by the OEB, would result in an increase to the average residential bill of about $1.86 per month. OPG delayed filing its application last month so that it could find a way to lower its requested rate by more than 30 per cent.
>
> "We wanted to do more to reduce the impact of our request on ratepayers" said Tom Mitchell, OPG's President and CEO. "Last year, we found $90 million of internal savings and deferred out application. This year, we sharpened our pencils to shave our current rate application while still allowing OPG to produce safe, clean, reliable, low-cost electricity for Ontario."

**Issue Number: 1.3**
**Issue:** Is the overall increase in 2011 and 2012 revenue requirement reasonable given the overall bill impact on consumers?

***Interrogatory***

a) What are the dollar impacts on the total revenue requirements of the reductions in the proposed payment amounts for 2011 and 2012 from those contemplated at the time of OPG's stakeholder consultations?

b) Please identify all proposals/projects in OPG's 2011 and 2012 payment amounts application that were impacted by the reductions in payment amounts.

c) For each proposal/project identified in b) above, please describe how it was impacted by the reductions (e.g. amount of budget cut relative to original budget, deferral to future year, cancellation) and the impact of the reductions (e.g. risks, asset life expectancy, impact on NPV).

d) Please describe in detail the process that OPG went through in arriving at the reductions in the proposed payment amounts from those contemplated at the time of the stakeholder consultations.

***Response***

a) and d)
Please see response to the interrogatory in Ex. L-4-001, part d).

Witness Panel: Deferral and Variance Accounts, Payment Amounts and Regulatory Treatments

b) and c)

Please see response to the interrogatory in Ex. L-4-001, part c).

# PWU Interrogatory #004

**Ref:** Ex. D1-T1-S1, page 1, line 32 to page 2, line 6 states:

> As described in Ex. F1-T1-S1, section 2, the Hydroelectric Business Unit uses a structured portfolio approach to identify and prioritize projects. Projects are then administered using the project management process that is described in section 7.0 below. The hydroelectric project portfolio is approved through OPG's business planning process, which includes approval of the capital project budget (as well as the project OM&A budget) by OPG's Board of Directors ("the OPG Board"). Prior to beginning work on a project, funds are released in accordance with OPG's Organizational Authority Register through the approval of a business case summary.

**Issue Number: 4.2**
**Issue:** Are the capital budgets and/or financial commitments for 2011 and 2012 for the regulated hydroelectric business appropriate and supported by business cases?

***Interrogatory***

a) Please indicate if OPG has displaced, over the period 2007 - 2009, ongoing works or activities related to either capital or OM&A expenditures for its hydroelectric business due to business planning decisions to reduce the portfolio budget in favour of other higher priority projects that impact the short-term and/or long-term reliability of the regulated hydroelectric generating units?

b) If your response to a) is yes, please describe such projects/expenditures that were displaced.

c) What are the impacts of displacing the projects described in response to b)?

d) Please indicate if OPG is planning to displace, over the period 2010-2012, ongoing works or activities related to either capital or OM&A expenditures for its hydroelectric business due to business planning decisions to reduce the portfolio budget in favour of other higher priority projects that impact the short-term and/or long-term reliability of the regulated hydroelectric generating units?

e) If your response to d) is yes, please describe such projects/expenditures that were displaced.

f) What are the impacts of displacing the projects described in response to e)?

***Response***

a) During the 2007 – 2009 period, OPG did not displace any significant capital or OM&A activities at the regulated stations as a result of business planning decisions. The portfolio management approach utilized in the hydroelectric business is described in Ex. F1-T1-S1, section 2. In general, it places a higher priority on investments in high value facilities which include the regulated hydroelectric stations.

b) Not applicable. See response to part a).

c) Not applicable. See response to part a).

d) In preparing plans for 2010 – 2012 period, OPG did not displace any significant capital or OM&A activities at the regulated stations as a result of business planning decisions. The same planning approach was used as for the 2007 – 2009 period described above in part a).

e) Not applicable. See response to part d).

f) Not applicable. See response to part d).

# PWU Interrogatory #005

**Ref:** (a) The Ontario Power Authority website states:

> Though wind energy is relatively new to Ontario, it is a growing source of electricity generation in the province. Ontario currently has more than 300 MW of wind power in service with an additional 1,000 MW on the way.

(b) The Ontario Power Authority website states:

> Ontario is Canada's first province to actively support the development of solar electricity generation projects through the Standard Offer Program, which will enable small, local, renewable energy producers to get into the energy market.

**Issue Number: 6.1**
**Issue:** Is the test period Operations, Maintenance and Administration budget for the regulated hydroelectric facilities appropriate?

***Interrogatory***

What work programs/investments is OPG undertaking to maintain/enhance its load-frequency control performance at its regulated facilities in support of the expected increase in Ontario's supply mix of non-dispatchable wind and solar generation?

***Response***

OPG is continuing its maintenance program to sustain the load-frequency control, or Automatic Generator Control ("AGC"), mode of operation at the Sir Adam Beck II Generating Station. No enhancements are planned for load-frequency control during the test period.

# PWU Interrogatory #006

**Ref:** Ex. B1, Tab 1, Schedule 1, Table 1 indicates that net fixed assets in the hydroelectric rate base are declining from $3.89B in 2007 to $3.77B in 2012, as accumulated depreciation is rising more quickly than new investment.

**Issue Number: 4.2**
**Issue:** Are the capital budgets and/or financial commitments for 2011 and 2012 for the regulated hydroelectric business appropriate and supported by business cases?

***Interrogatory***

a) Did OPG remove any hydroelectric projects from its plan, at the direction of its shareholder or its executive management, primarily to mitigate ratepayer impacts?

b) If the answer to part a) is yes, please provide a description of the removed projects, including the investment amounts and timing thereof.

***Response***

a) No.

b) Not applicable.

# PWU Interrogatory #008

**Ref:** (a) Ex. E1-T1-S1, page 5, line 30 to page 6, line 4. With regard to Surplus Baseload Generation ("SBG") factored into OPG's hydroelectric forecast production, OPG states:

> Significant SBG is forecast to continue through the test period based on Ontario electricity demand and generation supply forecasts. Consequently, an additional forecast SBG adjustment has been integrated into the regulated hydroelectric production forecast totals for 2010, 2011, and 2012, and itemized separately in line 21 of Ex. E1-T1-S2 Table 1. The specific SBG adjustments included in the forecast are: 0.2 TWh in 2010, 0.5 TWh in 2011, and 0.8 TWh in 2012.

(b) IESO's May 2010 18-Month Outlook, page iii:
http://www.theimo.com/imoweb/pubs/marketReports/18MonthOutlook_2010may.pdf

> From June 2010 to November 2011, approximately 2,900 megawatts ("MW") of new and refurbished supply are scheduled to enter commercial operation. Of that, approximately 470 MW of new generation has been announced under the Feed-in Tariff ("FIT") program and 180 MW contracted under the Renewable Energy Supply III ("RES III") program.

(c) IESO, FiT Dispatch and Operability, Gordon Drake, March 10, 2010. Slide 2:
http://www.theimo.com/imoweb/pubs/consult/se57/se57-20100310-FiT-Dispatch-Operability.pdf

- Initial applications for FiT program totaled more than 9,000 MW
  - Wind: 79%
  - Solar: 16%
  - Other: 5%
- Significant volumes of FiT projects are expected to connect to the distribution system
- Agreement with Samsung introduces another 2,500 MW of generation
  - Wind: 80%
  - Solar: 20%

(d) Ontario Government Newsroom. Ontario's Coal Phase Out Plan. September 3, 2009:
http://news.ontario.ca/mei/en/2009/09/ontarios-coal-phase-out-plan.html

Since 2003 coal-fired generation in Ontario has been decreasing. The closure of the coal-fired Lakeview Generating Station in 2005 eliminated carbon dioxide emissions equivalent to taking approximately 500,000 cars off Ontario roads.

Ontario Power Generation ("OPG") will continue to reduce carbon dioxide emissions through an ongoing coal phase out plan which targets emissions from coal at 19.6 million tonnes in 2009 and 15.6 million tonnes in 2010. By 2011, coal electricity generation will be cut by two-thirds.

**Issue Number: 5.1**
**Issue:** Is the proposed regulated hydroelectric production forecast appropriate?

***Interrogatory***

a) In setting out provisions in relation to SBG's associated with the hydroelectric production forecast, Ref (a), has OPG taken into account:

   i) Increasing penetration of renewable generation as set out in Ref (b) and Ref (c)? If so, please describe how this has been factored in.

   ii) The reduction of coal generation over 2010 and 2011 that would result from Ontario's Coal Phase Out Plan set out in Ref (d)? If so, please describe how this has been factored in.

b) Please confirm that spilling of water at OPG's regulated facilities is a likely outcome of SBG.

c) What is the financial impact of spilling of water at the regulated hydroelectric facilities on OPG?

d) What is the economic impact of spilling water at the regulated hydroelectric facilities on Ontario's power system (e.g., HOEP)?

e) Please describe any changes that OPG can make in its operation of its regulated hydroelectric facilities to avoid spilling water in accommodating SBG.

f) Does OPG modify the operation at regulated hydroelectric facilities when the operation of other hydroelectric facilities is capable of storing a portion of the surplus water as a result of SBG? If so, does this result in incremental costs related to generation loss?

g) If the response to f) is yes, has OPG estimated its possible capacity and energy losses incurred by compensating for SBG at its hydroelectric facilities?

h) If the response to g) is yes, what are the estimated losses incurred at the regulated facilities for 2010, 2011 and 2012? What are the losses in terms of SBG volume reported in Exhibit 1, Tab 1, Schedule 1?

i) In anticipating periods of SBG, will OPG be able to operate some of its hydroelectric facilities at a suboptimal operating point (e.g., is OPG considering keeping its forebays at levels that would reduce its capability to meet peak load that could have a negative impact on OPG's revenue)?

j) If OPG can operate some of its hydroelectric facilities at a suboptimal operating point at times of SBG, under what conditions will OPG be able to do so?

k) Is the use of the Sir Adam Beck Pump Generating Station an alternative to spilling water to meet SBG?

l) If the response to k) is yes, how will this alternative be impacted by the Niagara Tunnel project?

m) Please identify any direct and/or indirect impacts on safety, reliability and the asset life of OPG's prescribed hydroelectric facilities (e.g. control mechanisms) resulting from the changes in the operation of the regulated hydroelectric facilities related to SBG.

n) With regard to any impacts described in response to m), what would be the anticipated costs, if any, related to these impacts?

o) If costs are identified in response to n), would any of such costs apply to the test years?

