Report on the Sustainability of Electricity Sector Pension Plans to the Minister of Finance

By the Special Advisor

March 18, 2014

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Hon. Charles Sousa
Minister of Finance for Ontario

Dear Minister Sousa,

I have the honour to present to you my report on the sustainability of electricity sector pension plans in Ontario.

While as the Advisor I remain solely responsible for the text of this report and its recommendations, my work greatly benefited from the information provided by officials of the Electrical Safety Authority, Hydro One, the Independent Electricity System Operator, Ontario Power Generation, Ontario Energy Board, Ontario Financing Authority and Ontario Ministry of Government Services. I also benefited from meetings and discussions with representatives of these entities as well as representatives of the Power Workers' Union and the Society of Energy Professionals. I am also very grateful for the secretariat support provided by the Ministry of Finance.

I thank the many individuals, agencies and labour unions referred to above for their willingness to meet and to address frankly, intelligently and constructively the challenging issues of electricity sector pension sustainability and affordability that fell within my mandate. And I thank you, Minister for the opportunity to serve as Special Advisor.

I wish you and your officials every success in working with all the affected parties to translate your government's commitment to sustainability into a new pension policy framework for the Ontario electricity sector.

Sincerely

Jim Leech
Special Advisor

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Chapter 1: Introduction

1.1 The Task and Process

The 2013 Budget noted that pensions are a key part of the total compensation of public-sector workers, and that many public-sector pension plans, like their private-sector counterparts, are facing sustainability challenges. In that Budget the government committed to engaging with both employer and labour representatives on the challenges facing electricity sector plans. Specifically, the government announced its intention to establish a government-led industry Working Group to address pension issues associated with the single-employer pension plans at Hydro One (H1), Ontario Power Generation (OPG), the Independent Electricity System Operator (IESO) and the Electrical Safety Authority (ESA).[1]

This Report is intended to inform and help frame the efforts of this Working Group by setting out a starting point — beginning with the current status and outlook of the plans — and providing advice on a roadmap and potential destination that is both affordable and sustainable.

The Terms of Reference for this report tasked the Special Advisor with providing advice to the government on potential changes to these plans that would result in pension plans that are affordable for employers and ratepayers, and sustainable for the members who will rely on them for their retirements. Potential changes to be examined included:

- equal cost-sharing between employers and employees for ongoing contributions;
- joint governance by employers and plan members, with joint responsibility for the sustainability of plans;
- more affordable pension benefits, such as conditional prospective benefits; and
- the potential for pooling assets of the plans.

The full text of the mandate is included as Appendix A.

The work of the Special Advisor began in January 2014 with a series of meetings and conversations with the executive leadership as well as members of the Board of Directors of the four electricity sector agencies, and elected representatives and officials of the two unions — the Power Workers Union (PWU) and the Society of Energy Professionals (Society). Both employers and employee representatives came prepared to discuss electricity sector pension policy, specific challenges facing the four pension plans and potential solutions.

[1] Other agencies, such as the Ontario Energy Board and Ontario Power Authority do not offer their own pension plan, but belong to the Public Service Pension Plan. Other employers in the sector, such as local distribution companies, generally belong to Ontario Municipal Employees Retirement System (OMERS).

Officials of the Ministry of Government Services also provided useful information on sector collective bargaining and the labour relations context. Finally, the Ontario Energy Board which is responsible for establishing “just and reasonable rates” that utilities charge ratepayers and, as part of its process, reviews compensation costs, including pension costs, provided its helpful perspective.

On behalf of the Special Advisor, the Ministry of Finance requested that OPG, H1, IESO and ESA provide baseline data on key characteristics and trends for their respective pension plans. That data helped shape the recommendations in this report. It should be acknowledged that this process was the first time there has been such a collection of data across all the companies.

In the time available for this Report, it was not possible to produce the level of detailed data analysis to permit the more extensive modelling and actuarial studies required to complete a comprehensive review of each plan.

The Report provides background on the pension landscape in Ontario, as well as in the electricity sector. The structure of the Report is as follows:

Chapter 1 briefly outlines the Special Advisor’s mandate and consultation process, and reviews the current pension policy landscape in Ontario.

Chapter 2 describes the four agencies and provides information on their respective pension plans. It also identifies the pension cost impact on electricity rates and the Province’s Fiscal Plan and describes the collective bargaining environment.

Chapter 3 reviews the key findings of the Special Advisor arising from consultations with affected parties and data analysis.

Chapter 4 sets out conclusions and recommendations regarding movement towards equal cost-sharing for ongoing contributions, addressing affordability of the pension plans, institutionalizing joint responsibility for the sustainability of plans through a Funding Management Policy, the potential for pooling assets of the plans and other issues.

Finally, recognizing the complexity of this undertaking, **Chapter 5** outlines a potential implementation strategy and next steps.

1.2 Pension Policy Context

Employment-based pension plans are usually established voluntarily by employers, as an employee benefit in the form of deferred wages. They are an integral component of total compensation packages and are intended to provide an important source of retirement income for employees, who are plan members, and their families. Accordingly, it is critically important that any pension plan be sustainable so that the retirement income of retirees and active members is secure.

From the perspective of employers, employment-based pensions have typically served two objectives — attracting and retaining talent and managing internal labour succession by, for example, facilitating retirement of older workers. The cost of the plans must be considered appropriate in the context of total compensation expense. It is in the interests of employers and their customers, as well as employees, that plans be affordable.

The Pension Framework in Ontario

Registered pension plans (RPPs) are a specific type of tax-assisted retirement savings arrangement. RPPs may be sponsored by employers, employer associations, or unions, to provide retirement income to employees.

Pension plans are broadly characterized as either defined benefit or defined contribution plans.

- In a defined benefit (DB) plan, the pension benefit is determined by a formula, usually based on years of service and/or earnings (e.g., a percentage of average annual salary multiplied by years of service). Under the Ontario *Pension Benefits Act* (PBA), benefits accrued under defined benefit plans cannot be reduced.
- In a defined contribution (DC) plan, the pension benefit depends on the value of accumulated contributions made by and/or on behalf of the member, the returns earned on those funds and interest rates at the time of retirement.
- There are also hybrid plans which offer elements of both defined benefit and defined contribution plans.

Plans can either be 'contributory' (both employees and employers contribute) or 'non-contributory' (only employers contribute). Most public sector plans, including those in the four agencies in the electricity sector, are contributory defined benefit plans.

The Ontario Expert Commission on Pensions in its 2008 Report to the Minister of Finance observed that it is widely accepted that DB plans deliver better financial outcomes for retirees than DC plans, though they are likely to cost sponsors more.[2] In particular, the Report indicated that:

> "Moreover, because workers can predict what a DB pension will yield with relative accuracy, they can plan for their own retirement with greater certainty that they will not experience a dramatic decline in their living standards. And because these pensions are sometimes (not always) linked with other features (more aggressive investment strategies; partial or ad hoc indexing to mitigate the effects of inflation; additional non-pension benefits, such as extended health care coverage), DB plans have tended to be especially popular with workers. Finally, several types of DB plans, such as multi-employer plans and jointly sponsored plans, offer members and their union or other association a role in plan governance."

Pension plans in Ontario can be classified either as single-employer or multi-employer.

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[2] Inherently, a DB plan is the more cost effective pension model as it provides the opportunity to pool investment and longevity risks. However, employers and employees can underestimate the cost of the benefits promised which leads to large unforeseen cost increases.

Single-Employer Pension Plans (SEPPs):

SEPPs are composed of members that work for the same employer or group of affiliated employers. These plans can be defined benefit or defined contribution, or a combination of both.

- While these plans can be either contributory or non-contributory, the employer is typically the sole sponsor. With respect to DB plans, employers as sole sponsor are responsible for financing any funding shortfall, as required by the PBA.
- All plans within the four electricity agencies are SEPPs. While employees contribute to their pension, the employers are responsible for ensuring that the plans are fully funded, and bear all funding risks.

Multi-Employer Pension Plans (MEPPs):

MEPPs are composed of members that work for any of two or more non-affiliated employers. These plans can be DB, DC or a combination of both.

- These plans are most commonly established by trade unions, and provide pension mobility for employees who change employers within the same industry (e.g., in the construction trades).
- MEPPs may be "target benefit" plans: Where employer contributions are not enough to cover pension benefits, the PBA allows that accrued benefits as well as future benefits may be reduced, if the terms of the plan permit.

The 2013 Ontario Budget confirmed that the government will be moving ahead on regulatory changes to formalize the PBA framework pertaining to target benefits in MEPPs and announced the intention to develop a framework for single-employer target benefit plans.

MEPPs may have a single-sponsor (a group of employers) or be jointly sponsored.

Jointly Sponsored Pension Plans (JSPPs):

JSPPs are DB plans that may be SEPPs or MEPPs. The governance structure of JSPPs is fundamentally different from single-sponsor plans:

- Decision making on plan administration is shared and any plan changes must be agreed by the sponsors jointly.
- Contributions are shared by plan members and their employers, making the plans "cost-shared".
- Funding shortfalls are a joint obligation of both employees and employers, making the plans "risk-shared".

In addition, these plans allow for the reduction of accrued benefits in the event of the wind-up of a plan.

Some PWU and Society-represented employees at certain local distribution companies in the electricity sector are members of Ontario Municipal Employees Retirement System (OMERS), which is a JSPP.

Funding Issues for Ontario's Public Sector Pension Plans

Both employer sponsored and jointly sponsored public sector pension plans, like their private-sector counterparts, are facing sustainability and affordability challenges.

