IMO Independent Electricity Market Operator

Independent Electricity Market Operator

Business Plan 2004-2006

CONTENTS

INTRODUCTION

Ontario's restructured electricity market is at a crossroads and actions taken in 2004-2006 will be critical to its continued success. Over this period, the Independent Electricity Market Operator (IMO) and other industry stakeholders must address the current fundamental issues if the evolution of Ontario's electricity market is to continue for the benefit of all customers.

Bill 210, the Conservative government's Electricity Pricing, Conservation and Supply Act, came into effect in December of 2002 along with a series of regulations arising from the Bill. One of the most significant changes contained in the Bill was the establishment of a fixed commodity price of 4.3 cents per kilowatt-hour for low volume and other designated customers.

The decision to move to a fixed price was based in part on electricity customers' exposure to the volatility of the spot market price. Tight demand-supply periods resulting from the sustained high temperatures during the summer of 2002 created upward pressure on the Hourly Ontario Energy Price (HOEP) and resulted in high electricity costs for a number of Ontario residents. Customers were ill-prepared to deal with the bill impacts flowing from increased electricity use and the pass-through of volatile spot market prices.

The August 14, 2003 blackout that affected most of Ontario resulted in an increased awareness of the issues surrounding the reliability of Ontario's electricity system. Although almost all of Ontario customers had power restored within the first full day of the outage, a state of emergency existed for another week as industry, business and residents were asked to reduce electricity use by as much as 50 per cent to ensure reliable supply as generation returned to service.

Notwithstanding these events, Ontario's restructured electricity market has had more than its share of success over its brief 18-month history. The market helped Ontario deal with the challenges faced during the summer of 2002 when the province was hit with unprecedented demand for electricity at a time when internal supply resources were less than forecast. The market generated price signals that attracted both additional generation from outside the province and demand response from large customers inside the province. Both measures enhanced the reliability of the system and prevented rotational load shedding.

The experience in other jurisdictions that have introduced competition into the electricity sector is that change and evolution is the norm following the advent of an open market.

Ontario is no different and the IMO's 2003-2005 Business Plan, approved and issued in October, 2002, moved quickly to respond to the experience gained since the May 1, 2002 opening of the Ontario market. The 2003-2005 Business Plan initiated the IMO's Market Evolution Program (MEP) to enhance the operations of the wholesale market and to better recognize and address the interdependence of the wholesale and retail markets.

The major components of the MEP include:

A Day-Ahead Market – A functioning Day-Ahead Market would reduce customers' exposure to the volatility of real time pricing. The Day Ahead Market would allow participants to buy and sell energy and lock in prices and quantities a day in advance. Benefits of this initiative include more transparency, price certainty and improved reliability.

Long-Term Resource Adequacy - Recent events have underlined the need for Ontario to address resource adequacy in the long term for the province's electricity system. There is no single solution. Resource investment will need to encompass all of the interrelated aspects of the system that enable reliable service in the future.

Locational Marginal Pricing - A major consideration in the above initiatives is whether at the wholesale level a consistent set of more efficient price signals should replace the current uniform energy price and its associated congestion payments. A more efficient pricing system would better reflect the congestion and losses of Ontario's electricity grid and the resulting locational differences in the value of electricity.

The MEP has benefited greatly from input from IMO-sponsored, stakeholder-populated working groups that are examining these issues in detail and continues to be a major initiative in the 2004 Business Plan.

The IMO recognizes that stability in the wholesale market is directly tied to a stable regulatory environment across the whole market. The rate freeze imposed on Local Distribution Companies (LDCs) in 2002 has caused serious difficulties for distributors.

There are a number of issues that need to be addressed in the retail market in preparation for replacing the current fixed price regime. Customer education to help customers operate effectively in a restructured electricity market is critical to the success of the market and will be a major focus for the Ontario Energy Board (OEB) in its new mandate. The IMO will be involved with the OEB, stakeholders and others in meeting this challenge and coordinating activities that are designed to facilitate a successful transition to market-based rates.

Other jurisdictions have maintained strong wholesale markets while establishing appropriate regulatory mechanisms for the rest of the market. The challenge for the IMO and other stakeholders is to address both the issues that prompted the retail fixed price while continuing to strengthen the wholesale market for its participants.

The market can continue to enhance reliability in Ontario. It will also help to encourage investment in the Ontario electricity system, facilitate competition in the generation and sale of electricity, and drive innovation. Market-based rates also promote demand response initiatives including energy efficiency, time of use, conservation and development of renewables. Improved demand-side response is a key component of a future reliable electricity system in Ontario.