***Response***

a) i)

Yes, increasing penetration of renewable generation has been considered. Please see Interrogatory response L-1-035 for additional details.

a) Ii)

As the regulated hydroelectric generation is a baseload supply, their forecast output is not affected by assumptions regarding the availability of OPG's coal generation.

b) The energy quantities listed in line 21 of Ex. E1-T1-S2, Table 1, represents OPG's expectation of spill at regulated hydroelectric stations.

c) Spill at regulated hydroelectric facilities results in lost revenues less any avoided production costs.

d) Operation of the Ontario power system is the accountability of the IESO. OPG cannot assess the impact of spill on the Ontario power system.

e) OPG's operations of the regulated hydroelectric stations in situations of anticipated surplus baseload generation ("SBG") is described in OPG's response to the interrogatory in Ex. L-1-036 part b).

f) Historically, OPG has utilized all available hydroelectric storage prior to spilling water. OPG's operation at the regulated facilities in situations of anticipated SBG is addressed in part e) above.

g) No.

h) Not applicable.

i) See part e) above. When hydroelectric storage capability exists, the stored water is available for use at a later period. Utilizing hydroelectric storage capability is not considered suboptimal as the stored water remains available for use at a later period.

j) See part i) above.

k) The storage capability of the Sir Adam Beck Pump Generating Station ("PGS") is used based on the comparative economics of the pump/generate cycle (see Ex. E1-T2-S1, page 2, lines 6-15) regardless of whether SBG is anticipated or not.

l) The PGS will continue to be used based on the comparative economics of the pump/generate cycle.

m) When market economics dictate a reduction in Sir Adam Beck generation because of SBG (refer to Ex. L-1-036, part b)), the operators reduce water flow through the Sir Adam Beck generating units. This is done in a way to minimize the wear and tear on the units. SBG levels over the test period are anticipated to have immaterial impacts on reliability and asset life, and no impacts on public or employee safety. If no other options for use of this water (e.g., economic pump into the PGS reservoir, store in Grass Island Pool, or transaction with New York Power Authority) are available, it will become part of the spill over Niagara Falls. Other than utilizing the limited storage in the headponds, the DeCew Falls and R.H. Saunders Generating Stations are not used to manage SBG.

n) Not applicable, See response to part m).

o) Not applicable, See response to part m).

# PWU Interrogatory #009

**Ref:** (a): Ex. E2- T1-S1, page 12, lines 20-24. With regard to the impact of SBG on OPG's nuclear production forecast, OPG reports:

> The Nuclear production forecast for the 2011 - 2012 period does not include a specific provision for reduced production due to surplus baseload generation. OPG was not subject to material reductions in nuclear generation due to surplus baseload generation situations in 2008 or 2009 and is currently not anticipating a significant impact on its nuclear facilities during the test period.

(b): IESO's May 2010 18-Month Outlook, page iii
http://www.theimo.com/imoweb/pubs/marketReports/18MonthOutlook_2010may.pdf

> From June 2010 to November 2011, approximately 2,900 megawatts (MW) of new and refurbished supply are scheduled to enter commercial operation. Of that, approximately 470 MW of new generation has been announced under the Feed-in Tariff (FIT) program and 180 MW contracted under the Renewable Energy Supply III (RES III) program.

(c): IESO, FIT Dispatch and Operability, Gordon Drake, March 10, 2010. Slide 2
http://www.theimo.com/imoweb/pubs/consult/se57/se57-20100310-FiT-Dispatch-Operability.pdf

- Initial applications for FiT program totalled more than 9,000 MW
  - Wind: 79%
  - Solar: 16%
  - Other: 5%
- Significant volumes of FiT projects are expected to connect to the distribution system
- Agreement with Samsung introduces another 2,500 MW of generation
  - Wind: 80%
  - Solar: 20%

(d): Ontario Government Newsroom. Ontario's Coal Phase Out Plan. September 3, 2009
http://news.ontario.ca/mei/en/2009/09/ontarios-coal-phase-out-plan.html

> Since 2003 coal-fired generation in Ontario has been decreasing. The closure of the coal-fired Lakeview Generating Station in 2005 eliminated carbon dioxide emissions equivalent to taking approximately 500,000 cars off Ontario roads.

Witness Panel: Hydroelectric

Ontario Power Generation (OPG) will continue to reduce carbon dioxide emissions through an ongoing coal phase out plan which targets emissions from coal at 19.6 million tonnes in 2009 and 15.6 million tonnes in 2010. By 2011, coal electricity generation will be cut by two-thirds.

**Issue Number: 5.2**
**Issue:** Is the proposed nuclear production forecast appropriate?

***Interrogatory***

a) In setting out provisions in relation to SBG's associated with the nuclear production forecast, Ref (a), has OPG taken into account:

   i) Increasing penetration of renewable generation as set out in Ref (b) and Ref (c)? If so, please describe how this has been factored in.

   ii) The reduction of coal generation over 2010 and 2011 that would result from Ontario's Coal Phase Out Plan set out in Ref (d)? If so, please describe how this has been factored in.

b) Please identify the impact, if any, on the asset life of OPG's nuclear facilities that might result from the ramping down/up related to SBG should there be an increased requirement for OPG's nuclear facilities to react to SBG.

c) With regard to any impacts described in response to (b), what would be the anticipated costs related to these impacts?

d) If costs are identified in response to (c), would any of such costs apply to the test years?

***Response***

a) i)
Yes, increasing penetration of renewable generation has been considered. Please see the interrogatory response Ex. L-1-035 for additional details.

a) Ii)
As nuclear generation is considered a baseload supply, the forecast output of these plants is not affected by assumptions regarding the availability of OPG coal generation.

b) Please see OPG's response to the interrogatory in Ex. L1-1-038. As indicated at Ex. E2-T1-S1, page 12, lines 23-24, and as noted in the interrogatory reference above, OPG

does not currently anticipate significant impact on its nuclear facilities during the test period as the result of surplus baseload generation ("SBG").

c) Please see OPG's response to the Interrogatory in Ex. L1-1-038. As stated in part b) above, OPG does not currently anticipate significant impact on its nuclear facilities during the test period as the result of SBG. As a result, a cost analysis based on impacts of SBG has not been performed.

d) No costs due to SBG have been identified in OPG's 2010 – 2014 Nuclear Business Plan.

# PWU Interrogatory #010

**Ref:** Ex. F1,-T1-S1, page 3, lines 13-17 states:

> Hydroelectric uses a structured portfolio approach to identify and prioritize projects for its investment program. Annual engineering reviews and plant condition assessments (conducted on a cycle of approximately seven to ten years) are performed to determine short-term and long-term expenditure requirements to sustain or improve each facility, and ensure continued safe operation.

**Issue Number: 6.1**
**Issue:** Is the test period Operations, Maintenance and Administration budget for the regulated hydroelectric facilities appropriate?

***Interrogatory***

Please provide detailed descriptions of OPG's hydroelectric engineering review and plant condition assessment processes.

***Response***

Details of OPG's hydroelectric engineering review and plant condition assessment processes are provided below:

Engineering Risk Assessment Program
OPG's Hydroelectric Engineering Risk Assessment Program ("ERAP") is an annual technical review used to identify significant operational risks associated with plant equipment and systems in the hydroelectric business. This process systematically identifies, assesses and ranks the likelihood and consequence of safety, environmental and financial risks resulting from inadequate, obsolete or failed plant equipment or systems.

Each plant group within the hydroelectric business selects those systems that they believe present the highest risks to the business. Concurrence on the systems to be evaluated is obtained from the Chief Hydroelectric Engineer. The Chief Hydroelectric Engineer may also direct that strategic or emerging issues be included in the review. Subject matter experts from the Hydroelectric Engineering Division ("HED") are made available to assist the plant groups in their analysis. Subject matter experts are also made available from the Environmental Division to provide advice on environmental issues.

The selected systems are evaluated in-depth; risk profiles are developed; and mitigating action plans are formulated. A formal presentation of the current engineering risk profile is made to the Executive Vice President – Hydroelectric and Chief Hydroelectric Engineer annually highlighting the risks identified and the mitigation action plan. The status and effectiveness of mitigating plans from previous years are also reviewed. The objective is to

review the high risk systems each year and systematically lower the risk of plant operation. All plant systems must be reviewed every five years.

Risk Rank is defined as the product of Likelihood of Occurrence and the Resulting Consequence. For each system considered, a risk profile is developed for each category of safety, environmental and financial loss. Environmental risk is assessed based on two components, spill risk (using the Spill Characterization and Risk Assessment tool) and other environmental risks. The higher of the two results is adopted as the environmental risk rank. Both likelihood of occurrence and resulting consequence are ranked 1 through 5, with the resulting product being between 1 through 25. The table below outlines the risk rank and resulting required actions.

Data to assess the condition and evaluate the risk of failures is obtained from sources such as current plant condition assessments, maintenance records, condition reports, inspection reports, test reports, operator, maintenance and engineering reports, incident reports, regulatory infractions, and developments in external utilities and industries. Conformance to applicable codes, acts and regulations and Hydroelectric Engineering Governance as well as reference to industry standards is also included in the assessment to demonstrate good engineering practice and due diligence.

| Risk Rank | Category | Required Action (*) |
|---|---|---|
| 15 – 25 | Very High | Repair/replacement urgently carried out. |
| 10 – 12 | High | Plans put in place for repair/replacement at the earliest opportunity. |
| 5 – 9 | Medium | Have plans, as appropriate, in place (e.g., condition monitoring and/or plans for possible future repair/replacement). |
| 1 – 4 | Low | Continue to manage risk through the ERAP. |

(*) – Apply engineering judgement in establishing action plan. The objective is to minimize risk to the business.

Plant Condition Assessment

The Plant Condition Assessment ("PCA") is a thorough, multi-disciplinary, systems-based assessment of the physical condition of each hydroelectric generating station and that station's associated structures. The PCA provides a determination of the required repair, rehabilitation, modification, or replacement of the assessed facilities' various components and/or systems, in order to maintain the safety, reliable production capability, and viability of the facility for the next 30 years. PCAs are repeated on a seven year cycle.

PCAs are carried out on a station's structures, equipment and other components. Structures include the powerhouse and dams, water control structures, canals, tunnels, and roads,

bridges, and other structures (e.g., safety booms, ice booms) associated with the generating station under review.
For each of OPG's hydroelectric generating station (and associated structures), the PCA:

- provides a forecast of all required capital and non-standard OM&A investments over the next ten years. Base maintenance costs are not included.
- Identifies major investment requirements beyond ten years.
- Provides rigorous engineering-based rationale for the recommended investments.

Plant Condition Assessments are carried out by a multi-discipline team, having expertise in hydroelectric facilities' major components and systems. The team includes a PCA Coordinator, a PCA Lead Engineer for each discipline-specific team (Mechanical, Civil, and Electrical), PCA Investigators, and a PCA Plant Group Coordinator. Integrated into each discipline's assessment is a review of discipline-specific Health and Safety and Environmental issues.

Each Lead Engineer is responsible for the assessments of his disciplines' team of investigators. The Lead Engineer must be a professional engineer with a minimum of 10 years of engineering experience. This experience must include a minimum of five years experience in his/her specific discipline area of hydroelectric plant design, operation or maintenance.

Component-specific PCA checksheets guide the investigators and provide a detailed tool for the assessment of each system of the facility.

A common four level rating system (see below) ensures that the assessments are consistent both between disciplines, and between systems within a facility.

**Common Condition Rating Scale**

| Rating | Condition Description | Details | Remediation |
|---|---|---|---|
| 4 | Good | Only minor deterioration or defects are evident. | 20 plus years |
| 3 | Fair | Moderate deterioration. Function is still adequate. | 7-20 years |
| 2 | Poor | Serious deterioration of at least some portions of the equipment. Function is inadequate. | 2-7 years |
| 1 | Unacceptable | Extensive deterioration. Barely functional. Urgent need for remediation. | 0-2 years |

Data is obtained from engineering and inspection records to develop a clear picture of the condition of the facility and support the site investigations. Site investigations include

interviews with site operating, maintenance, and supervisory personnel, a physical review and inspection of the system being assessed, and, where appropriate, outage inspections.