The Commission on the Reform of Ontario's Public Services highlighted the fiscal pressures arising from public sector pension expense and recommended measures to contain costs and improve the sustainability of public-sector SEPPs.

The government has responded to these issues by addressing funding pressure in JSPPs and SEPPs.

Funding Overview

The financial health of a DB pension plan is determined by funding valuations governed by the PBA. Pension plans are required by the PBA to set aside sufficient funds to finance the benefits that will be paid out in the future. There are two types of funding valuations for defined benefit plans used to determine if a pension plan is funded sufficiently: the going concern valuation and the solvency valuation. These tests compare assets to liabilities:

- The solvency valuation assumes the plan winds up, with deficiencies paid back over five years.
- Going concern valuation assumes the plan continues indefinitely, with deficiencies paid back over 15 years.

Investment returns and long-term interest rates are the major drivers of a plan's funded status. Persistently low long-term interest rates have created pressure to increase contributions — lower rates increase the present value of future pension obligations and reduce the funded status of the plan.

JSPP Plan Changes

Most of Ontario's largest public-sector plans are JSPPs, four of which are consolidated in the Province's financial statements: Colleges of Applied Arts and Technology Pension Plan, Healthcare of Ontario Pension Plan, Ontario Public Service Employees Union Pension Plan, and Ontario Teachers' Pension Plan.

The 2012 Budget noted that contribution rates for many JSPPs had risen significantly as a result of funding challenges such as market volatility and continued low interest rates. After extensive engagement, the government reached agreements with the sponsors of the four consolidated JSPPs to freeze employer contribution rates for a period of five years in order to provide funding stability. For example, the sponsors of the Teachers' plan agreed to cap contributions at a maximum of 13.1 per cent and the sponsors of the Colleges plan agreed to a cap of 14.8 per cent. With contribution caps in place, should a funding shortfall occur during the freeze period (December 31, 2012 to December 30, 2017), the plan sponsors (which includes employees), agreed to reduce future pension benefits, to a limit.

Solvency Funding Relief for Public Sector SEPPs

Since May 2011, the government has made temporary relief from solvency funding requirements available to eligible public sector SEPPs. In exchange for relief, these SEPPs are expected to negotiate plan changes with employees that improve sustainability and affordability over the long term.

The government's temporary solvency funding relief regime for public-sector SEPPs has been successful. Since the announcement of the program in 2010, a total of 25 plans have been accepted for stage 1 relief (19 are in the university sector); this has reduced the solvency payment requirements of these plans by a total of more than $700 million as of the end of 2013, thereby protecting jobs and programs. Almost all university pension plans registered in the program have negotiated increases in member contribution rates and/or reductions in future benefits; at least 12 are now either at or close to 50/50 cost sharing for ongoing contributions between employees and employers.

The ESA, IESO and OPG each applied to the government for relief through the public sector temporary solvency funding relief program. While each of these plans met the eligibility criteria, the government deferred the decision on their applications, pending the outcome of the Working Group announced in the 2013 Budget, and the parties' progress in advancing a sustainable framework. The appointment of a Special Advisor is an important first step in this change process; recommendations regarding the public sector temporary solvency funding relief program and its application to the three electricity sector plans are further discussed later in this Report.

Removing Barriers to Creating JSPPs in the Electricity Sector

The government took an important step as part of its commitment to addressing challenges with respect to electricity sector pension through Bill 65, the *Prosperous and Fair Ontario Act (Budget Measures) 2013*. The legislation amended the *Electricity Act* to remove a number of statutory barriers to the possible future merger of the electricity sector pension plans and to the creation of JSPPs in the sector. Bill 65 received Royal Assent on June 13th, 2013. The provisions have not yet been proclaimed in force.

The amendments will enable the parties to form a JSPP if they jointly agree to do so.

Chapter 2: Electricity Sector Plans and Context

2.1 Agencies' Corporate Profiles and Pension Information

The four pension plans that are the subject of this report were initially formed as part of the former Ontario Hydro pension plan and were constituted as separate plans as of 2000. Since that time, the successor plans have changed and each now has different contribution rates and benefits. Examined together, as of 2012, the four successor plans have about 18,000 active members combined and about 19,000 retired and deferred members combined (See Table 1 in Appendix B for additional demographic details). Overall, this represents a mature and maturing pension plan; however, there are significant demographic differences among the individual plans.

Similar to other pension plans, these plans have experienced significant market volatility since 2008. All four plans have had going concern funding deficits recently and have been required to make substantial special payments toward these deficiencies.

In 2012, total contributions from all sources to the four plans were approximately $585 million.[3] Table 2 in Appendix B sets out the various types of payments flowing into the plans. Of the $585 million, just over $100 million was contributed from employees. The approximately $480 million in funding from the companies consisted of current pension expense payments ($365 million), and special payments required under the *Pension Benefits Act* (PBA) for deficits ($115 million).

All elements of the sector pension plans, including employee contribution rates and benefit levels, are negotiated through collective bargaining. Through this process, relatively generous pension benefits have been negotiated. The plans' benefit provisions include:

- unreduced early retirement (as low as factor 82)[4] with bridge benefits;[5]
- the maximum survivor benefits permitted under the *Income Tax Act*; and
- a rich benefit formula based on average salary recognition using an employee's best three years plus, in some cases, bonuses up to a certain percentage.

Chart 1 breaks down the costs of the benefits under the OPG pension plan — the other three plans have a similar cost distribution. It shows the costs for the different pension plan benefits, as a proportion of pensionable salary but does not include the cost of funding any plan deficit through special or voluntary payments. The chart clearly demonstrates that ancillary benefits (indexation, bridge benefits and early retirement subsidy) are a significant portion of the overall pension cost — in fact the base pension represents less than 52 per cent of the total pension cost.

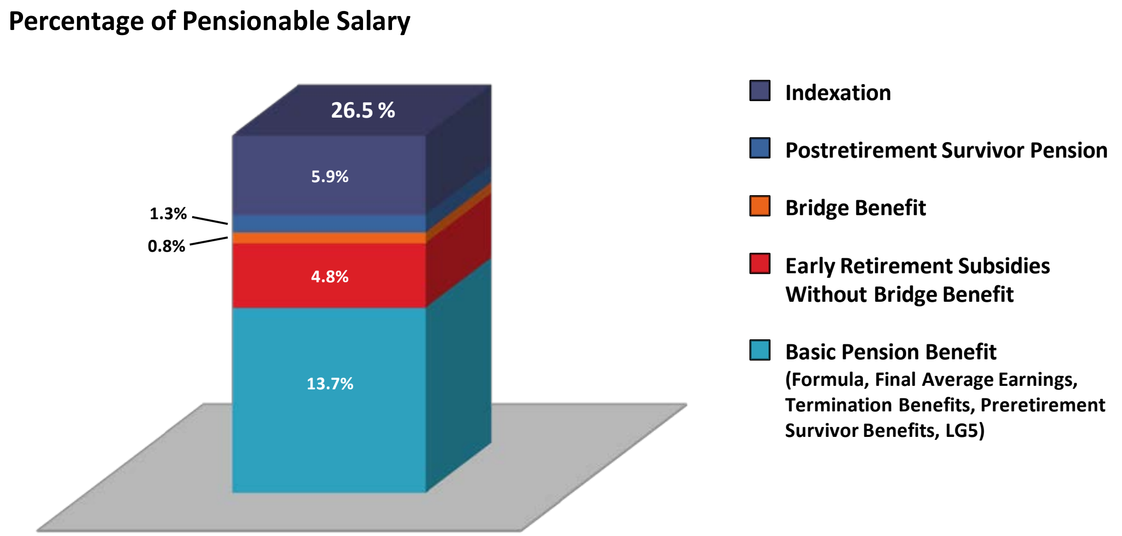
3 Excludes voluntary employer contributions.

4 The retirement factor for any given pension plan is the total of the plan member's age and years of service. In this case, when the total is 82 or more, the person is eligible for an unreduced pension.

5 A bridge benefit provides additional pension income until age 65, when CPP and OAS payments begin.

Breakdown of Total Current Service Cost as of January 1, 2013 by Benefit Component

Chart 1



Note: Actuarial assumptions provided in document summarizing January 1, 2013 valuation results.

Table 3 in Appendix B compares these benefits with other public sector plans and other energy companies. Compared to other public-sector pension plans, the DB plans in the electricity agencies are generous, expensive and inflexible.[6] They generally require lower contributions from employees, while providing substantial benefits. Furthermore, electricity sector employers are responsible for a larger share of pension contributions compared to most other public-sector employers. In addition, as single-employer pension plans (SEPPs), the employers bear all risks, such as investment performance, interest rate changes and increased longevity. These risks increase both the amount and the volatility of pension costs, which is ultimately borne by ratepayers, customers and the shareholder.

In addition to the registered pension plans, the four companies provide Supplementary Pension Plans (SPP), which provide additional benefits to employees whose income exceeds federal *Income Tax Act* limits for pension contributions. These plans are non-contributory, and not pre-funded (i.e., benefits are paid from the individual company's general revenue, including regulated revenues). In 2013, the cumulative unfunded SPP liability on the balance sheets of the four agencies was approximately $490 million.

6 In recent years, several public sector pension plans have introduced flexibility by adjusting benefits to control costs. For instance, both the Ontario Teachers' Pension Plan and the Healthcare of Ontario Pension Plan have adopted variations of conditional inflation protection for future service.