The Business Plan looks in detail at the various facets of our planning including the issues facing the market, the current actions and resources required to sustain and improve current market operations and the market improvements in the Market Evolution Program.

PROJECTED 2003 FINANCIAL RESULTS

The financial results projected for fiscal 2003 demonstrate the IMO's commitment to meeting the obligations set forth in legislation and in the market rules, while continuing to evolve to address the challenges facing electricity restructuring in Ontario. Responding to substantial changes in circumstances, IMO management has successfully contained costs across the organization. As shown in the table below, overall, the results are projected to be $18.6 million better than the post-Bill 210 budget, resulting in a small surplus being anticipated for 2003. As discussed below, the 2003 budget, and the results projected for the year, provide important context for the 2004-2006 Business Plan.

The 2003-2005 Business Plan, as presented to the Board of Directors, Regulatory Affairs Standing Committee and submitted to the Ontario Energy Board ("OEB") in October 2002, was impacted by the introduction of Bill 210 in December 2002. In particular, Bill 210 rolled back the proposed increase in the IMO usage fee, freezing that tariff at the approved 2002 amount of $0.959/MWh, and required the IMO to withdraw the fiscal 2003 submission to the OEB. As a result of the tariff freeze, IMO management undertook to reduce the original Operating Maintenance and Administration ("OM&A") budget by $3.2 million in recognition of the reduced revenues, and committed to ongoing efforts to achieve further cost reductions throughout fiscal 2003. Management was able to successfully address the impact of Bill 210 – achieving reduced costs and overcoming a potential deficit of $17.8 million, as summarized in the table below.

The currently anticipated 2003 financial results now project an operating surplus of approximately $0.8 million, an improvement of $18.6 million over the circumstances faced following the tariff freeze.

Figure 1: IMO Financial Results

($ millions)	2003 Projected	2003 Budget	Variance
Usage Fees	149.3	145.0	4.3
Settlement Clearing Account	5.0	1.1	3.9
Cost Recovery for Services	1.1	0.9	0.2
Total Revenues	**155.4**	**147.0**	**8.4**
OM&A Program Costs	78.6	86.9	8.3
OM&A Pension Expense	4.2	4.3	0.1
Market Evolution Program	3.8	7.3	3.5
Amortization	49.8	46.0	(3.8)
Interest	18.2	20.3	2.1
Total Costs	**154.6**	**164.8**	**10.2**
Operating Surplus/(Deficit)	**0.8**	**(17.8)**	**18.6**

2003 Projected Revenues

Usage Fees

The usage fee revenue for 2003 is projected at $149.3 million, some $4.3 million greater than budget. The revenues in this account are a direct result of increased load volumes within the IMO-Administered Markets. The expected energy volumes for 2003 are projected at 155.6 TWh, or 4.4 TWh higher than the energy forecast of 151.2 TWh that was issued in September 2002.

Settlement Clearing Account

The settlement account revenues represent the interest earned by the IMO through the IMO-Administered Markets cash accounts. In its settlement of the market, the IMO typically collects funds from owing market participants (i.e. buyers) and then pays the receiving market participants (i.e. sellers) two business days later. In the period between receipt and disbursement of market funds, the monies are invested with the interest earned accruing in the settlement clearing account. Also, at times, market participants make prepayments and similarly those monies are invested with the interest accruing to the settlement clearing account. Lastly, Market Power Mitigation Rebates (MPMR) are executed on a quarterly basis and the interest earned on the funds held during the settlement cycle are also included in the settlement clearing account.

The projected 2003 revenues of $5.0 million are from the interest earned on the above-described funds and represents a positive variance of $3.9 million relative to budget. The budget for 2003 was derived based on no interest on prepayments, since there was no prior history on which to base anticipated prepayments, and prepayments result from activities outside the control of the IMO. The budget also did not include any interest related to the MPMR program since the rebate amount was not known and, at the time the business plan was crafted, MPMR payments were to occur annually. Combined, these two forms of revenues are projected to account for about $3.3 million in revenues for 2003, primarily accounting for the variance from the 2003 budget.

Cost Recovery for Services

Cost recovery for services revenues represent fees charged by the IMO for services provided, charged on a cost recovery basis. In 2003, those fees are projected to be $1.1 million and represent work on connection assessments ($1.0 million) and training ($0.1 million). The projected variance of $0.2 million is the result of increased volumes in the area of connection assessments.