The findings from each system assessment (as defined in the systems matrix) are reported following a standard format of system description, system assessment and recommendations. The recommendations identify the remedial work, its engineering basis, estimated costs, and the recommended timeframe. A discipline summary spreadsheet consolidates these recommendations, costs, and their timing (30-year timeframe) on a discipline basis, and a facility summary spreadsheet is then developed to roll the discipline costs into a single snapshot of the facilities' recommended remedial work and costs for the next 30 years. When complete, the PCAs are used as the basis for development of life cycle plans for the individual stations.

# PWU Interrogatory #011

**Ref:** (a) Ex. F1-T2-S2, page 4, lines 10-11. In comparing 2009 Actual vs. 2009 budget OPG reports:

> Higher than planned attrition and unfilled vacancies across the central support groups (resulting in lower labour costs).

(b) Ex. F1-T2-S2, page 4, lines 27-28. For 2009, in relation to the Niagara Group, OPG submits:

> These costs have been offset by a reduction in labour burdens of $0.2M and an overall reduction in labour costs due to staff vacancies of $1.8M.

(c) Ex. F1-T2-S2, page 5, lines 28-30. In comparing 2008 Actual vs. 2008 budget OPG reports:

> …and delays in filling staff vacancies across the central support groups, especially in Engineering and Hydroelectric Development.

(d) Ex. F1-T2-S2, page 8, line 15. In comparing 2007 Actual vs. 2007 budget for the hydroelectric central support groups OPG states:

> Staffing under-variance due to staff departures and slower hiring ($0.5M).

**Issue Number: 6.1**
**Issue:** Is the test period Operations, Maintenance and Administration budget for the regulated hydroelectric facilities appropriate?

***Interrogatory***

a) Were OPG's works across the Niagara Plant Group, R.H. Saunders Generating Stations and the Hydroelectric Central Groups impacted by unfilled staff vacancies reported over the period 2007-2009? If so, please provide a description of OPG's efforts to manage unfilled vacancies.

b) What is the current status of OPG's staff vacancies across the Niagara Plant Group, R.H. Saunders Generating Stations and the Hydroelectric Central Groups? Please indicate the number of current staff vacancies for each of the three groups.

c) Has OPG eliminated vacant positions reported as unfilled over the period 2007-2009? Please indicate the number of vacant positions eliminated for each of the following three groups:

- Niagara Plant Group;
- R.H. Saunders Generating Stations; and
- Hydroelectric Central Groups.

Witness Panel: Hydroelectric

d) Is OPG planning to fill current staff vacancies for the Niagara Plant Group, R.H. Saunders Generating Stations and the Hydroelectric Central Groups over the period 2010-2012?

***Response***

a) The Niagara Plant Group and Hydroelectric Central Support Groups have been impacted by staff vacancies over the 2007 – 2009 period. The Niagara Plant Group managed unfilled vacancies by hiring temporary employees to help facilitate the workload until regular staff could be hired. The Hydroelectric Central Support Groups have managed their unfilled vacancies by hiring temporary staff, staff on rotation from other parts of OPG, outsourcing some specialized technical work, and re-prioritizing some work. For the period 2007 – 2009, R.H. Saunders Generating Station has not been impacted because the station was at or above staff complement levels.

b) The Niagara Plant Group currently (year-to-date July) has 17 vacant regular staff positions as compared to the approved 2010 – 2014 Business Plan. There are no vacancies at R.H. Saunders Generating Station as the staff level is above the approved complement. The Hydroelectric Central Support Groups currently have a total of 20 vacancies, of which 14 are in the Hydroelectric Development ("HD") group. Delays in hiring staff for HD have been due to late approvals and the start-up of certain new development projects related to unregulated facilities.

c) No. The Niagara Plant Group, R.H. Saunders Generating Station, and the Hydroelectric Central Support Groups have not eliminated any vacant positions from our staff plan/organizational structure during the 2007 – 2009 period.

d) Yes, the Hydroelectric Central Support Groups are planning to fill vacancies from 2010 – 2012. The Niagara Plant Group has recently been impacted by significant attrition due to retirement. As a result, it is currently reassessing its staffing strategy in an effort to achieve greater efficiencies. However, Niagara Plant Group is still expecting to fill most of its current vacancies over the 2010 – 2012 period. There are currently no vacancies at R.H. Saunders Generating Station.

# PWU Interrogatory #012

**Ref:** A news release from Ontario Power Generation posted on May 26, 2010 states:

> [Toronto): Ontario Power Generation (OPG) is proceeding with a lower rate application to the Ontario Energy Board (OEB).
>
> The proposal, if accepted by the OEB, would result in an increase to the average residential bill of about $1.86 per month. OPG delayed filing its application last month so that it could find a way to lower its requested rate by more than 30 per cent.
>
> "We wanted to do more to reduce the impact of our request on ratepayers" said Tom Mitchell, OPG's President and CEO. "Last year, we found $90 million of internal savings and deferred out application. This year, we sharpened our pencils to shave our current rate application while still allowing OPG to produce safe, clean, reliable, low-cost electricity for Ontario."

**Issue Number: 1.3**
**Issue:** Is the overall increase in 2011 and 2012 revenue requirement reasonable given the overall bill impact on consumers?

***Interrogatory***

a) How much per cent lower are OPG's proposed hydroelectric payment amounts for 2011 and 2012 compared to the hydroelectric payment amounts contemplated at the time of OPG's stakeholder consultations on March 29 and April 1, 2010?

b) What are the dollar impacts on the hydroelectric revenue requirements of the reductions in the proposed payment amounts for 2011 and 2012 from those contemplated at the time of OPG's stakeholder consultations?

***Response***

Please see response to the interrogatory in Ex. L-4-001, part d).

# PWU Interrogatory #015

**Ref:** (a): Ex. D2-T1-S1, pages 3 and 4 state:

> Cost-focused reductions in the OM&A portfolio have resulted in a significant deferral of planned work beyond the test period. The OM&A portfolio has been reduced from a budget of $118M for 2008 and 2009 as approved in EB-2007-0905, to a comparative budget of $111.7M in 2010, $108.3M in 2011 and $111.2M in 2012. Managing to the OM&A portfolio levels listed in Chart 1 will therefore require continued careful assessment and prioritization of work across OPG Nuclear.

**Chart 1**
**Total Nuclear Project Portfolio Costs – Project OM&A and Capital**

| | $M | 2007 Actual | 2008 Actual | 2009 Actual | 2010 Budget | 2011 Plan | 2012 Plan |
|---|---|---|---|---|---|---|---|
| 1 | Project Portfolio – Capital | 186.5 | 163.5 | 159.4 | 172.0 | 172.0 | 172.0 |
| 2 | Project Portfolio – OM&A | 102.1 | 121.2 | 120.8 | 111.7 | 108.3 | 111.2 |
| 3 | **Total Project Portfolio** | **288.6** | **284.7** | **280.2** | **283.7** | **280.3** | **283.2** |

**Issue Number: 6.3**
**Issue:** Is the test period Operations, Maintenance and Administration budget for the nuclear facilities appropriate?

***Interrogatory***

(a) Please provide the information in Chart 1 in constant dollars.

(b) Does Chart 1 above include or exclude the SAVH of approximately $12 million/year?

(c) Does "cost-focused reductions" imply that those cost reductions were made in isolation from their impact on net value? Please provide a list of the planned work deferred together with the impact of the deferrals on net present value over the station life cycles, taking into account both costs and benefits that would have accrued to the plants had the work been done on the original schedule. If this is not available please indicate how net value entered into the decisions to defer, or eliminate, planned work.

(d) Please discuss any increase in risks resulting from deferrals of work.

(e) Please comment on the impact of this deferral on future costs, staffing needs and performance metrics.

Witness Panel: Nuclear Projects

(f) Please comment on the impact of aging on the need for additional work. Directionally would you expect an increasing workload? Please provide an explanation in your response. Is this consistent with the decisions to defer work into the future?

***Response***

a) The following chart represents the total Nuclear Portfolio Costs in constant 2007 dollars.

**Chart 1**
**Total Nuclear Project Portfolio Costs – Project OM&A and Capital**

| 2007$ | 2007 Actual | 2008 Actual | 2009 Actual | 2010 Budget | 2011 Plan | 2012 Plan |
|---|---|---|---|---|---|---|
| Project Portfolio – Capital ($M) | 186.5 | 157.0 | 152.3 | 160.3 | 155.9 | 151.7 |
| Project Portfolio – OM&A ($M) | 102.1 | 116.4 | 115.4 | 104.1 | 98.1 | 98.1 |
| Total Project Portfolio ($M) | 288.6 | 273.4 | 267.7 | 264.4 | 254.0 | 249.8 |

b) Chart 1 includes Sickness, Accident, Vacation and Holiday ("SAVH") of approximately $12M per year in years 2010 onwards. As indicated in Ex. D2-T1-S1, page 4, lines 9-14, the OM&A budget for 2010 onwards was increased to offset forecast SAVH costs; the capital budget was not increased to offset such costs.

c) No, 'cost-focused reductions' does not imply that those cost reductions were made in isolation of their impact on net value. As outlined in Ex. D2-T1-S1, Section 3.1, it is the role of the Asset Investment Screening Committee ("AISC") to prioritize project work to provide highest value. This is done on the basis of the project Part A screening forms (characterizing the issue, operational and financial impact, and relative ranking of potential impact) supplemented by the broad senior management experience of the AISC members. Lower priority work is deferred until it can be accommodated within planned portfolio funding. The work that will potentially be deferred beyond the test period due to project portfolio funding levels is the "Listed Work to be Released" (Ex. D2-T1-S2 Table 5a, 5b and Ex. F2-T3-S3 Table 4a and 4b). As indicated above, any such judgments will be made on the basis of AISC assessment of project value. Critical work will not be deferred.

d) As part of the AISC process, project deferral risks are assessed and compensatory measures put in place to manage them within acceptable levels. For example, a reasonable compensatory measure pending implementation of a project to replace a component might be to increase the frequency and scope of maintenance activities; such

a measure would incur a short-term cost in labour and parts, and this increased cost would be assessed against the value of deferral or cancellation of the project.

e) Potential impacts of project deferrals would be assessed and considered as part of the AISC project ranking decision process outlined above.

f) The aging of the stations will have an impact on the composition of the project workload but not the overall amount, which is determined by the approved project portfolio level. The OM&A portfolio is forecast to have more small scale projects and minor modifications than large projects. The number of larger OM&A projects is expected to decline with the completion of major initiatives such as the Darlington environmental qualification projects.

As Pickering A and B Generating Stations approach their end of life, the focus at those stations will be on smaller OM&A projects addressing replacement of obsolescent components rather than larger capital upgrades or replacements. This increase in OM&A spending at Pickering will be offset by reductions in capital.

The focus at Darlington Generating Station will be on capital upgrades and replacements necessary to extend the life of the plant. Increasing capital spending will be offset by reductions in OM&A work at Darlington.