Individual Agency Summaries

1. The Electrical Safety Authority (ESA)

The ESA began operations in 1999 with the mandate to enhance public electrical safety in Ontario. It is an administrative authority acting on behalf of the Government of Ontario with specific responsibilities for electrical safety. The agency operates as a stand-alone, financially self-sustaining not-for-profit corporation accountable to a Board of Directors and operating as an Administrative Authority under the Electricity Act 1998 and under an Administrative Agreement with the Ministry of Consumer Services.

Consistent with its mandate, ESA administers regulation in four areas: the Ontario Electrical Safety Code; licensing of electrical contractors and master electricians; electricity distribution system safety; and electrical product safety.

Unlike the other three agencies, ESA costs are not passed on to ratepayers directly. Its costs are included in fees charged to contractors requiring electrical inspections, or when license fees are imposed on customers of local distributors or contractors.

Funding for the ESA comes from fees paid for safety oversight, safety services, and licensing. The ESA has revenues of approximately $100 million. The vast amount of this revenue is recovered as fees for its services as an inspector and licensing agent.

As a not-for-profit, this revenue must match its expenses. In fiscal year 2013, total accounting pension expense for the ESA was over 10 per cent of total revenue. Due primarily to the low interest rate environment and the increasing longevity of its pension beneficiaries, the ESA has absorbed a 155 per cent increase in annual pension costs into its operating budgets over the last three years.

Due to the relatively large pension expenses, as a proportion of revenue, small swings in pension assumptions can have significant effects on the bottom line of the agency. Unlike the other three companies, this volatility is difficult to manage because there is no ability to reconcile actual pension expense against expected expenses when billing customers.

The ESA pension assets have a value of approximately $200 million. It has about 450 active members in the plan and about 260 retirees. The demographic profile of the pension plan is expected to remain relatively stable in the future. Given the pension plan’s small size, it cannot achieve efficient asset management.

The PWU represents most ESA employees, including its inspection force. While it offers generous early retirement options, most employees start work at the ESA later in their careers, meaning that retirement is often delayed beyond the age of initial eligibility.

2. Hydro One (H1)

H1 is the largest electricity transmission and distribution company in Ontario, with assets of $21.6 billion. It owns and operates 97 per cent of Ontario's electricity transmission system as well as many rural and small town distribution systems in Ontario. All electricity ratepayers contribute to the cost of H1 pension contributions through transmission rates. Its distribution customers also pay an additional amount representing the cost of H1 pensions attributable to distribution workers.

H1 is wholly owned by the Province of Ontario, and its transmission and distribution businesses are regulated by the Ontario Energy Board (OEB). It operates as a commercial enterprise with an independent Board of Directors.

Its pension plan has approximately $5 billion of assets. H1 has the oldest demographic profile in the sector: 5,600 active members compared to 7,000 retired members, or 1.25 retirees for every employee. However, many of H1 retirees were originally retirees of the former Ontario Hydro. As such, it is expected that the H1 plan will move to a more balanced ratio between active members and retirees in the future.

Of all the plans, H1 is in the best financial condition. It was able to generate significant returns in 2013. However, it should be noted that it continues to face funding pressure from continued low interest rates. In addition, due to updated actuarial standards, changes will be required to the mortality assumptions underlying the plan which will contribute to further funding pressures.

3. The Independent Electricity System Operator (IESO)

IESO balances the supply and demand for electricity in Ontario and then directs its flow across the province’s transmission lines.

IESO connects all participants — generators that produce electricity, transmitters that send it across the province, retailers that buy and sell it, industries and businesses that use it in large quantities and local distribution companies that deliver it to people's homes.

The IESO is a not-for-profit corporate entity established in 1998 by the Electricity Act of Ontario. It is governed by an independent Board, whose Chair and Directors are appointed by the Government of Ontario. Its fees are set by the Ontario Energy Board and are passed on to ratepayers through regulatory charges.

The IESO pension plan has approximately $300 million in assets, with about 440 active members and about 290 retirees. It has a relatively stable demographic profile. The majority of its employees are represented by the Society. As a small plan, it too cannot achieve efficient asset management.

4. Ontario Power Generation (OPG)

OPG is an electricity generation company whose principal business is the generation and sale of electricity in Ontario. Its focus is on the efficient generation and sale of electricity from its generating assets. OPG was established under the *Business Corporations Act* (Ontario) and is wholly owned by the Province of Ontario which appoints its independent Board of Directors. OPG provides a large portion of base-load electricity generation in Ontario through its nuclear and large hydroelectric generation assets; the price of electricity generated by those assets is regulated by the Ontario Energy Board. As such, all ratepayers are responsible for OPG's pension contributions.

Its pension plan has approximately $10.3 billion of assets. The pension plan currently has approximately 11,200 active members and 10,300 retirees.

OPG is a mature company operating mature assets. Over the last decade, its share of the market has declined as new sources of electricity have been developed. As a result, OPG has been shrinking its workforce through attrition. According to Ontario's 2013 Long Term Energy Plan, OPG's market share will continue to decrease, as the Plan includes the closure of the Pickering station, and defers the building of any new nuclear generating facilities. If this continues to be the case, OPG will see further dramatic shifts in its work force and, consequently, changes to the pension plan.

According to 2013 Annual Report by the Auditor General on Ontario:

> "…the number of staff needed to operate, maintain and support its business activities is expected to drop significantly from 2013 to 2025—by close to 50%. As a result, OPG will need only about 5,400–7,000 staff by 2025."

It should also be noted that OPG sets aside and invests funds specifically for discharging its nuclear waste management liabilities. In accordance with the Ontario Nuclear Funds Agreement between OPG and the Province, OPG established and jointly oversees the investment management of two Nuclear Funds with the Province — a Decommissioning Segregated Fund and a Used Fuel Segregated Fund. Although these Nuclear Funds are not related to the OPG pension plan and thus not the subject of this Report, if they were pooled with the OPG pension assets, the total market value of investments under administration would be approximately $23 billion (based on estimates as of December 31, 2012). This represents a potential opportunity for greater efficiency of asset management.

2.2 Pension Cost Impact

This section describes electricity rate setting process and identifies the impact of pension costs on electricity rates and Ontario's Fiscal Plan.

Electricity Rate Setting Process

Rates for transmission, distribution and OPG's regulated generation assets are set by the Ontario Energy Board (OEB).

One of the OEB's principal functions is to set "just and reasonable rates" that utilities may collect from ratepayers for utility services. The Board sets rates using a quasi-judicial process that requires utilities to present evidence to justify any proposed rate increases through an open and transparent public hearing.

The OEB's current rate-setting process establishes base rates for each distribution utility through a comprehensive review of the utility's costs as detailed in its rate application. This review typically occurs every four years for electricity distributors. In the intervening years, the Board provides for inflationary increases adjusted by a productivity measure.

For transmission and distribution rates, H1 submits applications to the OEB presenting its forecast revenue requirements to recover allowable costs, including operating costs, such as pension expenses, and the cost of capital (depreciation, debt costs, and an allowable return on equity, based on its deemed capital structure). OPG submits applications presenting its forecast revenue requirements for costs related to its regulated generation facilities (nuclear, large hydro, and, prospectively, other smaller hydro facilities).

The OEB assesses the prudence of the submitted costs and makes a determination on costs ("revenue requirements") that are allowable for inclusion in transmission and distribution rates for H1 and in electricity rates for OPG's regulated generation facilities.

Based on approved revenue requirements, the OEB sets transmission and distribution rates, and rates for OPG's regulated generation such that the revenue requirements are expected to be collected over the rate-setting period.

Where actual costs differ from forecast costs and are deemed outside the control of the regulated electricity companies (such as pension costs), the OEB may allow variance accounts to be established. These accounts track the difference between projected costs in approved regulated rates and actual costs; these cost differences can be considered for recovery in future rate hearings. Pension costs can create challenges for the regulator, in situations where the costs in the variance accounts are approved for recovery at a later date but turn out to be much higher than predicted.

In the case of the IESO, the OEB approves the annual business plan and converts the revenue required to operate the IESO to a fixed charge on electricity consumption. The IESO can adjust any under- or over-recovery of revenue the following year.

The OEB does not regulate the ESA and is not involved in its pricing.

The OEB will often set out a policy framework to guide applicants and interveners as to how certain costs will be examined and allocated through the rate-setting process. To date, the OEB has not established such a policy with respect to the treatment of pension costs. However, the Board has raised concerns about high compensation levels in general at OPG, and the impact on rates. In particular, it stated that "The Board remains concerned about compensation costs, … and would be assisted by a comprehensive benchmarking study comparing OPG's total compensation with broadly comparable organizations." (EB-2010-0008: Decision with Reasons for OPG Payment Amounts Application, page 88).

Impact of Pension Costs on Electricity Rates

Pension costs are reflected in the price that H1, IESO and OPG charge for their services. As noted earlier, all transmission grid connected ratepayers in Ontario pay for H1 transmission, IESO operations and OPG generation. In addition, H1's 1.25 million distribution customers must also pay the pension costs for H1 distribution.

Pension costs represent a significant risk to prices. It is difficult to predict pension expense as market returns shift, low interest rates continue, and mortality assumptions change. This volatility represents a price risk for customers.

There is also a fiscal risk to the Province to the extent that pension costs are not fully recovered in rates, or deviate from forecasts without a variance account with an OEB-approved recovery. Pension costs not recovered through electricity rates would reduce net income and payments-in-lieu of taxes paid by OPG and H1 to the Ontario Electricity Financial Corporation (OEFC), which is consolidated in the Province's financial statements.