2003 Projected Costs

Revenue Requirements (Total Costs)

Overall, the 2003 revenue requirements (equivalent to total costs) are projected to be some $154.6 million, or $6.3 million higher than the total cost requirement of $148.3 million in 2002. It is important to recognize that $4.4 million or close to 70% of that increase is due to pension expense. The remaining expected cost increase in 2003 over the prior year is projected to be $1.9 million, representing about a one per cent increase.

Total projected costs for 2003 also represents an amount that is $10.2 million below the 2003 budget due to a combination of lower costs for OM&A, lower spending on the MEP, and lower interest expense, partly offset by higher amortization.

A discussion and analysis of each of the components is contained below:

OM&A Program Costs

The following table outlines the projected 2003 OM&A program costs relative to budget.

Figure 2: IMO OM&A Costs

OM&A Program Costs ($ millions)	2003 Projected	2003 Budget	Variance
Staff Costs	51.4	54.2	2.8
Computer Support, Maintenance and Equipment	12.0	15.3	3.3
Consultants and Contract Services	5.3	6.3	1.0
Administration	6.0	6.0	-
Telecommunication	3.9	5.1	1.2
Total OM&A Program Costs	**78.6**	**86.9**	**8.3**

Lower than Planned Staff Costs

Staff costs represent all operating costs associated with staffing, excluding pension[1]. For 2003, these costs are projected to be $51.4 million, or $2.8 million below budget. This projected variance is the result of:

- Lower than planned staff levels and staff redirected to capital or MEP work ($1.4 million);
- Successful reduction of overtime, lower staff travel expenses and training cost management, with 2003 costs projected at $1.3 million below budget and at levels below 2002 actual costs; and
- Minimal relocation costs associated with new hires projected ($0.1 million.)

[1] *Staff Costs include salaries, benefits, overtime, allowances, contract labour, relocation, staff expenses and training costs.*

Successful Reduction of Computer Support, Maintenance and Equipment

Computer support, maintenance and equipment costs include software annual maintenance fees, application support costs, computer equipment lease and maintenance costs, and external computer expert services. The projected 2003 costs are $12.0 million, or some $3.3 million below the budgeted level of $15.3 million. This positive variance is largely due to: the early cancellation of licence fees associated with the hardware for the Data Acquisition and Computer Systems ("DACS"), a result of the early completion of the associated replacement project ($1.0 million); contract consolidation/renegotiations ($0.5 million); elimination of some applications/software and other support costs ($0.5 million); smaller than expected cost increases and growth in the use of some software and services ($0.6million); and the cancellation or capitalization of some licence or hardware lease costs ($0.7 million).

Reduced Consultants and Contract Services

Consultants and contract services represent external information or service providers, including such items as external audits, insurance, health services, electricity industry expert advice, regulatory support, and legal fees. The projected cost in 2003 of $5.3 million is $1.0 million below budget. This variance is spread across the business with the largest portion of the variance due to the deferral of some external audits, lower than expected increases in insurance premiums at a time of increasing premiums for the industry, and deferral of a corporate credit rating.

In respect of the audit work mentioned above, the deferral relates to changing the requirements for external audits/reviews of the dispatch algorithm and the settlement operations and internal controls, which are now planned to be performed in alternate years.

On the recommendation of management, due in large part to the auditors' clean report on settlement operations and internal controls, the IMO Board changed the required frequency from once every year to once every two years, unless otherwise directed by the Board. The Board also approved expanding the scope of the external review of the dispatch algorithm to include related dispatch processes. These audits and reviews are substantial efforts and incur significant internal and external costs. These changes were made consistent with management's commitment to contain costs across the IMO, while assuring that due diligence will be maintained and markets will not be exposed unduly to increased risk.

With respect to the deferral of the corporate credit ratings, given the political uncertainty facing the industry throughout the year, IMO management made a conscious decision to defer spending on obtaining two credit ratings from major credit rating agencies in 2003.

Administration

Administration costs include materials and supplies, property taxes, memberships, building services, building rent, other rental facilities, and utilities. Although there are some minor differences within these cost categories, overall, administration is projected to equal the budget in 2003.