Decisions on the Pickering B and Darlington Refurbishments have changed the types of projects needed at those stations. Significant capital upgrades may not be economically viable at Pickering A and B Generating Stations, whereas, obsolescence and performance issues at Darlington need to be addressed by more enduring solutions that are consistent with extended station life.

# PWU Interrogatory #016

**Ref:** (a): Ex. F2-T3-S3, Volume 3 of 3, PDF Pages 134-144 of 160, Calandria Tube Replacement Execution 13-40669 OM&A, Full Release Business Case Summary NK30-BCS-31230-00002-R000

**Issue Number: 6.3**
**Issue:** Is the test period Operations, Maintenance and Administration budget for the nuclear facilities appropriate?

## *Interrogatory*

Ref (a) is a business case for the replacement of leaking calandria tube that resulted in the forced outage for April 2008 through to November 2008.

a) Did the unavailability of the calandria cutting tool in April 2008 contribute to the length of the April 2008 through November 2008 forced outage?

b) If your response to (a) is yes, please indicate the degree of extension of the forced outage that was attributable to the unavailability of a calandria tube cutting tool.

c) Please confirm that the original scheduled cutting tool readiness of September 2009 was a result of repair work related to the leak identified in 2005, planned for a date later than September 2009.

## *Response*

a) The unavailability of the calandria tube cutting tool was not a significant contributor to the forced outage extension of April 2008 to November 2008. The activity that took the longest to complete was the removal of the residual gadolinium from the calandria vessel. Developing, qualifying and applying the process to remove this gadolinium was a determining factor in the ultimate length of the forced outage.

b) N/A

c) Replacement of the calandria tube was originally scheduled for the 2010 planned outage of Unit 7 following the tool readiness target of September 2009. As discussed in EB-2007-0905 Ex. N1-T1-S1, engineering reviews, including a third party assessment, had indicated that the unit could safely operate to time of the planned outage when the calandria tube was to be replaced.

# PWU Interrogatory #017

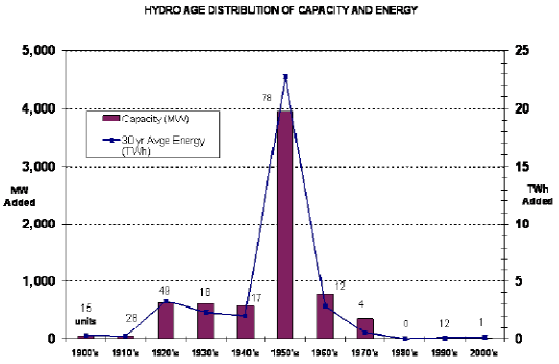
**Ref:** (a) Ex. F1-T1-S1, page 3, line 12 to page 14, line 5 states:

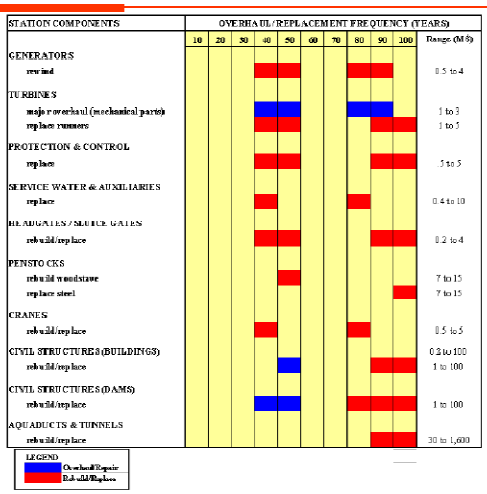
> Portfolio Approach to Investment Management
> Hydroelectric uses a structured portfolio approach to identify and prioritize projects for its investment program. Annual engineering reviews and plant condition assessments (conducted on a cycle of approximately seven to ten years) are performed to determine short-term and long-term expenditure requirements to sustain or improve each facility, and ensure continued safe operation. These may be followed by the preparation of a facility life cycle plan, which is performed on an as-needed basis for marginal assets or assets requiring significant expenditures relative to the value of the facility. This planning approach is designed to identify necessary capital, operating and maintenance expenditures for each facility, and direct limited corporate funds at the facilities that can best maintain or enhance the value of the hydroelectric business and OPG. The cornerstone of this approach is that safety, environmental, and other regulatory programs are of the highest priority compared to production and reliability initiatives.
>
> Streamlined Reliability Centred Maintenance Process
> Hydroelectric uses a process known as streamlined reliability centred maintenance process to optimize the preventive maintenance program at its facilities. The streamlined reliability centred maintenance process provides a consistent method of identifying, scheduling and executing maintenance activities. The concept of streamlined reliability centred maintenance dictates that the type and frequency of preventive maintenance applied to an individual component is determined based on the nature and consequences of failure (i.e., balance of cost versus risk). By focusing maintenance and associated support resources appropriately, Hydroelectric has been able to accomplish more of its base work program (including additional regulatory requirements), while minimizing the need for additional resources.

(b) Ex. F1-T1-S1, Attachment 1, page 3



## The Assets: Age Profile & Re-Investment Frequencies




- Average age of stations is 70 years.
- 70% of Hydro capacity built during the 1950's and 1960's.
- Equipment service lives range between 30 to 50 yrs.
- Structures such as dams, penstocks, powerhouses, canals, etc. typically require repairs every 25 to 50 years. Replacement of some civil components is required every 40 to 75 years (eg, wood stave penstocks, stop-logs, etc).
- There is risk of deteriorating performance and safety without significant continued re-investment (due to demographics of portfolio, and large number and variability of stations/units/equipment).
- Re-investment levels of about 1% to 3% per yr of "replacement cost" are considered reasonable by industry experts. Hydro has invested approximately 0.5% to 1.5% per yr of "replacement cost" in the past 10 years (excludes new facilities). Determination of appropriate investment levels should consider station/fleet age and condition, type of equipment, station role (peaking vs base), past investment strategy (eg, harvesting), reliability targets, etc.
- The Business Plan addresses the need to sustain and improve the existing assets for long term per the Hydro mandate. Plant Condition Assessment/Life Cycle Plans and Portfolio Approach to Asset Management used to determine and prioritize investments (Appendix A).

ONTARIO POWER GENERATION

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**Issue Number: 4.5**

**Issue:** Are the capital budgets and/or financial commitments for 2011 and 2012 for the nuclear business appropriate and supported by business cases?

***Interrogatory***

a) Ref (a) provides information related to hydroelectric assets life cycle assessment and maintenance process, and Ref (b) provides information on hydroelectric asset age profile and re-investment frequencies. Please provide similar information for nuclear generation.

b) Please provide detailed descriptions of OPG's nuclear engineering review and plant condition assessment processes.

***Response***

a) OPG Nuclear has established life cycle plans for its "major components", including, steam generators, fuel channels, reactor components, and feeder piping. The end-of-life of any one of these "major components" defines the end-of-life of the nuclear unit. The life cycle plans for the major components identify degradation mechanisms and associated rates, inspection and maintenance requirements to mitigate degradation, and, where appropriate, expected life of the components. The life cycle plans for the major components are extensive, reflecting the technically complex nature of these components, as well as their importance towards achieving unit end-of-life. The information in these life cycle plans is used to support business planning, including investment in these assets and required outages to support the inspection and maintenance strategies outlined in these plans.

b) OPG Nuclear has established an Integrated Aging Management Program. The objective of this program is to ensure that the condition of critical nuclear power plant equipment is understood and that required activities are in place to maintain the health of these components and systems while the plant ages. This is accomplished by establishing an integrated set of programs and activities that ensure performance requirements of all critical station equipment are met on an ongoing basis (critical station equipment refers to equipment that is important to safe and reliable operation). The program also requires preparation of condition assessments for critical plant equipment.

The condition assessment process has the same objectives and fundamental steps as the life cycle plans for major components, discussed earlier:

i. Identifying and understanding component degradation mechanisms.
ii. Collecting data or conducting analyses, research or other activities to evaluate the degree of degradation experienced.
iii. Evaluating component condition by comparing experienced degradation against established limits.
iv. Establishing actions required to maintain acceptable component condition. Actions can be in the form of material condition improvements or modification of program activities, such as, adjusting a chemistry program parameter.

The actions identified through this process are documented in system and component health reports. These actions are integrated into the station equipment reliability plan, which is an input into business planning. Condition assessment of equipment is performed on an ongoing basis by defined system surveillance activities. System health reports summarize the results of component condition assessments and identify action plans required to resolve aging related issues. An aggregate assessment of system deficiencies (including component aging issues) is completed in the determination of the overall system health rating.

# PWU Interrogatory #018

**Ref:** (a): A news release from Ontario Power Generation posted on May 26, 2010 states:

> [Toronto): Ontario Power Generation (OPG) is proceeding with a lower rate application to the Ontario Energy Board (OEB).
>
> The proposal, if accepted by the OEB, would result in an increase to the average residential bill of about $1.86 per month. OPG delayed filing its application last month so that it could find a way to lower its requested rate by more than 30 per cent.
>
> "We wanted to do more to reduce the impact of our request on ratepayers" said Tom Mitchell, OPG's President and CEO. "Last year, we found $90 million of internal savings and deferred out application. This year, we sharpened our pencils to shave our current rate application while still allowing OPG to produce safe, clean, reliable, low-cost electricity for Ontario."

**Issue Number: 1.3**
**Issue:** Is the overall increase in 2011 and 2012 revenue requirement reasonable given the overall bill impact on consumers?

***Interrogatory***

a) How much per cent lower are OPG's proposed nuclear payment amounts for 2011 and 2012 compared to the nuclear payment amounts contemplated at the time of OPG's stakeholder consultations on March 29 and April 1, 2010?

b) What are the dollar impacts on the nuclear revenue requirements of the reductions in the proposed payment amounts for 2011 and 2012 from those contemplated at the time of OPG's stakeholder consultations?

***Response***

Please see response to the interrogatory in Ex. L-4-001, part d).

# PWU Interrogatory #020

**Ref:** Ex. F5-T1-S2, pages 43-44

> Tables outline scenarios with significant changes to non-fuel operating costs for Darlington, Pickering A and Pickering B. However, there is no change in production between the five scenarios within the period to 2014. For example, in 2012 cost for Darlington range from $764 million to $706 million; for Pickering A from $344 million to $470 million; and for Pickering B from $763 million to $577 million. There is no change in production for any of the five scenarios.

**Issue Number: 6.4**
**Issue:** Is the benchmarking methodology reasonable? Are the benchmarking results and targets flowing from those results for OPG's nuclear facilities reasonable?

***Interrogatory***

a) What were the changes (e.g. performance levels) of other performance metrics for each plant over the plant life cycle as a result of these cost cuts?

b) How was the information provided in response to a) used in setting targets for non-fuel operating costs?

***Response***

a) For expected performance levels in all metrics, please refer to Ex. F2-T1-S1, Attachment 1, page 10.

b) Ex. F5-T1-S2 provides different cost scenarios for target setting purposes in an effort to show the effect of cost reductions using the same generation assumptions on Total Generation Costs per MWh. Total Non-Fuel Costs for Darlington ranged from $796M to $740M for 2012, not $764M to $706M. The final 2012 target for Darlington was $765M.