2.3 Collective Bargaining Environment

Generally, employees and employers are able to negotiate a compensation package that can include tradeoffs between current and future compensation, where pensions represent future payments. In the electricity sector, it is not obvious that such tradeoffs have been realized: the pensions are generous, in comparison to comparators; and, according to the companies, current compensation is also at least equivalent to, or better than, other employers.

Bargaining Pensions

As noted earlier, all elements of the pension plans at these companies are determined in collective bargaining. Notwithstanding the fact that the employers are the plan sponsors and bear all of the risks, the collective agreements contain language providing that terms can only be altered with the consent of both parties.

Historically, pensions have been a key subject of negotiations at the bargaining table. Both the PWU and the Society maintain that over the years they have made concessions on some elements of current compensation in return for pension plan improvements, and that the total compensation package must be considered at the negotiating table. They were very clear in discussions with the Special Advisor that government should respect the collective bargaining process and that pensions should remain part of the collective bargaining process.

Collective bargaining in this sector is decentralized — it takes place on an employer-by-employer and union-by-union basis. The four employers do not coordinate their bargaining activity or mandates. However, outcomes at one table directly influence outcomes at the others.

Collective Bargaining Background

Collective bargaining in the electricity sector is governed by the *Labour Relations Act, 1995* (LRA). There is no provincial essential services statute covering employees.

In general, the parties are free to strike or lockout, although the Society has agreed to interest arbitration in place of the right to strike other than at H1. The Society is covered by voluntary recognition agreements (VRA) which prohibit a strike/lock-out so long as the VRA remains in effect.

The PWU has two classes of employees that are covered under an essential services protocol negotiated by the parties. There is no requirement under the collective agreement to negotiate such a protocol, but it was done voluntarily when the parties negotiated work conditions specific to those classes.

The binding interest arbitration framework negotiated by the Society and electricity employers is a non-statutory regime. The framework is contained in VRAs/collective agreements which originated with Ontario Hydro and have been modified over subsequent bargaining rounds.

The binding interest arbitration is conducted by a sole mediator-arbitrator. Monetary issues must be determined through consideration of criteria:

a) balanced assessment of internal relativities, general economic conditions, external relativities;
b) employer need to retain, motivate and recruit qualified staff;
c) the cost of changes and their impact on total compensation; and
d) the financial soundness of the employer and its ability to pay.

Pensions are normally considered part of the compensation package by interest arbitrators. Whether money is given as salary or as an employer pension contribution, it is part of the total compensation package. A request to shift the pension obligation from the employer to the employee is likely to be seen by arbitrators as a form of compensation reduction unless it is offset by an increase in wages. In addition, arbitrators tend to direct parties to resolve significant pension-related decisions through subsequent rounds of bargaining and have not made significant changes to pension plan design.

Recent Collective Bargaining Outcomes

As of August 2013, all collective agreements in the sector had been settled either through the negotiation process or interest arbitration.

In the case of collective bargaining process at H1, modest incremental increases to employee pension contributions were negotiated with both PWU and the Society. The negotiated changes would shift the ratio of employer-employee contributions from about 80:20 to 73:27.

In the cases of ESA and IESO, the agencies negotiated modest incremental increases of employee pension contributions with the Society and PWU respectively.

No changes were made to the employee contribution as a result of collective bargaining or the interest arbitration process at OPG.

Electricity Sector Bargaining in Other Jurisdictions

The relatively high value of total compensation generally in the Ontario electricity sector and these pensions specifically, is demonstrated by comparing their recent agreements to other companies operating in similar circumstances across Canada.

New Brunswick Power

- Since 2010, negotiations have resulted in zero per cent wage increases in large collective agreements; in addition, the company instituted a two-year wage freeze on non-union positions, eliminated 300 full-time positions, eliminated executive bonuses and reduced the number of vice-president positions.

Hydro-Québec

- Collective bargaining with Canadian Union of Public Employees (CUPE) coalition was completed in December 2013. These agreements included:
  - a wage freeze for 2014 and 2015;
  - wage increases of 3 per cent in 2016, 2.75 per cent in 2017 and 2.5 per cent in 2018;
  - the establishment of 50/50 pension cost-sharing formula; and
  - the elimination of the profit-sharing plan in 2014 and partial integration of bonuses into wage rates.
- The collective agreement with the engineers' union previously negotiated reflects the same terms.

Chapter 3: Key Findings from Meetings with Stakeholders and Data Analysis

3.1 Pension Benefits are Generous and Costly

Benefits in these four plans are quite similar and they are very close to the maximum benefits allowed under the *Income Tax Act*.

In general, benefits in these plans are richer than most of the Broader Public Service (BPS) plans and employee contributions are also lower than BPS plans in general. As noted earlier, features of certain plans include:

- maximum benefit accrual rates, at 2 per cent per year of service;
- retirement calculation based on best 3 years' average salary,
- early unreduced retirement based on factor 82;
- CPP bridging benefit formula;
- fully guaranteed indexing; and
- maximum joint and survivor benefits.

Employee contributions for plan members are generally in the range of 6 to 7 per cent of salary;[7] recently there have been some negotiated increases in employee contributions towards 7.75 per cent. This can be compared to Toronto Hydro and other local distribution companies in the municipal sector that are part of OMERS, which offers less generous benefits whereas employee contributions are currently over 14 per cent of salary.[8]

As a result of generous benefits and larger employer contributions these plans are expensive. As noted earlier, employers bear the majority of costs. Based on the most recent valuation reports filed with the pension regulator, the Financial Services Commission of Ontario (FSCO), the employer current service cost represents approximately 18 per cent of payroll for OPG and 19 per cent of payroll for H1. With special payments, employer contributions represent approximately 24 per cent and 27 per cent of payroll respectively. They are also close to 24 per cent for both IESO and ESA. (See Table 4 in Appendix B for further details).

3.2 Affordability and Risks: Analysis of Pension Plan Value by Benefit Component

As noted, these plans are relatively expensive, and relatively mature. As such, the accrued benefits of existing retirees combined with those already earned by active employees represent the significant portion of the overall liability for the plans. Only the relatively small future liability that is accrued each year is subject to change.

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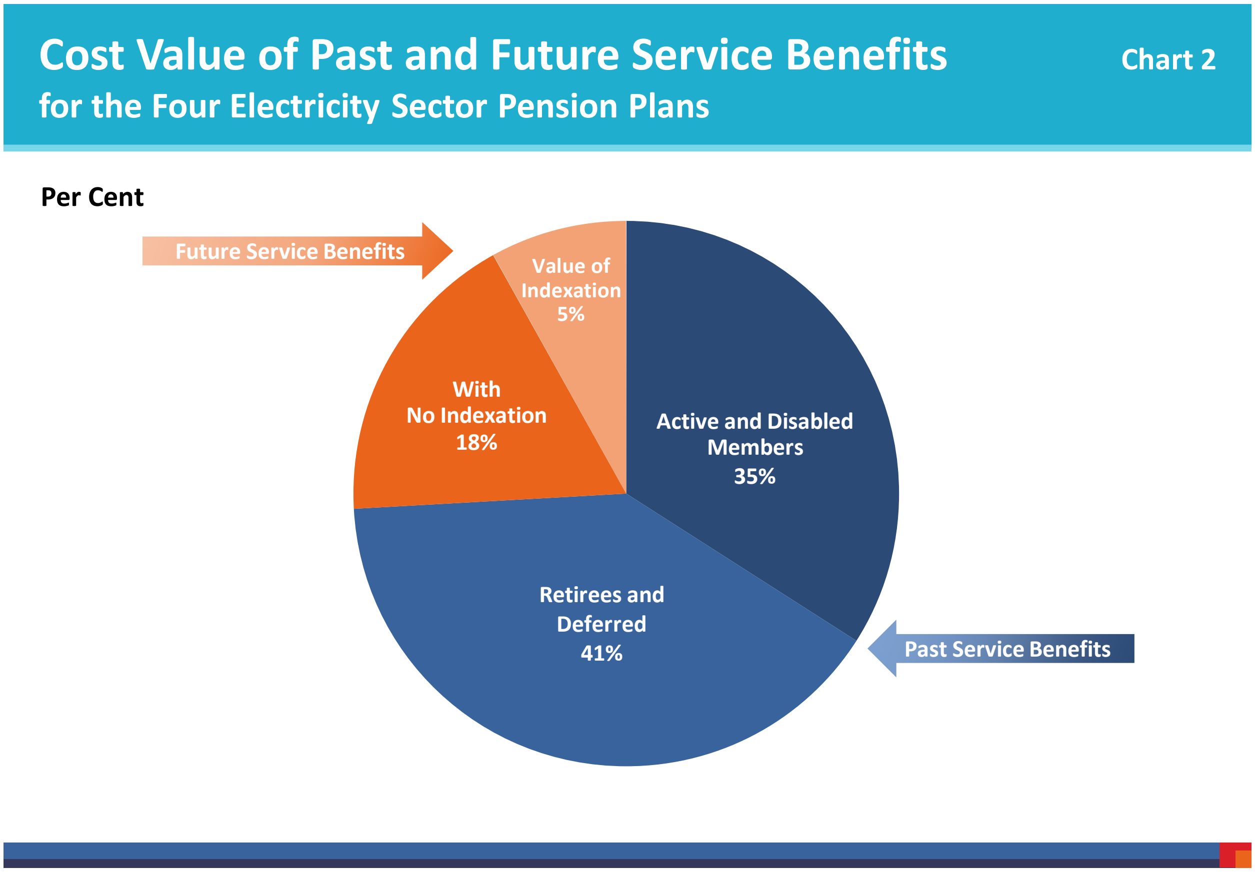
7 Management members of the pension plan pay, on average, more than unionized staff. Rates vary from 7 per cent at OPG to 10.2 per cent at the ESA.