The 2009 Benchmarking Report analysis shows that nuclear industry peers have been able to accomplish financial and operation performance improvements simultaneously. OPG expects to continue improving operational performance, as well as financial performance.

# PWU Interrogatory #021

**Ref:** (a) Ex. F4-T3-S1, page 8, lines 16-18 states:
As a result of collective bargaining, the general wage increases for the PWU have been between 2 per cent and 3 per cent for the past number of years, and this trend continues for the years 2008-2012.

(b): Ex. F4-T3-S1, page 9, lines 7-9 states:
As a result of a collective bargaining, the general wage increases for the Society have been between 2 per cent and 3 per cent for the past number of years, and this trend continues through 2010, the end of the current contract for the Society.

**Issue Number: 6.8**
**Issue:** Are the 2011 and 2012 human resource related costs (wages, salaries, benefits, incentive payments, FTEs and pension costs) appropriate?

***Interrogatory***

a) Has OPG compared the wage escalations contained in its current collective agreements to data regarding the escalations contained in other Ontario and collective agreements (e.g. major public sector settlements, all public sector settlements, and the Transportation, Communication and Utilities sector) entered into at or about the same time as compiled by, for example, the Ministry of Labour or Statistics Canada?

b) if the response to a) is yes, please provide the results of such comparisons.

***Response***

a) In preparation for collective bargaining, OPG gathers wage settlement information for Ontario Hydro successor companies. In addition, OPG monitors Ontario wage settlements for the broader public sector as provided by the Ministry of Labour.

b) The information for the Ontario Hydro successor companies is found on Charts 5 and 6 on page 9 of the pre-filed evidence.

Attachment 1 contains the external data collected on Ontario wage escalations.

Filed: 2010-08-12
EB-2010-0008
L-11-021
Attachment 1

# Collective Bargaining Highlights
December 2009

Ontario

## At A Glance

Average Annual Wage Increase

| | Nov | Dec |
|---|---|---|
| | % | % |
| Private Sector | 0.9 | 1.8 |
| Public Sector | 2.6 | 2.4 |
| **All Settlements** | **1.5** | **2.0** |

## In This Issue



For further information, contact:
Collective Bargaining Information Services
400 University Avenue, 8th Floor
Toronto ON M7A 1T7
Telephone: 416-326-1260
Facsimile: 416-326-1277
E-mail: cbis@ontario.ca

## Agreements Settled in December

In December, 18 collective agreements were ratified, each covering 200 or more employees. These agreements covered 9,798 employees, 73% of whom were in the private sector. By industry, the majority of employees were in communications.

The overall average annual increase in base wage rates in December was 2%, an increase from 1.5% reported in the previous month. In the public sector, eight agreements were settled for an average annual wage increase of 2.4%, a slight decrease from 2.6% in the last month. In the private sector, 10 agreements were settled, providing an average annual wage increase of 1.8%, compared to 0.9% in November.

Major settlements in December included an agreement between Bell Canada and the Communications, Energy and Paperworkers Union of Canada (CEP). The four-year settlement, covering 4,190 Ontario-based employees, provided an average annual wage increase of 1.9%.
Serco Des Inc (Drivetest) reached a settlement with the United Steelworkers, representing 560 employees. The 48-month agreement provides an average annual wage increase of 1.5%. The London Transit Commission and the Amalgamated Transit Union reached a 45-month agreement, providing 410 employees with an average annual wage increase of 3.2%.

# Wage Settlements - December

## Average Annual Increase, Current Month

| | Agmts | Empls | Increase % |
|---|---|---|---|
| Private Sector | 10 | 7,136 | 1.8 |
| Public Sector | 8 | 2,662 | 2.4 |
| **All Settlements** | **18** | **9,798** | **2.0** |

## Average Annual Increase, Current Three Years

| | 2009 % | 2008 % | 2007 % |
|---|---|---|---|
| Private Sector | 1.3 | 2.0 | 2.9 |
| Public Sector | 2.4 | 3.1 | 3.1 |
| **All Settlements** | **2.1** | **2.7** | **3.0** |

## Average Annual Increase by Industry, Current Month

| | Agmts | Empls | Increase % |
|---|---|---|---|
| Manufacturing | 4 | 1,312 | 1.1 |
| Trade & Finance | 1 | 217 | 2.0 |
| Transportation, Communications & Utilities | 4 | 5,173 | 2.1 |
| Public Administration | 3 | 1,154 | 2.1 |
| Health & Social Services | 4 | 1,098 | 2.4 |
| Other Services | 2 | 844 | 1.7 |
| **All Settlements** | **18** | **9,798** | **2.0** |

## Average Annual Increase by Industry, Current Three Years

| | 2009 % | 2008 % | 2007 % |
|---|---|---|---|
| Primary | 3.4 | 4.1 | 2.7 |
| Manufacturing | 0.7 | 1.2 | 2.4 |
| Construction | 2.5 | 3.4 | 3.2 |
| Trade & Finance | 1.6 | 2.1 | 1.9 |
| Transportation, Communications & Utilities | 1.8 | 2.9 | 3.2 |
| Public Administration | 2.0 | 3.1 | 2.9 |
| Education & Related Services | 3.0 | 3.1 | 3.4 |
| Health & Social Services | 2.4 | 3.0 | 3.0 |
| Other Services | 2.2 | 2.6 | 3.0 |
| **All Settlements** | **2.1** | **2.7** | **3.0** |

# December Settlements

| Employer | Union | Average Annual Wage Incr. % | 1st 12 months % | Approx. Number of Empls. (Ontario) | Duration of Wage Schedule (months) | Agmt. Expiry Date |
|---|---|---|---|---|---|---|
| **Manufacturing** | | | | | | |
| Autoliv Electronics Canada | Machinists | 1.7[2] | 0.0 | 242 | 36 | 2013-01-11 |
| Horizon Plastics | Food & Commercial Workers | 0.5 | 0.0 | 225 | 48 | 2013-11-01 |
| Maple Leaf Foods | Food & Commercial Workers | 1.5 | 0.0 | 220 | 48 | 2013-08-31 |
| Molson Coors Canada | Brewery & General Workers | 1.0[1,2] | 1.0 | 625 | 84 | 2016-12-31 |
| **Trade & Finance** | | | | | | |
| HDS Retail North America (Pearson Intl Airport) | Teamsters | 2.0 | 2.1 | 217 | 36 | 2012-10-31 |
| **Transportation, Communications & Utilities** | | | | | | |
| Bell Canada (clerical/associated) | Communications Energy Paperworkers | 1.9 | 1.5 | 4,190 | 48 | 2013-05-31 |
| Independent Electricity System Operator | Energy Prof Society | 2.7 | 2.6 | 310 | 36 | 2012-12-31 |
| Jazz Air LP (Air Canada Jazz) (customer service) | Cdn Auto Workers | 1.7[1] | 2.0 | 263 | 42 | 2013-01-13 |
| London Transit Commission | Amalgamated Transit (ATU-Intl) | 3.2 | 3.0 | 410 | 45 | 2013-03-31 |
| **Public Administration** | | | | | | |
| City of Peterborough (inside) | Cdn Public Empls | 2.1 | 2.0 | 221 | 36 | 2012-12-31 |
| Treasury Board of Canada (Foreign Service) | Foreign Service Officers | 1.7 | 2.3 | 643 | 48 | 2011-06-30 |
| City of Windsor (Firefighters) | Ont Firefighters | 3.2[3] | 3.2 | 290 | 48 | 2009-12-31 |
| **Health & Social Services** | | | | | | |
| Municipality of Chatham-Kent (Riverview Gardens)(service/RPN) | Cdn Auto Workers | 2.0 | 2.0 | 335 | 36 | 2011-12-31 |
| Hotel-Dieu Grace Hospital (office) | Cdn Auto Workers | 2.0 | 2.0 | 212 | 36 | 2012-03-31 |
| Hotel-Dieu Grace Hospital (service) | Cdn Auto Workers | 2.0 | 2.0 | 248 | 36 | 2012-03-31 |
| Rygiel Supports for Community Living | Cdn Public Empls | 3.4 | 3.8 | 303 | 24 | 2011-03-31 |
| **Other Services** | | | | | | |
| Ontario Public Service Employees Union | Ont Public Service Staff | 2.2 | 2.0 | 284 | 36 | 2012-06-30 |
| Serco Des Inc (Drivetest) | United Steelworkers (USW) | 1.5 | 1.0 | 560 | 48 | 2013-03-01 |

1 Wage restructuring
2 Two-tier wage schedule
3 Interim Arbitration Award

## Selected Settlement Summaries

**(Based on available information)**

### Bell Canada and Communications, Energy and Paperworkers Union of Canada (4,190 Ontario-based clerical and associated employees)

*a four-year renewal agreement, effective June 1, 2009, expiring May 31, 2013*

- wage increases of 1.5% on November 1, 2009, and 2.1% in each of the second, third and fourth years for eligible employees
- modifications to various leaves
- improvements to job security provisions
- letters of intent regarding job evaluation, reclassification, and wage protection
- creation of a joint committee to provide recommendations regarding post retirement benefits and flex dollars
- introduction of the CEP Humanity Fund via the Employee giving fund

### Molson Coors Canada and Canadian Union of Brewery and General Workers, Local 325 (625 employees)

*a seven-year renewal agreement, effective January 1, 2010, expiring December 31, 2016*

- wage increases of 1% in each year; wage restructuring and implementation of a graduated wage progression scale for specific classifications effective January 1, 2010
- modifications to provisions related to regular hours of employment, overtime, and joint and survivor pension plan
- improvements to health and welfare benefits
- increased meal allowance
- letters of agreement and intent regarding World Class Manufacturing (WCM), retirement incentives, leaves of absence, and compressed work week

## Fourth Quarter 2009 Summary

During the fourth quarter of 2009, 93 collective agreements were ratified, each covering 200 or more Ontario-based employees. These agreements covered 71,337 employees, 57% of whom were in the public sector. By industry, the majority of employees affected were in health and social services (25,605), followed by retail trade (11,632), education and related services (6,375), and communications (5,548).

**Wage Trends - Last Three Years**
**Average Annual Increase in Base Wage Rates and Consumer Price Index**

| | 2007 | | | | 2008 | | | | 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sector and CPI | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Private Sector | 2.6 | 3.0 | 3.3 | 1.9 | 2.0 | 1.7 | 2.5 | 2.6 | 2.0 | 1.2 | 1.2 | 1.2 |
| Public Sector | 3.0 | 3.2 | 3.4 | 2.9 | 3.1 | 3.0 | 3.0 | 3.1 | 2.4 | 2.6 | 2.2 | 2.3 |
| All Settlements | 2.9 | 3.0 | 3.4 | 2.7 | 2.9 | 2.0 | 2.9 | 3.0 | 2.4 | 2.2 | 1.9 | 1.8 |
| Consumer Price Index | 1.3 | 1.8 | 2.0 | 2.3 | 1.5 | 1.9 | 3.6 | 2.0 | 1.6 | 0.3 | -1.1 | 0.8 |

## Wage Adjustments

Fourth quarter settlements provided an overall average annual wage increase of 1.8%, a slight decrease from 1.9% in the previous quarter. In the public sector, the average annual wage increase was 2.3%, a slight increase from 2.2% in the third quarter. The private sector remained unchanged from the third quarter at 1.2%. During the fourth quarter of 2009, average annual wage increases were affected by settlements in health and social services (2.2%), retail trade (1.4%), education and related services (2.8%), and communications (1.9%).

In the fourth quarter of 2009, approximately 40% of all employees received average annual wage increases ranging from 2% to 2.9%, compared to 38% who received average annual wage increases ranging from 1% to 1.9%. In the public sector, 64% of employees were covered by agreements with average annual wage increases ranging from 2% to 2.9%, compared to 9% of private sector employees. The majority of private sector employees (59%) received average annual wage increases ranging from 1% to 1.9%.

Of the total number of employees, 39% were covered by four-year agreements. Approximately 52% of public sector employees and 22% of private sector employees were covered by four-year agreements, compared to 22% of public sector employees and 17% of private sector employees covered by three-year agreements. Approximately 36% of private sector employees, and 22% of public sector employees were covered by 24-month agreements. In manufacturing, 61% of employees were covered by one-year agreements, compared to less than 1% of non-manufacturing employees. Approximately 44% of non-manufacturing employees and 14% of manufacturing employees were covered by four-year agreements.

## Table 1: Average Annual Increases in Base Wage Rates by Sector (public and private), Fourth Quarter 2008 to Fourth Quarter 2009

| | All Agreements | | | Agreements with COLA | | | Agreements without COLA | | |
|---|---|---|---|---|---|---|---|---|---|
| | *Agmts* | *Empls* | *%* | *Agmts* | *Empls* | *%* | *Agmts* | *Empls* | *%* |
| **Fourth Quarter 2008** | | | | | | | | | |
| Private Sector | 21 | 27,545 | 2.6 | 8 | 3,088 | 1.8 | 13 | 24,457 | 2.8 |
| Public Sector | 191 | 160,413 | 3.1 | 1 | 918 | 2.6 | 190 | 159,495 | 3.1 |
| All agreements | 212 | 187,958 | 3.0 | 9 | 4,006 | 2.0 | 203 | 183,952 | 3.0 |
| **First Quarter 2009** | | | | | | | | | |
| Private Sector | 21 | 8,234 | 2.0 | 1 | 275 | 2.0 | 20 | 7,959 | 2.0 |
| Public Sector | 83 | 154,641 | 2.4 | 2 | 1,265 | 3.0 | 81 | 153,376 | 2.4 |
| All agreements | 104 | 162,875 | 2.4 | 3 | 1,540 | 2.8 | 101 | 161,335 | 2.4 |
| **Second Quarter 2009** | | | | | | | | | |
| Private Sector | 43 | 55,780 | 1.2 | 8 | 22,735 | 0.4 | 35 | 33,045 | 1.9 |
| Public Sector | 94 | 134,124 | 2.6 | 2 | 7,705 | 3.0 | 92 | 126,419 | 2.5 |
| All agreements | 137 | 189,904 | 2.2 | 10 | 30,440 | 1.0 | 127 | 159,464 | 2.4 |
| **Third Quarter 2009** | | | | | | | | | |
| Private Sector | 28 | 25,783 | 1.2 | 7 | 6,442 | 1.0 | 21 | 19,341 | 1.2 |
| Public Sector | 35 | 62,278 | 2.2 | - | - | - | 35 | 62,278 | 2.2 |
| All agreements | 63 | 88,061 | 1.9 | 7 | 6,442 | 1.0 | 56 | 81,619 | 2.0 |
| **Fourth Quarter 2009** | | | | | | | | | |
| Private Sector | 24 | 30,666 | 1.2 | 3 | 7,926 | 0.1 | 21 | 22,740 | 1.6 |
| Public Sector | 69 | 40,671 | 2.3 | 1 | 1,358 | 1.9 | 68 | 39,313 | 2.3 |
| All agreements | 93 | 71,337 | 1.8 | 4 | 9,284 | 0.3 | 89 | 62,053 | 2.0 |

## Table 2: Average Annual Increases in Base Wage Rates by Sector (manufacturing and non-manufacturing), Fourth Quarter 2008 to Fourth Quarter 2009

| | All Agreements | | | Agreements with COLA | | | Agreements without COLA | | |
|---|---|---|---|---|---|---|---|---|---|
| | *Agmts* | *Empls* | *%* | *Agmts* | *Empls* | *%* | *Agmts* | *Empls* | *%* |
| **Fourth Quarter 2008** | | | | | | | | | |
| Manufacturing | 12 | 3,985 | 1.1 | 6 | 2,031 | 1.2 | 6 | 1,954 | 1.0 |
| Non-Manufacturing | 199 | 173,973 | 3.0 | 3 | 1,975 | 2.8 | 196 | 171,998 | 3.1 |
| Construction | 1 | 10,000 | 3.4 | - | - | - | 1 | 10,000 | 3.4 |
| All agreements | 212 | 187,958 | 3.0 | 9 | 4,006 | 2.0 | 203 | 183,952 | 3.0 |
| **First Quarter 2009** | | | | | | | | | |
| Manufacturing | 13 | 4,024 | 1.7 | 1 | 275 | 2.0 | 12 | 3,749 | 1.7 |
| Non-Manufacturing | 91 | 158,851 | 2.4 | 2 | 1,265 | 3.0 | 89 | 157,586 | 2.4 |
| All agreements | 104 | 162,875 | 2.4 | 3 | 1,540 | 2.8 | 101 | 161,335 | 2.4 |
| **Second Quarter 2009** | | | | | | | | | |
| Manufacturing | 24 | 30,626 | 0.6 | 7 | 22,535 | 0.3 | 17 | 8,091 | 1.4 |
| Non-Manufacturing | 112 | 158,636 | 2.5 | 3 | 7,905 | 3.0 | 109 | 150,731 | 2.5 |
| Construction | 1 | 642 | 2.5 | - | - | - | 1 | 642 | 2.5 |
| All agreements | 137 | 189,904 | 2.2 | 10 | 30,440 | 1.0 | 127 | 159,464 | 2.4 |
| **Third Quarter 2009** | | | | | | | | | |
| Manufacturing | 11 | 5,611 | 0.5 | 6 | 4,086 | -0.2 | 5 | 1,525 | 2.3 |
| Non-Manufacturing | 52 | 82,450 | 2.0 | 1 | 2,356 | 3.0 | 51 | 80,094 | 2.0 |
| All agreements | 63 | 88,061 | 1.9 | 7 | 6,442 | 1.0 | 56 | 81,619 | 2.0 |
| **Fourth Quarter 2009** | | | | | | | | | |
| Manufacturing | 13 | 11,827 | 0.5 | 2 | 7,276 | 0.0 | 11 | 4,551 | 1.3 |
| Non-Manufacturing | 80 | 59,510 | 2.1 | 2 | 2,008 | 1.6 | 78 | 57,502 | 2.1 |
| All agreements | 93 | 71,337 | 1.8 | 4 | 9,284 | 0.3 | 89 | 62,053 | 2.0 |

## Table 3: Average Annual Increases in Base Wage Rates, Manufacturing, Fourth Quarter 2009

| | All agreements | | | Agreements with COLA | | | Agreements without COLA | | |
|---|---|---|---|---|---|---|---|---|---|
| | *Agmts* | *Empls* | *%* | *Agmts* | *Empls* | *%* | *Agmts* | *Empls* | *%* |
| Food, Beverage | 5 | 2 732 | 1.1 | - | - | - | 5 | 2,732 | 1.1 |
| Rubber, Plastics | 2 | 432 | 0.3 | - | - | - | 2 | 432 | 0.3 |
| Transportation Equipment | 4 | 7,802 | 0.1 | 2 | 7,276 | 0.0 | 2 | 526 | 1.7 |
| Electrical Products | 1 | 242 | 1.7 | - | - | - | 1 | 242 | 1.7 |
| Chemicals | 1 | 619 | 2.7 | - | - | - | 1 | 619 | 2.7 |
| **Total Manufacturing** | **13** | **11,827** | **0.5** | **2** | **7,276** | **0.0** | **11** | **4,551** | **1.3** |

## Table 4: Average Annual Increases in Base Wage Rates, Non-Manufacturing, Fourth Quarter 2009

| | All agreements | | | Agreements with COLA | | | Agreements without COLA | | |
|---|---|---|---|---|---|---|---|---|---|
| | *Agmts* | *Empls* | *%* | *Agmts* | *Empls* | *%* | *Agmts* | *Empls* | *%* |
| Transportation | 5 | 3,897 | 2.4 | 1 | 650 | 1.0 | 4 | 3,247 | 2.7 |
| Communications | 2 | 5,548 | 1.9 | 1 | 1,358 | 1.9 | 1 | 4,190 | 1.9 |
| Electric, Gas, Water | 1 | 310 | 2.7 | - | - | - | 1 | 310 | 2.7 |
| Retail Trade | 4 | 11,632 | 1.4 | - | - | - | 4 | 11,632 | 1.4 |
| Education & Related Services | 3 | 6,375 | 2.8 | - | - | - | 3 | 6,375 | 2.8 |
| Health & Social Services | 57 | 25,605 | 2.2 | - | - | - | 57 | 25,605 | 2.2 |
| Recreational Services | 1 | 950 | 2.0 | - | - | - | 1 | 950 | 2.0 |
| Other Services | 2 | 844 | 1.7 | - | - | - | 2 | 844 | 1.7 |
| Federal Government | 2 | 3,443 | 1.7 | - | - | - | 2 | 3,443 | 1.7 |
| Local Government | 3 | 906 | 2.9 | - | - | - | 3 | 906 | 2.9 |
| **Total Non-Manufacturing** | **80** | **59,510** | **2.1** | **2** | **2,008** | **1.6** | **78** | **57,502** | **2.1** |

## Table 5: Average Annual Increases in Base Wage Rates, All Industries, Fourth Quarter 2009

| | All agreements | | | Agreements with COLA | | | Agreements without COLA | | |
|---|---|---|---|---|---|---|---|---|---|
| Manufacturing | 13 | 11,827 | 0.5 | 2 | 7,276 | 0.0 | 11 | 4,551 | 1.3 |
| Non-manufacturing | 80 | 59,510 | 2.1 | 2 | 2,008 | 1.6 | 78 | 57,502 | 2.1 |
| All Industries | 93 | 71,337 | 1.8 | 4 | 9,284 | 0.3 | 89 | 62,053 | 2.0 |

## Table 6: Average Annual Increases in Base Wage Rates by Duration and Sector, Fourth Quarter 2009

| | All Agreements | | | Private Sector | | | Public Sector | | |
|---|---|---|---|---|---|---|---|---|---|
| | *Agmts* | *Empls* | *%* | *Agmts* | *Empls* | *%* | *Agmts* | *Empls* | *%* |
| One-year agreements | 3 | 7,607 | 0.3 | 2 | 7,207 | 0.0 | 1 | 400 | 5.8 |
| Two-year agreements | 19 | 19,768 | 2.1 | 2 | 10,950 | 1.4 | 17 | 8,818 | 2.8 |
| Three-year agreements | 23 | 14,264 | 2.1 | 10 | 5,163 | 1.4 | 13 | 9,101 | 2.4 |
| Four-year agreements | 46 | 27,715 | 2.0 | 9 | 6,721 | 1.8 | 37 | 20,994 | 2.0 |
| Five-year agreements | 1 | 1,358 | 1.9 | - | - | - | 1 | 1,358 | 1.9 |
| Seven-year agreements | 1 | 625 | 1.0 | 1 | 625 | 1.0 | - | - | - |
| **All Agreements** | **93** | **71,337** | **1.8** | **24** | **30,666** | **1.2** | **69** | **40,671** | **2.3** |