8 All contribution rates in this paragraph are applicable to earnings above the yearly maximum pensionable earnings under the CPP.

The following pie chart demonstrates the value of the past and future benefits in percentage terms for the four electricity sector pension plans.



No single change to the plans would make them sustainable over time. Multiple levers are required: indexation, bridge benefits and early retirement subsidies are each expensive elements of the plans that need to be addressed. For example, turning inflation indexing "on or off" based on the financial health of the plan is an effective and easy way to cushion the impact of market volatility and low interest rates for all members. Adjusting the early retirement subsidy and CPP bridge "on or off" is more difficult to accomplish while maintaining equity across generations; nevertheless as shown on the next page, the early retirement subsidy and CPP bridge are costly and set up inequities amongst members.

It is not clear that, in the dynamics of collective bargaining at these agencies, such plan design changes can be made to affect future benefits. However, for these plans to be sustainable in the long term, future benefits must be part of negotiated changes. Subsidized early retirement, CPP bridge and fully guaranteed indexation represent significant costs for these plans. Without the option to adjust future benefits, plans have little ability to manage future funding.

Flexibility to reduce benefits on a temporary basis in the future, if needed, should be built into the plans now so that the adverse effects of volatile markets and increased longevity can be managed. It is important that the parties understand and agree on what could be changed in those eventualities.

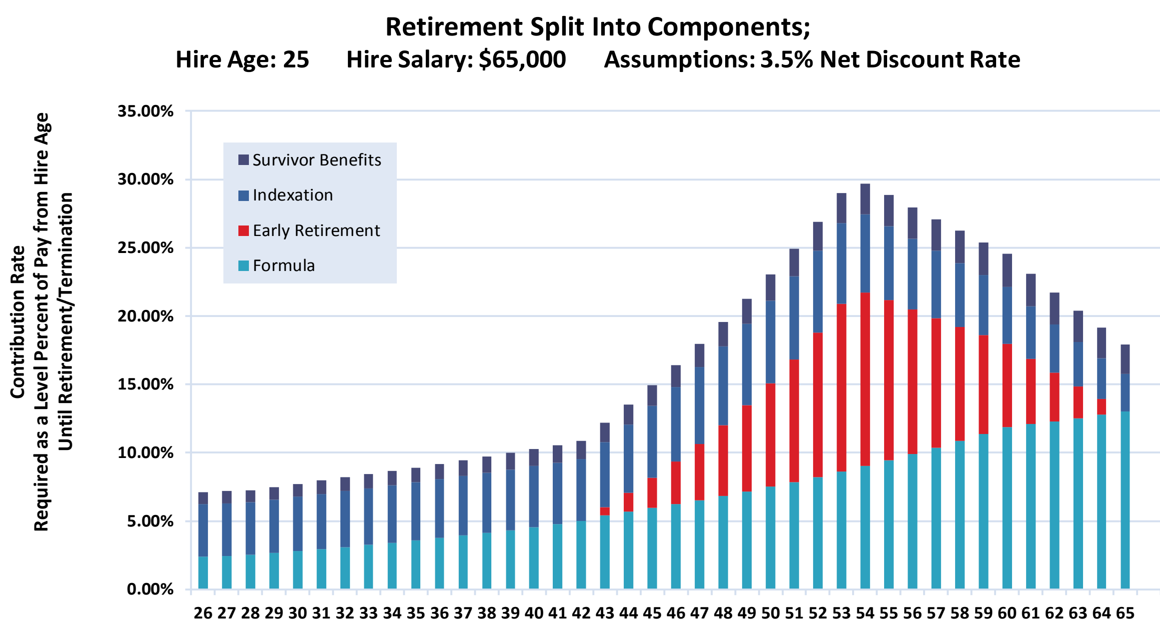
The cost of a pension is based on the value of its various elements. It is possible to break these costs out for different employees, using various assumptions, to demonstrate the cost drivers of the pension plans. It is changing these elements that can change the future service benefits, and make a plan sustainable.

Chart 3 below is an example of the differing costs of a pension plan, as a percentage of payroll.[9] It shows that for an individual who starts employment with an electricity sector company at age 25 and retires at age 54 (factor 82), it will require a contribution rate of almost 30 per cent of salary for his entire working life to cover all benefits. However, if that same individual works until 63, the cost will be approximately 20 per cent, due to a lower subsidy for early retirement and reduced costs for future indexation, partially offset by a larger base pension. As this Chart clearly illustrates, longer working employees are subsidizing those who choose to retire early which is inherently unfair.

Electricity Sector Pension Plan

Chart 3

Total Equivalent Contribution Required from Hire Age to Termination



9 The calculations assume a male participant and are based on certain actuarial assumptions outlined below (which are similar to the assumptions used for the actuarial valuations of the electricity sector pension plans). The pension plan provisions valued are the legacy provisions that include the pension formula with three-year average earnings, bridge benefits, unreduced early retirement at 82 points or age 60 and 25 years of service, 66-2/3% survivor pension and 100% of CPI indexation. Actuarial Assumptions:

Increase on CPI:	2.00% per year	Nominal Interest Rate:	5.50% per year
Increase in YMPE:	2.75% per year	Real Interest Rate:	3.50% per year
Increase in Salaries:	3.75% per year	Termination Rates:	None
Spouse:	4 years young	Mortality Rates:	CPM-RPP2014 Priv With CPM-A Improvement Scale

3.3 The Plans are Far from Sustainable

As demonstrated by Chart 2, approximately 75 per cent of pension plan benefits' liabilities have accrued and cannot be changed under the *PBA*. With employer contributions already at high levels, none of the plans have the ability to absorb further market fluctuations, investment performance significantly below actuarial assumptions or the costs associated with increased longevity of its members. Should plans go further into deficit, the sponsors, and ultimately ratepayers, will be required to pay even larger contributions. This exposes the plans to volatility.

Employer contribution rates have been volatile with large increases in special payments in the period since the 2008 economic downturn. As described earlier, this volatility increases the potential impact on regulated electricity rates. With stronger 2013 investment returns and higher long-term interest rates (as reflected in the plans' discount rate), deficits in all plans are decreasing. This may create a sense of complacency — "if we just wait, the problem will go away". However, the plans are far from sustainable: they have a high total cost, volatile/unpredictable contribution rates, have yet to incorporate new actuarial mortality assumptions[10] and no flexibility to absorb the effect of future adverse events.

It is critical that the plans build flexibility into their structure so that they are able to accommodate shocks in the future. Because so much of the pension liability is already accrued, and changes can only affect future service, benefit changes that provide flexibility must be adopted sooner rather than later to have a meaningful impact.

3.4 More Pension Data Transparency and Information Sharing is Needed

Indications are that, in recent years, there has been increased pension information and data sharing and discussions of pension issues between the companies and unions, companies and employees, and unions and members. This is a change from past practice of pension information being withheld by employers, and is a positive development.

There has also been movement to institutionalize or regularize such arrangements through the collective bargaining process. For example, under the most recent collective agreement between the IESO and the PWU, parties have agreed to establish a new joint committee to discuss pension plan sustainability. The Forecasts and Assessments Standing Committee (FASC) is set to meet annually to discuss plan administration, funding and performance.

Similarly, ESA, H1 and OPG meet regularly with the unions to discuss pension plan information and data.

[10] For example, the Canadian Institute of Actuaries (CIA) has recently issued the first-ever mortality tables and mortality improvement scales that are based on Canadian pensioner mortality experience. In prior years, many Canadian pension actuaries have used the U.S. standard tables published in 1994 to derive their assumptions. According to the CIA, the financial impact of adopting the new Canadian tables may vary considerably between pension plans. Reported pension obligations could increase by as much as 7 per cent or more for some plans but, more typically, increases may be in the range of 3 to 4 percent. Some larger Canadian pension plans, such as OPG, have determined mortality assumptions from their own experience.

Engagement of the plan actuaries in the process has contributed to the agreement of the parties on the projections and assumptions underlying the plan, and a better understanding of the challenges associated with the generous level of the current benefits and the plans' exposure to risk.

It is also important to note that pension issues are high priority items on the respective Boards' agendas. Board members emphasized in meetings with the Special Advisor an understanding of the importance of ensuring that the pension plans are both affordable and sustainable, and are actively devoting time and resources to developing potential solutions.

3.5 Shared Recognition of Pension Challenges

Both employers and unions agree on the need for change. In particular, all parties:

- Support a sustainable and affordable DB pension plan model. Differences arise, however, around the definition of what comprises "sustainable and affordable".
- Recognize that current benefits are generous and expensive, and that the public perceives electricity sector pensions as even more generous compared to other public sector pensions.
- Recognize that the pension plans' demographic profiles are mature and in most cases maturing over the near future.
- Recognize that the status-quo is not an option.
- Share concern that some "solution" could be imposed and have a desire to be architects of any fundamental changes.
- Are ready to engage in discussions and development of solutions through a government-led Working Group.

This shared recognition of key pension challenges in the sector provides valuable impetus for the efforts of a Working Group.

With respect to the collective bargaining context, the position of both unions is clear: existing pensions are a product of the collective bargaining process and any changes to the plans should be made through that process. They further argue that the existing agreements are protected by the Canadian Charter of Rights and Freedoms.[11]

3.6 Perspectives on Potential Solutions

Movement towards equal-cost-sharing:

The companies' focus has been on achieving improved sustainability and affordability by moving to 50/50 cost sharing. Unions generally support negotiating over time toward 50/50 cost sharing, with appropriate negotiated offsets, through collective bargaining; unfortunately, this only exacerbates the pension plan's funding challenge.

[11] It is important to note that the case law in this area is developing.

Moving to a 50/50 contribution ratio will help to:

- Address the public concern over the impact of the employer contributions to these generous pension plans on electricity rates.
- Address affordability for ratepayers by increasing the contributions for employees, without a compensating offset to salaries. However, if the plans are not fully funded, employers will still be responsible for future special payments. This creates risk for ratepayers.
- Introduce more incentive for the parties to negotiate lower future benefits if necessary, as employers and employees are both paying a significant portion of the costs of benefits.

However, movement towards 50/50, while helpful in addressing affordability issues, is not sufficient to address the sustainability challenges. Changing the ratio of contributions from employers to employees does not necessarily provide any additional funds to the pension plans — increasing the total contributions to the pension plans by increasing employee contributions and holding steady employer rates would push the total funding for pensions beyond acceptable levels.

The data shows that funding levels of the plans remain unchanged or in some cases are improving as a result of strong 2013 returns; however, they are still fragile with little room to absorb further funding pressures due to the high level of employer contributions.

Joint Governance and the Collective Bargaining Process:

The companies respect the collective bargaining process and have tried to use the process to achieve needed changes to pension plans.

However, the collective bargaining process is not designed for working through complex, technical pension issues that tend to require both long-term timeframes for their resolution and short-term flexibility to deal with economic downturns.

This observation is echoed in the report of the Ontario Expert Commission on Pensions led by Dr. Harry Arthurs which found that:

> "…the adversarial, one-minute-to-midnight atmosphere of collective negotiations is sub-optimal for working through complex, technical pension issues that often require lengthy horizons for their resolutions. Indeed as some stakeholders reported — pension decisions taken at the bargaining table are sometimes made with little or no information about the plan. Moreover, the plan itself is not represented in the negotiations, so there is a risk that pension concerns may be set aside by the principal parties if seen as impeding the settlement of more immediate, comprehensible and controversial issues."
>
> *Report of the Expert Commission on Pensions, page 157, 2008.*

The companies favour potential conversion to a JSPP. However, they differ in their preference for a sector-wide multi-employer JSPP or a single-employer JSPP model. While joint-sponsorship involving a single union, rather than both unions, would simplify governance from the union perspective, it is considered to be complex from the employers' perspectives.

Unions differ in their preference or readiness to explore the idea of one multi-employer JSPP or two union-specific JSPPs. Regardless, they still would like to retain collective bargaining as the vehicle to influence pension plan features.

Both employer and union representatives noted that merging the four plans into a single multi-employer JSPP would be difficult given the differences between the current plans in terms of:

- demographic profiles of membership;
- the mandates and regulatory frameworks governing the agencies;
- union membership; and
- contribution rates and plan benefits.[12]

Questions were also raised regarding responsibility for past and future liabilities, and the potentially high costs associated with converting from a single sponsor to joint sponsorship.

Clearly, a sector-wide JSPP — about fourteen years after the original Ontario Hydro plans were divided — would be a difficult and lengthy negotiation. It would also create complexity if further changes in the structure of the sector are contemplated.

Pooled Asset Management

Further to the 2013 Budget announcement, the government has established a technical working group with expertise in design, governance and transition issues related to implementing a new pooled asset management entity for public-sector SEPPs. Officials from OPG and H1, with expertise in asset management, participate in the working group deliberations. The working group's advice will assist the government in determining how to move forward with implementation in 2014.

This initiative follows up on the 2012 announcement of the government's intention to introduce an asset pooling framework for public-sector pension plans; the subsequent report by the Province's Pension Investment Advisor, Bill Morneau, which recommended the government establish a new entity for this purpose; and the Commission on the Reform of Ontario's Public Services recommendations to achieve efficiencies for broader public-sector plans.

Among the agencies, there were mixed opinions on the value of pooling assets. The larger companies do not agree on the value of pooling assets, given the different characteristics and profiles of the plans, while the two smaller agencies are very supportive of a BPS pooled asset management entity, and recognize the value of greater efficiencies in asset management.

[12] Table 3 in Appendix B sets out the contribution rates by union and by company. In the case of H1, Society members have different contribution rates and different benefits, depending on their date of hire.

Chapter 4: Conclusions and Recommendations

This Report's recommendations reflect many of the experiences and insights shared by the four agencies and the two unions with the Special Advisor and offers a balanced response to the many complex issues confronting Ontario's electricity sector pension plans.

Summary of Key Conclusions:

The purpose of this Report is to create a roadmap so that the sector can achieve sustainable pension plans at affordable costs. It is not the goal of this Report to set out specific pension plan terms, or provide a specific cost for those plans. Rather, it is to provide context and understanding for the government, employers and employees, so that those parties can reach an agreement that will address the issues faced by the sector's plans.

The following key conclusions guided the formation of the Report's recommendations:

- *Defined benefit pension plan model is preferred over alternatives provided it is affordable, sustainable and flexible.*
- *The four pension plans are relatively generous and very costly to employers.*
- *None of the pension plans are currently stable — nor do they have the ability/flexibility to handle any adversity as the parties do not share risks and the benefits are fully guaranteed regardless of the investment performance of plans.*
- *Exposure of regulators, ratepayers and customers to open-ended and volatile pension costs needs to be minimized.*
- *None of the plans have stated strategies on how to handle future surpluses or deficits should the plans over/under perform actuarial assumptions.*
- *There is no history or experience of shared governance, risk sharing or cost sharing.*
- *Historically, limited institutionalized transparency and data sharing suggests that further employee education may be needed.*
- *IESO and ESA are too small to have efficient asset management.*
- *Collective bargaining process, on its own, is not an optimal process to ensure that the pension plans are sustainable and affordable on an ongoing basis.*

4.1 Equal Cost-Sharing for Ongoing Contributions

It is recommended that employer/employee contribution move to the target of 50/50 on an agreed timeline. The government has suggested five years to reach that target which would appear to be a reasonable phase in period.

4.2 Affordability: Contribution Ceiling

The parties should establish a ceiling on the contribution rate (current service plus special payments) to be paid by the employer and employees. A suggested appropriate range would be 9 per cent to 12 per cent.[13] Limiting pension costs to 24 per cent (i.e. 12 per cent for each of the employer and the employee) of salary would appear to be appropriate; however this should be determined by the parties. The reduction in employer contribution levels could be phased in to allow funding of any existing deficits by the agencies. As noted earlier, there are examples of effective ceilings that have been negotiated in the public sector — in 2012 and 2013 the government successfully negotiated contribution ceilings with certain consolidated JSPP pension plans. These ceilings require reductions in future benefits rather than increased contributions in the event of future deficits.

If the parties are unable to agree on an affordable ceiling then there could be a role for government in establishing a ceiling on the contribution rate.

4.3 Joint Responsibility for the Sustainability of Plans

The opportunity to make the necessary plan changes is increased if, for the time being, the agency plans remain as SEPPs; this approach is the most practical in light of the additional complexities associated with moving to a MEPP or joint sponsorship.[14] However, there are a number of elements that typically support single-employer jointly-sponsored pension plan governance that would be very beneficial to the agency plans and would help ensure their sustainability.

These include:

- Institutionalized pension information and data sharing processes. It is recommended that the parties institutionalize pension information and data sharing through the plan sponsor reporting the plan status to a proposed Funding Management Committee (comprising employer and employee representatives) on a quarterly basis.

- A Funding Management Policy (FMP) that sets out what would happen in the event the plan is in surplus or deficit going forward. A new funding management policy would guide the parties in terms of affordability of current and future pension benefits. Its primary purpose is to ensure sustainability of the plan so that both active and retired members know their retirement will be secure. A strong FMP requires the pension plan be managed in the most prudent manner, reducing the reliance on the plan sponsor's solvency to fund benefits.

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[13] Nine per cent of salary is the limit outlined in the *Income Tax Act* as the maximum employee contribution level; contribution levels above 9 per cent must be approved by the Canada Revenue Agency. There has been commentary within the actuarial community that due to the prolonged level of low interest rates, 12 per cent may be a more appropriate upper limit. The parties may wish to canvass their membership to determine contribution rate appetite.

[14] There are no existing barriers to the parties agreeing to a funding management policy and contribution ceiling under the SEPP structure. However, the *PBA* currently does not allow for the conversion of SEPP benefits to a JSPP. The Province has signalled its intention to develop a legislative framework to facilitate conversion of existing benefits from a SEPP to a JSPP.

Accordingly, it is recommended that the parties immediately engage in a process to implement formal information and data sharing processes and develop an agreed-upon FMP, contribution ceiling and 50/50 cost sharing phase in period, as SEPPs. During this process, the parties may determine it to be in their interests to move to a company-specific JSPP which the government should facilitate.

Chart 4 sets out a general framework for a FMP. The intent is that the FMP would steer a plan to sustainability over the long term by making decisions automatic, based on funding status. An FMP can be designed with specific valuation thresholds that determine what contribution rates should be, when benefits may require temporary reduction, and when those benefits may be restored or new benefits offered. The framework provides mechanisms for benefit and contribution changes in response to pension funding risks. It may be that the parties would prefer that the FMP form part of a collective agreement but it should operate automatically outside of the collective bargaining cycle.