## Table 7: Average Annual Increases in Base Wage Rates by Duration (Manufacturing and Non-Manufacturing), Fourth Quarter 2009

| | Manufacturing | | | Non-manufacturing | | | Construction | | |
|---|---|---|---|---|---|---|---|---|---|
| | *Agmts* | *Empls* | *%* | *Agmts* | *Empls* | *%* | *Agmts* | *Empls* | *%* |
| One-year agreements | 2 | 7,207 | 0.0 | 1 | 400 | 5.8 | - | - | - |
| Two-year agreements | - | - | - | 19 | 19,768 | 2.1 | - | - | - |
| Three-year agreements | 4 | 2,287 | 1.1 | 19 | 11,977 | 2.3 | - | - | - |
| Four-year agreements | 6 | 1,708 | 1.7 | 40 | 26,007 | 2.0 | - | - | - |
| Five-year agreements | - | - | - | 1 | 1,358 | 1.9 | - | - | - |
| Seven-year agreements | 1 | 625 | 1.0 | - | - | - | - | - | - |
| **All Agreements** | **13** | **11,827** | **0.5** | **80** | **59,510** | **2.1** | - | - | - |

## Negotiations

On average, private sector agreements were ratified within 3.8 months from the start of negotiations, compared to 8.7 months in the public sector.

Of all settlements reached during the fourth quarter of 2009, 11 agreements involving 16% of employees were negotiated directly by the parties, compared to 58 agreements, covering 64% of employees, settled in conciliation or mediation. The arbitration process settled 18 agreements, and six agreements were settled following work stoppages.

In the public sector, approximately 66% of employees reached settlements through conciliation or mediation, and 2% settled by direct bargaining. In the private sector, 62% of employees reached agreements through conciliation or mediation, compared to 33% who settled by direct bargaining.

## Upcoming Bargaining

Major negotiations continuing into the first quarter of 2010 involve the federal government, municipalities, police services boards, hospitals, nursing homes and homes for the aged, universities and the College Compensation and Appointments Council (academic staff).

Major agreements expiring during the first quarter of 2010 will include hospitals, nursing homes and homes for the aged, community services, and the municipal sector.

**Table 8: Duration of Negotiations, Fourth Quarter 2009**

| | **Total** | | **Private Sector** | | **Public Sector** | |
|---|---|---|---|---|---|---|
| | *Agmts* | *Empls* | *Agmts* | *Empls* | *Agmts* | *Empls* |
| 1 – 3 months | 15 | 22,532 | 13 | 22,091 | 2 | 441 |
| 4 – 6 months | 15 | 11,411 | 8 | 3,562 | 7 | 7,849 |
| 7 – 9 months | 56 | 29,219 | 3 | 5,013 | 53 | 24,206 |
| 10 – 12 months | 2 | 1,693 | - | - | 2 | 1,693 |
| 13 months and over | 5 | 6,482 | - | - | 5 | 6,482 |
| **Total** | **93** | **71,337** | 24 | 30,666 | **69** | **40,671** |

**Table 9: Average Duration of Negotiations by Sector, Fourth Quarter 2009**

| | Average Duration of Negotiations |
|---|---|
| | *months* |
| Private sector | 3.8 |
| Public sector | 8.7 |
| **Total** | 7.4 |

**Table 10: Stage of Settlement by Sector, Fourth Quarter 2009**

| | Total | | Private Sector | | Public Sector | |
|---|---|---|---|---|---|---|
| | *Agmts* | *Empls* | *Agmts* | *Empls* | *Agmts* | *Empls* |
| Direct bargaining | 11 | 11,211 | 8 | 10,214 | 3 | 997 |
| Conciliation | 11 | 8,137 | 5 | 5,614 | 6 | 2,523 |
| Post-conciliation bargaining | 3 | 1,103 | - | - | 3 | 1,103 |
| Mediation | 43 | 33,743 | 7 | 13,422 | 36 | 20,321 |
| Post-mediation bargaining | 1 | 2,800 | - | - | 1 | 2,800 |
| Arbitration | 18 | 7,298 | 1 | 310 | 17 | 6,988 |
| Work stoppage | 6 | 7,045 | 3 | 1,106 | 3 | 5,939 |
| **Total** | **93** | **71,337** | **24** | **30,666** | **69** | **40,671** |

## Work Stoppages

During 2009, 64 work stoppages under Ontario jurisdiction were reported; the number of reported work stoppages in 2009 remained unchanged from 2008. Work stoppages in 2009 involved 42,573 employees and resulted in 1,550,730 person-days lost, compared to 19,118 employees and 281,770 person-days lost reported for 2008.

For 2009, 25 work stoppages were reported in the manufacturing sector, unchanged from 2008. The non-manufacturing sector reported 39 work stoppages during 2009, a slight increase from 38 in 2008. During 2009, 0.11% of the estimated working time in Ontario was lost due to work stoppages.

## Table 11: Work Stoppages, 2008 and 2009

| | 2009 | 2008 |
|---|---|---|
| Manufacturing | 25 | 25 |
| Non-manufacturing | 39 | 38 |
| Construction | - | 1 |
| **All Industries** | **64** | **64** |

## Table 12: Person-Days Lost, 2008 and 2009

| | 2009 | 2008 |
|---|---|---|
| Manufacturing | 317,270 | 122,280 |
| Non-manufacturing | 1,233,460 | 159,460 |
| Construction | - | 30 |
| **All Industries** | **1,550,730** | **281,770** |

As of December 31, 2009, 20 work stoppages, covering a total of 5,566 employees, were carried over to January 2010.
(Data are collected for all work stoppages involving two or more employees under Ontario jurisdiction.)

## Table 13: Work Stoppages under Ontario Jurisdiction, 1988 to 2009

| Year | Number of Work Stoppages | Number of Employees Involved | Number of Employees Per Work Stoppage | Number of Person-Days Lost | Number of Person-Days Lost Per Employee Involved | Average Duration of Work Stoppages (Days Out) | Person-Days Lost as % of Estimated Working Time |
|---|---|---|---|---|---|---|---|
| 1988 | 180 | 62,082 | 345 | 1,362,150 | 21.9 | 35 | 0.12 |
| 1989 | 190 | 45,679 | 240 | 868,630 | 19.0 | 35 | 0.08 |
| 1990 | 218 | 81,022 | 372 | 2,957,640 | 36.5 | 43 | 0.26 |
| 1991 | 153 | 25,448 | 166 | 453,520 | 17.8 | 43 | 0.04 |
| 1992 | 121 | 38,160 | 315 | 577,710 | 15.1 | 39 | 0.05 |
| 1993 | 81 | 15,620 | 193 | 371,150 | 23.8 | 42 | 0.03 |
| 1994 | 130 | 25,456 | 196 | 488,320 | 19.2 | 34 | 0.05 |
| 1995 | 136 | 57,318 | 421 | 476,960 | 8.3 | 39 | 0.04 |
| 1996 | 135 | 216,917 | 1,607 | 1,914,900 | 8.8 | 39 | 0.16 |
| 1997 | 113 | 176,029 | 1,558 | 1,904,210 | 10.8 | 50 | 0.16 |
| 1998 | 156 | 69,411 | 445 | 1,060,990 | 15.3 | 38 | 0.09 |
| 1999 | 143 | 44,980 | 315 | 651,100 | 14.5 | 39 | 0.05 |
| 2000 | 146 | 55,267 | 379 | 649,730 | 11.8 | 39 | 0.05 |
| 2001 | 144 | 34,652 | 241 | 671,990 | 19.4 | 35 | 0.05 |
| 2002 | 117 | 66,572 | 569 | 1,510,580 | 22.7 | 40 | 0.11 |
| 2003 | 94 | 23,807 | 253 | 494,880 | 20.8 | 38 | 0.04 |
| 2004 | 99 | 20,952 | 212 | 486,840 | 23.2 | 37 | 0.03 |
| 2005 | 76 | 12,239 | 161 | 403,210 | 32.9 | 45 | 0.03 |
| 2006 | 70 | 30,240 | 432 | 394,600 | 13.0 | 48 | 0.03 |
| 2007 | 75 | 25,257 | 337 | 389,130 | 15.4 | 39 | 0.03 |
| 2008 | 64 | 19,118 | 299 | 281,770 | 14.7 | 48 | 0.02 |
| 2009* | 64 | 42,573 | 665 | 1,550,730 | 36.4 | 72 | 0.11 |

* preliminary

## Major Negotiations Underway

| Employer | Union | Location | Approx. Number Empls. | Expiry Date |
|---|---|---|---|---|
| Federal Government | Various unions | Canada-wide | 2,800 | Various dates |
| Various Municipalities (excluding Police Services Boards) | Various unions | Various locations | 18,700 | Various dates |
| Police Services Boards | Police Associations | Various locations | 10,200 | Various dates |
| Hospitals | Various unions | Various locations | 48,300 | Various dates |
| Nursing Homes/Homes for the Aged | Various unions | Various locations | 37,400 | Various dates |
| Universities | Various unions | Various locations | 2,180 | Various dates |
| Vale Inco | USW | Sudbury | 3,000 | 2009-05-31 |
| College Compensation and Appointments Council (academic staff) | OPSEU | Province-wide | 8,750 | 2009-08-31 |
| Pulp and Paper | Various unions | Various locations | 6,200 | Various dates |

As of December 31, 2009, there were 208 agreements, each covering 200 or more employees, that have expired and not been renewed.

## Consumer Price Index (2002=100)*

| | 2006 | 2007 | 2008 | 2009 | October 2009 | November 2009 | December 2009 |
|---|---|---|---|---|---|---|---|
| Canada | 2.0 | 2.1 | 2.4 | 0.3 | 0.1 | 1.0 | 1.3 |
| **Ontario** | **1.8** | **1.8** | **2.3** | **0.4** | **0.2** | **1.0** | **1.2** |
| Toronto | 1.6 | 1.9 | 2.4 | 0.5 | 0.3 | 0.8 | 0.8 |
| Ottawa-Gatineau (Ont. part) | 1.7 | 1.9 | 2.2 | 0.6 | 0.4 | 1.1 | 1.2 |
| Thunder Bay | 1.5 | 1.0 | 2.2 | 0.1 | -0.6 | 0.1 | 0.3 |

* Percentage change from previous year
Source: Statistics Canada

Data for the months of March, June, September and December include quarterly information.

Information in this report is based on collective agreements covering 200 or more employees, a sample that represents 76% of unionized employees in Ontario. Wage data in this report are derived exclusively from information reported to Collective Bargaining Information Services. Data for the current month are preliminary. All percentage wage data are calculated on the base rate, weighted by the number of employees, and include cost-of-living adjustments (COLA) where applicable, calculated at projected rates of inflation. The increases do not necessarily reflect the average increase for each member of the bargaining unit.