Funding Management Policy — Framework Description

Chart 4

Valuation Basis

Valuation Basis		
Assets = (100+x)% of Liabilities valued at interest rates + y_1%	**Zone:**	**Permanent Plan Improvements**
	Mechanism:	Improve benefits as agreed
	Funding Risk:	Plan is essentially fully funded at a conservative discount rate. Funding security is desired to ensure the Plan can support these benefits continually in the future.
Assets = (100+x)% of Liabilities valued at interest rates + y_2%	**Zone:**	**Temporary Plan Improvements**
	Mechanism:	Improve benefits or lower contributions as negotiated
	Funding Risk:	Plan is well funded and can afford changes that temporarily provide a benefit enhancement (as long as it does not create a long term cost) and/or lower the contributions being paid into the plan.
Assets = Liabilities valued at interest rates + y_3%	**Zone:**	**Fully Funded**
	Mechanism:	Maintain Base Benefits and Contributions
	Funding Risk:	Plan is adequately funded to provide base benefits supported by the base contributions. Given the volatility of market factors and the numerous assumptions in the funding valuation, "fully funded" is considered a range.
	Zone:	**Additional Support Required From FMP Levers**
	Mechanism:	Raise Contribution Rates and/or Invoke Benefit reductions as agreed
	Funding Risk:	Plan is not considered adequately funded to provide base benefits supported by the base contributions using a discount rate that reflects long term expected return less expenses less a provision for adverse deviation. An increase to the contribution rate (within FMP maximum) and/or a decrease to the level of benefits being provided are necessary to recoup the deficit. As the funding position improves, these plan changes will be reversed.

Where $y_1\% < y_2\% < y_3\%$

The JSPP model has many positive attributes, including joint involvement in decision making, but can also represent a risk for members. For instance, benefits can be reduced on the wind-up of a JSPP. It is possible to design an FMP that can mimic many of the attributes that the JSPP model can provide with respect to funding decisions, while not converting completely to that model. The following compares key attributes of a JSPP and the proposed SEPP model with a FMP and contribution ceiling. The comparative table demonstrates that a SEPP with FMP and contribution ceiling can allow for:

- increased pension data/information transparency;
- co-governance;
- effective use of collective bargaining process to address complex and long-term pension plan challenges; and
- pension plan design flexibility.

Attributes of a JSPP	Attributes of a SEPP with Funding Management Policy/Contribution Constraints
General	
Employer and employee jointly responsible for plan; jointly determine plan design and what actions must be taken in the event of a deficit or surplus.	Employer remains plan sponsor but financial exposure is defined. Employer and employees jointly determine in advance what actions must be taken in the event of a deficit or surplus.

Attributes of a JSPP	Attributes of a SEPP with Funding Management Policy/Contribution Constraints
Benefits	
Sponsors can agree to certain benefits, as appropriate, to meet agreed contribution constraints.	Funding Management Policy (FMP) agreed by employer and union determines in advance the valuation parameters and what action is to be taken in the event of either a deficit or a surplus (i.e. plan is put on auto-pilot). For example, in the event of a deficit, once the contribution ceiling is reached, benefits start to decrease on a temporary basis. Once the plan is no longer in deficit, benefit reductions can be restored. Examples of benefit flexibility include: inflation protection; early retirement subsidy; bridge benefit.
Given plan can only reduce future benefits under current legislation, it would be important that as many benefits as possible become conditional as soon as possible (but not necessarily invoked) to start the "grow in"; otherwise there is too much risk borne by young actives.	Given plan can only reduce future benefits under current legislation, it would be important that as many benefits as possible become conditional as soon as possible (but not necessarily invoked) to start the "grow in"; otherwise there is too much risk borne by young actives.

Attributes of a JSPP	Attributes of a SEPP with Funding Management Policy/Contribution Constraints
Governance	
Removed from formal collective bargaining process: full transparency and decisions made collaboratively (usually through a Committee comprised of equal representation from the employer and the employees) with equal information.	Does not legally remove from collective bargaining process — FMP is collectively agreed. Parameters are set for long term, beyond the normal collective bargaining cycle. Plan administrator reports with full transparency to Funding Management Committee (comprising agency and union representatives) on a quarterly basis. Committee is responsible to ensure plan decisions made in accordance with FMP.
Default	
Regulatory default in case of no agreement to solve deficit is to raise contributions.	FMP defines what happens in the event of a deficit.
Solvency	
Only JSPPs named in a regulation under the PBA are exempted from funding solvency deficit.	As SEPPs, solvency funding requirements would continue to apply.
Process to Convert	
It requires enabling legislation to convert existing benefits from a SEPP to a JSPP. Process to convert must comply with collective bargaining parameters; broad parameters are laid out but employer/union have flexibility to work within those parameters	No enabling legislation is required provided employer and employees can agree to FMP and contribution ceiling.

4.4 Pooled Asset Management

Two of the four pension plans are quite small. Even together, the ESA and IESO are only managing approximately $600 million. As noted earlier, the government has created a technical working group to make recommendations on the creation of an investment entity. Once established, the government should facilitate IESO and ESA joining the new pooled asset management entity for public-sector SEPPs.

Both H1 and OPG are involved in the technical working group. They should consider if joining a new pooled asset management entity for public sector SEPPs will provide them with anticipated advantages.

4.5 Other

Supplementary Pension Plans

The four agencies should consider exploring establishment of a cap on pensionable earnings (e.g., exclude bonuses and/or cap pensionable salary) and/or lower the benefit accrual rate for the purpose of the supplementary pension plans.

Chapter 5: Implementation — Next Steps

Consistent with intent of the 2013 Ontario Budget announcement of a Working Group, it is recommended that the parties establish four separate agency-specific Working Groups for employer and employee nominated representatives to jointly address the changes in cost sharing, the introduction of contribution ceilings and the development of a FMP.

Given the recommendation that the plans remain separate, a one-table approach would add unnecessary complexity to negotiations. Separate tables will allow the parties to develop tailored solutions for each company. The FMPs need to be negotiated for the long-term so the plans can operate on "auto-pilot" but be incorporated in the collective agreements. The four plans' respective FMPs will have similar structure but the terms will be unique to each plan, allowing for customization.

The Working Groups' activities should be facilitated by an experienced labour mediator with pension knowledge.

It is recommended that the Working Groups work diligently through 2014, with a view to completing framework agreements that can inform collective bargaining activities in 2015 and beyond.

This approach offers a window of opportunity to have a discussion regarding pensions. No collective agreements are subject to negotiation before the end of this year[15]. Pension negotiations will require time, and much more analysis than was available in the production of this Report. Both employers and employees will require access to information and actuarial analysis. Nine months seems to be a reasonable timeframe for the Working Groups to arrive at negotiated solutions broadly consistent with the recommendations of this Report, concluding prior to the 2015 collective bargaining process.

Public Sector Temporary Solvency Funding Relief Program

It is recommended that, subject to meeting eligibility requirements of the program and achieving progress in advancing a sustainable framework through the Working Groups, the three electricity sector agencies that applied to the program in 2013 be reconsidered for admission to the program at the end of 2014.

[15] With exception of the agreement between PWU and ESA that expires on March 31, 2014. The parties are already in negotiations.

Appendix A

Terms of Reference for Special Advisor on the Sustainability of Electricity Sector Pension Plans December 16, 2013

Background

There are four government agencies operating in the electricity sector that sponsor pension plans for its employees. The four agencies are:

1. Electrical Safety Authority (ESA);
2. Hydro One;
3. Independent Electricity System Operator (IESO); and
4. Ontario Power Generation (OPG).

The four agencies and their plans are the subject of the review by the government's newly-appointed Special Advisor, Electricity Sector Pension Sustainability. The two government agencies within the electricity sector that are not part of the review, the Ontario Energy Board and the Ontario Power Authority, do not sponsor their own pension plans.

Ontario Budget 2013

The 2013 Budget re-iterated the government's commitment to:

- ensuring that single-employer pension plans (SEPPs) move to equal cost-sharing for ongoing contributions within five years; and
- exploring opportunities to support joint sponsorship as the model for pension plan governance and funding in Ontario's public sector.

It also specifically addressed the issue of sustainability of electricity sector pensions and committed to engaging with both employer and labour representatives on the challenges facing electricity sector plans in order to promote a common understanding of the pension challenges and move toward a more sustainable framework.

The 2013 Ontario Economic Outlook and Fiscal Review further indicated the government's commitment to seeing changes in cost sharing, governance, and other provisions to make Ontario's electricity sector pensions more affordable.

Mandate

The mandate of the Special Advisor is to prepare a report for the Minister of Finance setting out:

- a summary of the funding sources and funding status of the plans;
- the nature of funding challenges (including potential electricity price impacts resulting from funding challenges);
- workplace changes in demographics (including planned OPG workforce reductions);
- a summary of the treatment of management and executives within the plans;
- a list of appropriate comparators and how the provisions and governance of current electricity sector pension plans compare to them;
- advice on how to move forward on initiatives to improve the sustainability and the affordability of the plans, including the potential benefit of pooled asset management for the sector; and
- an assessment of the implications of such initiatives, which could include, but are not limited to, moving toward:
    1. equal cost sharing between employers and employees for ongoing contributions within five years;
    2. joint governance by employers and plan members, and joint responsibility for funding shortfalls on a prospective basis through joint sponsorship of plan(s); and
    3. more affordable pension benefits, such as conditional prospective benefits.

Any advice on initiatives to address the sustainability and affordability should operate within the context of collective agreements and existing labour agreements.

The Working Group announced in Budget 2013 will provide a forum, under the leadership of Ministry of Finance officials for sector-nominated employer and employee representatives to consider the potential approaches to improving sustainability and affordability of the electricity sector pension plans. The report of the Special Advisor is intended to inform and help frame the efforts of the Working Group.

Special Advisor Consultations

In preparing the report for the Minister, the Special Advisor is expected to consult with management and union representatives within the sector. This should include representatives of the following organizations:

- Ontario Power Generation;
- Hydro One;
- the Independent Electricity System Operator;
- the Electrical Safety Authority;
- the Power Workers Union; and
- the Society of Energy Professionals.

Key contacts for these organizations are attached in the Appendix.

Deliverables and Timing

The Special Advisor will provide a final report to the Minister of Finance by February 28th, 2014. The proposal will include options and a recommended strategy for improved affordability and sustainability, including implementation considerations and timelines.

Meetings and Reporting

The schedule of meetings is to be developed by the Special Advisor to meet the above deliverable.

Resources and Budget

In addition to the costs related to the appointment of the Special Advisor, the Ministry of Finance will fund outside expertise as required to fulfill the mandate of the Special Advisor.

The Broader Public Sector Pension Branch of the Ministry of Finance will provide secretariat support in the organization and scheduling of meetings.

Appendix B

Table 1: Pension Plan Membership Status, Affiliation and Demographics

	OPG	H1	IESO	ESA	Total
Membership (#)[1]					
Active	11, 238	5, 621	439	455	17,753
Retired	10, 282	7, 093	291	263	17,929
Deferred	840	309	37	23	1,209
Affiliation of Active Members (#):[2]					
PWU	6, 628	3,514	50	366	10,558
Society	3, 435	1,384	329	49	5,197
Management	1, 175	641	76	40	1,932
Average Age:[3]					
Active Members	46.6	44.2	NA	49	NA
At Retirement	59.1	58.6	56.6	60	NA

1 As of December 31, 2012.
2 As of December 31, 2012 for OPG and ESA and as of September 30, 2013 for H1 and December 31, 2013 for IESO.
3 As of December 31, 2012 for OPG, IESO, ESA and as of December 31, 2011 for H1 (most recent valuation).

Table 2: Employer and Employee Contributions[1]

For 2012 (millions)	OPG	H1	IESO	ESA**	Total
Employer Contributions (current service costs) ($)	225M	126.2M	7M	6.5M	364.5M
Employer Contributions (going concern special payments) ($)	65M	36.8M	6.5M	3.4M	111.7M
Employer Contributions (solvency special payments) ($)	n/a	0	2.4M	0	2.4M
Employee Contributions (Current Service Costs)	73M	26.9M	3.6M	2.8M	106.3
Employer/Employee Contribution Ratio (Current Service Cost)	76%/24%	81%/19%*	66%/34%	70%/30%	–

1 Represents cash contributions to pension plans other than voluntary employer contributions.
2 Estimated to be 77%/23% in 2013.
3 Additional contributions of $0.6M were made in 2012 in excess of minimum in respect of PWU gain-sharing.

Table 3: Comparison of key features of the electricity sector agencies' pension plans with major pension plans including PSPP, OPSEU Pension Plan, OMERS, HOOPP, OTPP, Enbridge, Bruce Power, BC Hydro, Quebec Hydro.

Benefit Provision	OPG	Hydro One	IESO	ESA
Averaging Period For Earnings (yrs)	3	3 (5 for new non-represented and society members)[1]	3 (5 for new non-represented)[2]	3
Benefit Rate After Age 65 (per year of pensionable service)				
• Below CPP Wage Base	1.50%	1.50% (1.375% for non-represented and new society)[1]	1.50% (1.375% for non-represented)	1.50%
• Above CPP Wage Base	2.00%	2.00%	2.00%	2.00%
Benefit Rate Before Age 65 (per year of pensionable service)	2.229%	2.229% (2.10% for non-represented) No bridge for new non-represented and society members[1]	2.229% (2.10% for non-represented)	2.229%
Subsidized Payment Form				
• With Spouse	66⅔% J&S	66⅔% J&S	66⅔% J&S	66⅔% J&S
• Without Spouse	LG5 (life annuity with 5 years guaranteed)	LG5	LG5	LG5
Earliest Age For Unreduced Early Retirement Pension	82 points (84 points non-represented), or age 60 + 25 years, or 35 years	82 points (85 points for new non-represented and society members)[1], or age 60 + 25 years, or 35 years	82 points (84 points non-represented/ 90 points new non-represented[2]), or age 60 + 25 years, or 35 years	82 points, or age 60 + 25 years, or 35 years
Indexation of Pension Benefits	100% of CPI	100% of CPI (75% of CPI for new non-represented and society members)[1]	100% of CPI (75% of CPI[2])	100% of CPI
Member Contribution Rates				
• Below/Above CPP Wage Base	PWU: 5.0%/7.0% Society/non-represented: 7.0%	Non-represented: 4.75%/6.75% Society: 4.0%/6.0% increasing to 6.5%/8.5%[3] PWU: 4.5%/6.5% increasing to 6.25%/8.25%[4]	PWU: 6.75%/8.75% Society: 7.0% Non-represented: 6.0%/8.0%	Non-represented: 9.5%/10.2% Society: 8.25%/8.95% (8.5%/9.2%[5]) PWU: 5.2%/7.2% plus gainsharing

1 Non-represented hired on or after January 1, 2004 or Society members hired on or after November 17, 2005.
2 Post-2006 Non-represented new hires.
3 Effective April 1, 2015.
4 Effective April 1, 2014 and rates 0.5% lower for post-November 2005 Society hires.
5 Effective April 1, 2014.

Benefit Provision	HOOPP	Ontario Teachers' Pension Plan (OTPP)	OMERS	Ontario Public Service Pension Plan (OPB)	OPSEU Pension Plan (OPT)
Averaging Period For Earnings (yrs)	5	5	5	5	5
Benefit Rate After Age 65 (per year of pensionable service)					
• Below CPP Wage Base	1.50%	1.55%	1.325%	1.30%	1.30%
• Above CPP Wage Base	2.00%	2.00%	2.00%	2.00%	2.00%
Benefit Rate Before Age 65 (per year of pensionable service)	2.00%	2.00%	2.00%	2.00%	2.00%
Subsidized Payment Form					
• With Spouse	60% J&S	50% J&S	66⅔% J&S	50% J&S	60% J&S
• Without Spouse	LG15	LG10	ROC[1]	ROC[1]	ROC[1]
Earliest Age For Unreduced Early Retirement Pension	age 60, or age 55 + 30 years	85 points	age 55 + 30 years, or age 55 + 90 points	age 60 + 20 years, or 90 points	age 60 + 20 years, or 90 points
Indexation of Pension Benefits	Pre-2006 Benefits: 75% of CPI Post-2005 Benefits: Conditional up to 75% of CPI	Pre-2010 Benefits: 100% of CPI 2010–2013 Benefits: 50% of CPI plus conditional up to 100% of CPI Post-2013 Benefits: 0% of CPI plus conditional up to 100% of CPI	100% of CPI	100% of CPI	100% of CPI
Member Contribution Rates					
• Below/Above CPP Wage Base	6.90%/9.20%	11.50%/13.10%	9.00%/14.60%	6.40%/9.50%	9.40%/11.00%

[1] Life annuity, with total pension payments not less than member contributions with interest.

Benefit Provision	BC Hydro	Hydro-Québec	Bruce Power	Enbridge[1]
Averaging Period For Earnings (yrs)	5	5	5	3
Benefit Rate After Age 65 (per year of pensionable service)				
• Below CPP Wage Base	1.40%	1.55%	1.50%	1.25%
• Above CPP Wage Base	2.00%	2.25%	2.00%	1.60%
Benefit Rate Before Age 65 (per year of pensionable service)	2.00%	2.25% + 0.20% below YMPE from 60 to 65, or + 0.40% below YMPE from 55 to 60	2.229%	1.60% (only before age 60)
Subsidized Payment Form				
• With Spouse	LG10	50% J&S with other options subsidized at half the cost	66⅔% J&S	60% J&S
• Without Spouse	LG10	ROC	LG5	LG15
Earliest Age For Unreduced Early Retirement Pension	age 60, or age 55 + 85 points	age 60 + 15 years, or age 55 + 85 points	82 points (84 points for non-represented), or 35 years	age 60, or 30 years
Indexation of Pension Benefits	Conditional based on sufficient funds in indexation account	Greater of: 100% of CPI up to 2%, or CPI – 3%	100% of CPI	50% of CPI
Member Contribution Rates				
• Below/Above CPP Wage Base	3.65%/5.21% plus 0.77%/1.10% to indexation account (intent is to move to 50/50 sharing of current service cost)	50% of current service cost subject to a maximum of 7.5% in 2014 grading up to 10.75% in 2018; from 2019 onward, maximum increase of 0.5% from previous year	4.50%/6.50% (as of January 1, 2013; may have been changed subsequent to this)	none

[1] Also a Savings Plan with 100% Company match on employee contributions up to 2.5%; also choice of DC pension plan instead of DB pension plan.

Table 4: Current service costs as a per cent of pensionable salary.

	OPG	H1	IESO	ESA
Funded Status Date	January 1, 2013	December 31, 2011	January 1, 2011	January 1, 2013
Total Current Service Cost ($000's)	$310,800	$126,221	$10,331	$9,650
As a % of Valuation Compensation	26.5%	24.0%	23.6%	23.8%
Annual Special Payments from last filed Actuarial Valuation ($000's)*	$64,837	$59,675	$9,021	$3,352

*May be based on funded status using asset smoothing.