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# PWU Interrogatory #022

**Ref:** Ex. F4-T3-S1, page 5, line 29 to page 6, line 5 states:

> Pursuant to the Ontario Labour Relations Act, OPG was required, as a successor employer to Ontario Hydro, to adopt collective agreements covering the employees transferred to OPG from Ontario Hydro on April 1, 1999. For the majority of employees within OPG that are unionized, items such as wages, pensions, and benefits can only be changed through the collective bargaining process. In this environment, it is necessary to balance the business requirements and long-term company interests related to maintaining a positive relationship with its unions, while recognizing that the unions, in most cases, have the right to strike. Since OPG was created, new collective agreements have been negotiated by OPG with both the PWU and the Society.

**Issue Number: 6.8**
**Issue:** Are the 2011 and 2012 human resource related costs (wages, salaries, benefits, incentive payments, FTEs and pension costs) appropriate?

***Interrogatory***

a) Please confirm that OPG's Collective Agreements with the PWU and the Society are binding legal contracts.

b) Please describe the processes and steps involved in collective bargaining with unions and all the relevant context considerations (factors), internal or external to OPG and the unions that are applied to arrive at the final collective agreement.

c) If the levels of compensation in comparable firms is a factor in b), please comment on how the levels of compensation within OPG might be affected by levels of compensation in comparable firms.

***Response***

a) Yes. OPG's collective agreements with the PWU and the Society are legal contracts.

b) The Collective Bargaining process involves the following:

- Establish OPG's bargaining mandate. The mandate is established based on a number of factors: the financial position of the company, OPG's business objectives, general economic conditions, internal and external wage relativities, costs of benefits, etc. The mandate provides the strategic objectives for bargaining and the cost envelope.

- Develop the detailed bargaining agenda. The bargaining agenda provides all of OPG's items that it wishes to pursue in bargaining, consistent with the bargaining mandate. The union also prepares an agenda. These agendas are exchanged at the opening of negotiations.

- Negotiations. Based on the bargaining agenda of each party, the parties work towards a collective agreement to meet their interests. The parties strive to find mutual interests and areas to trade off in order to ensure the best possible agreement. Once an agreement is reached, it must be ratified (voted on and accepted) by the union membership. In the event that an agreement cannot be reached, either party could engage the services of a Ministry of Labour conciliator. A continued impasse could lead to a strike (by the union) or a lock-out (by management). In the case of the Society of Energy Professionals, there is a "no strike/no lock-out" clause in the collective agreement. In the event of an impasse, the parties are driven to a binding mediation/arbitration process where an arbitrator will ultimately award the terms of the new agreement.

  Internal and external factors that influence the final collective agreement include:
  - general economic conditions
  - internal and external wage comparisons
  - the economic position of the company
  - the relationship between the union and the company
  - the interests, positions and philosophies of the two parties

c) In order to remain competitive, OPG monitors compensation levels in the industry for benchmarking purposes. This helps calibrate expectations and allows OPG to contain wage increases while continuing to attract highly skilled staff.

In the case where mediation/arbitration is applied (as with the Society of Energy Professionals), an arbitrator will consider the following with regards to monetary issues:

- a balanced assessment of internal relativities, external relativities and general economic conditions
- OPG's need to retain, motivate and recruit qualified staff
- the cost of changes and their impact on total compensation
- the financial soundness of OPG and its ability to pay

# PWU Interrogatory #023

**Ref:** (a): Ex. F3-T1-S2, page 2, lines 17-19. In comparing 2009 Actual versus 2009 Budget for the allocation of corporate costs to the regulated hydroelectric segment, OPG reports:

> …lower OEB related costs due to a decision to defer the rate application, and efforts to manage staff vacancies.

(b): Ex. F3-T1-S2, page 2, lines 28-30. In comparing 2008 Actual versus 2008 Budget for the allocation of corporate costs to the regulated hydroelectric segment, OPG submits:

> Actual corporate support costs were $2.0M lower than budget in 2008, primarily due to lower costs related to Information Technology special initiatives, a number of one-time IT credit adjustments and hiring lags, partly offset by economic increases.

(c): Ex. F3-T1-S2, page 3, lines 12-15. In comparing 2007 Actual versus 2007 Budget for the allocation of corporate costs to the regulated hydroelectric segment, OPG reports:

> Corporate support costs were $1.4M lower than budget in 2007. The lower costs were mainly due to staff vacancies, lower outsourcing agreement gainshare, OEB-related activities and deferral of 2007 safety conference, partly offset by higher project OM&A (for infrastructure asset refresh work), support function review, and tax advisory costs.

(d): Ex. F3-T1-S2, page 4, lines 18-21. In comparing 2009 Actual versus 2009 Budget for the allocation of corporate costs to the nuclear segment, OPG submits:

> Actual corporate support costs were $32.9M lower than budget in 2009, primarily due to lower OEB costs due to a decision to defer the rate application, lower advertising costs, lower costs in Information Technology related to special initiatives, and efforts to manage staff vacancies.

(e): Ex. F3-T1-S2, page 5, lines 2-4. In comparing 2008 Actual versus 2008 Budget for the allocation of corporate costs to the nuclear segment, OPG submits:

> Corporate support costs were $31.5M lower than budget in 2008, primarily due to lower costs in Corporate Affairs advertising and

> lower costs in Information Technology relating to special initiatives, a number of one-time IT credit adjustments and hiring lags.

(f): Ex. F3-T1-S2, page 5, lines 17-20. In comparing 2007 Actual versus 2007 Budget for the allocation of corporate costs to the nuclear segment, OPG submits:

> Corporate support costs were lower than budget by $9.8M in 2007. The lower costs were mainly due to staff vacancies, lower NHSS outsourcing agreement gainshare, lower OEB related activities and deferral of 2007 safety conference, partly offset by higher project OM&A (for infrastructure asset refresh work), support function review, and tax advisory costs.

**Issue Number: 6.9**
**Issue:** Are the "Centralized Support and Administrative Costs" (which include Corporate Support and Administrative Service Groups, Centrally Held Costs and Hydroelectric Common Services) and the allocation of the same to the regulated hydroelectric business and nuclear business appropriate?

***Interrogatory***

a) OPG has reported staff vacancies and hiring lags in relation to the allocation of corporate support costs to its nuclear and regulated hydroelectric businesses over the period 2007 – 2009. Please indicate the corporate functions that have been affected by staff vacancies or hiring lags reported by OPG over 2007 – 2009. In particular, please refer to the vacancies related to the provision of corporate support services to the nuclear and regulated hydroelectric businesses.

b) Please indicate the number of staff vacancies for 2007, 2008 and 2009. In particular, please refer to the vacancies related to the provision of corporate support services to the nuclear and regulated hydroelectric businesses.

c) Has OPG's provision of corporate support services to its nuclear and hydroelectric regulated businesses been impacted due to staff vacancies or hiring lags reported over the period 2007 – 2009. If so, please provide a brief description of efforts to manage staff vacancies.

d) What is the current status of OPG's staff vacancies in relation to the provision of corporate support services to its regulated businesses? Please indicate the number of currents unfilled vacancies.

e) Is OPG planning to fill vacancies for the corporate groups over the period 2010 – 2012? Please refer to the vacancies related to the provision of corporate services to the nuclear and regulated hydroelectric businesses.

Witness Panel: Corporate Functions and Cost Allocation

***Response***

a) The corporate functions that have been affected by staff vacancies and hiring lags include Business Services & Information Technology, Finance, and Human Resources.

b) The corporate functions provide support and service on both a direct and shared resource basis. The identification of individual vacancies to the nuclear and regulated hydroelectric businesses cannot be determined, as these impacts are not tracked according to vacancies related to the provision of corporate support services to the nuclear and regulated hydroelectric businesses.

c) Staff vacancies and hiring lags are a normal occurrence in operating a business. As vacancies arise management assesses the need to fill the vacancy or to eliminate the position. The process to fill vacancies is followed by management in accordance with the process established by Human Resources and in adherence to the collective agreements.

d) As noted in part b), this information cannot be provided as vacancies are not tracked in this manner.

e) OPG will fill vacancies as there is a business need to do so.

# PWU Interrogatory #024

**Ref:** Ex. H1-T2-S1, page 1, lines 20-23. The evidence states:

> OPG is proposing to clear the 2010 projected balances rather than 2009 actual balances as the bulk of the change in balances in 2010 consists of amortization as approved in EB-2009-0174 and an addition to the Tax Loss Variance Account, which is a determined, not forecast amount.

**Issue Number: 10.2**
**Issue:** Are the balances for recovery in each of the deferral and variance accounts appropriate?

***Interrogatory***

Please provide the impact on the proposed total balance to be cleared, and the associated ratepayer impact, of using the 2009 actual balances adjusted only for the amortization approved in EB-2009-0174 and the determined addition to the Tax Loss Variance Account, but excluding any other forecasted balance changes in 2010.

***Response***

The requested impact on the total proposed balance to be cleared, expressed as the total test period recovery amount, and the associated ratepayer impact, expressed as rate riders, for each of regulated hydroelectric and nuclear are as follows:

| | **Using 2009 Actual Balances, Adj. for 2010 Amortization and 2010 Tax Loss Variance Account Entries[1]** | **As Proposed by OPG** |
|---|---|---|
| Reg. Hydro Test Period Recovery Amount ($M) | (36.1) | (86.8) |
| Nuclear Test Period Recovery Amount ($M) | 497.0 | 459.9 |
| | | |
| Reg. Hydro Rate Rider ($/MWh) | (1.02) | (2.46) |
| Nuclear Rate Rider ($/MWh) | 5.51 | 5.09 |

[1] Amortization for 2010 has been calculated over the remaining recovery period based on the OEB's decisions and orders for EB-2007-0905 and EB-2009-0174. For the Pickering A Return To Service Deferral Account, which has an authorized recovery period of 45-months ending beyond December 31, 2010, amortization for January and February 2011 has also been adjusted out. "Determined addition" to the Tax Loss Variance Account for 2010 is the total additions to the account (including interest) shown in Ex. H1-T1-S1, Table 1d, lines 4 and 17, columns (b), (c) and (d).

# PWU Interrogatory #026

**Ref:** Ex. H1-T2-S1, pages 3 and 5 state that OPG proposes to extend the amortization of balances in the Tax Loss Variance Accounts to 46 months, to lessen ratepayer impact.

**Issue Number: 10.3**
**Issue:** Is the disposition methodology appropriate?

***Interrogatory***

Please provide a comparison of the ratepayer impacts assuming the balances in these accounts (for each of hydroelectric and nuclear) were amortized over the same 22 month period being proposed to clear the balances in all other deferral and variance accounts.

***Response***

The requested comparison of the ratepayers impacts, expressed as rate riders for each of regulated hydroelectric and nuclear, is as follows:

| | **Tax Loss Variance Account Recovery Period of 22 Months ($/MWh)** | **Tax Loss Variance Account Recovery Period of 46 Months ($/MWh)** |
|---|---|---|
| Regulated Hydro Rate Rider | (1.30) | (2.46) |
| Nuclear Rate Rider | 7.48 | 5.09 |