Lower Telecommunication Costs

Telecommunication costs are projected to be $3.9 million for 2003, or about $1.2 million below the approved budget. This variance is due primarily to the cancellation of a back-up link for automated generation control ($1.0 million) and the early retirement of DACS ($0.2 million). 2003 represents the fourth year in a row where telecommunication costs have been reduced, largely through service rationalization and contract renegotiations, with a projected 2003 cost level that is less than half of the 1999 cost level.

Market Evolution Program

The MEP continues to feature prominently in the IMO's activities for both the current year and the years ahead. The details and plan forward with respect to the program are included later in this Plan document. However, in the 2003-2005 Business Plan, there was $7.3 million of funding included for 2003. Last year's plan identified that "accurate estimates of the costs of delivering the various elements will be one of the key products of the feasibility and project definition work for each element of the MEP." In addition, last year's plan identified that the funding included for 2003 of $7.3 million focussed on feasibility and definition work, with limited, if any, funding for implementation.

The projected 2003 cost of $3.8 million for MEP contained within the annual operating costs reflects the following definition and feasibility work.

- MEP Phase I - $0.8 million for program definition, planning and scope development for all elements of MEP
- Day-Ahead Market - feasibility and scoping ($2.1 million, with a further $1.2 million in 2004)
- Short-Term Resource Adequacy – planning and execution of short-term solution ($0.2 million, with a further $0.2 million in 2004)
- Wholesale/Retail Integration – support of various initiatives ($0.2 million)
- Stakeholder Management – execution of stakeholdering ($0.1 million in 2003)
- Program Management and Resourcing Contingency– overall management of MEP and a contingency to reflect the potential for additional costs if insufficient internal resources are available for MEP work execution ($0.3 million in 2003)
- Remaining work in the definition and feasibility phases of MEP ($0.1 million, with a further $0.3 million in 2004)

Amortization

The projected amortization costs for 2003 are $49.8 million, or some $3.8 million higher than budget. This variance results primarily from the shortening of service lives for some information technology infrastructure hardware and applications. The impact of this change is an estimated increase in amortization of approximately $7.2 million for 2003. This increase is partially offset by a positive variance of $3.4 million due to the result of lower than planned capital spending in each of years 2002 and 2003. The IMO, consistent with sound accounting practice, has reviewed the estimated useful service lives of hardware and software in light of actual experience with the open market and the marketplace demands on hardware and software. As a result of this review, service lives for some of the infrastructure hardware and applications were shortened from either five or six years, to four years. The review determined that no adjustments to the estimated useful service lives were required for market-related software.

Interest

Interest expense is projected to be $18.2 million for 2003, or $2.1 million below the budget of $20.3 million. This positive variance is the result of higher than planned cash levels, resulting in higher investment income, combined with a reduction in the forecasted interest rate paid on the $175.0 million in debt that is expected to be refinanced in November 2003.

Accumulated Surplus

The accumulated surplus at the end of 2003 is projected to be approximately $11.5 million, resulting from a projected operating surplus of $0.8 million and an opening balance of $10.7 million. Most of the opening balance relates to the surplus in 2000 of some $10.2 million, largely a result of the extension in the date of market opening. The residual $0.5 million in the opening balance is the cumulate net result of operating results since 1999 which included a deficit of $1.6 million in 1999 and modest surpluses of $1.0 million in 2001 and $1.1 million in 2002.

2003 Projected Balance Sheet

Cash and Cash Equivalents

The balance of cash and cash equivalents at the end of 2003 is projected to be $33.7 million, or about $24.5 million higher than budget. This variance is largely the result of the better than planned operating surplus and the lower than planned capital spending, somewhat offset by the temporary investments.

Temporary Investments

For budgeting purposes, the IMO does not budget temporary investments since the only distinction between cash and cash equivalents and temporary investments is the duration of the investment. Investments of less than 90 days are treated as cash and cash equivalents while investments of a duration equal to or greater than 90 days are classified as temporary investments. However, in the 2003 projection, $6.3 million was placed in temporary investments, to offset the obligation associated with the unfunded Supplemental Employee Retirement Plan ("SERP").

Property and Equipment

The projected total property and equipment balance at the end of 2003 is $223.6 million, an expected $17.6 million below the budgeted level. This variance is due to 2003 capital spending that is projected to be $13.8 million below budget and amortization that is projected at $3.8 million above budget.

Prepaid Pension Expense

The projected prepaid pension expense balance of $24.6 million at the end of 2003 is $4.5 million higher than budget due almost entirely to the $4.4 million unbudgeted contribution to the registered pension plan. The issue of increased pension contributions is being faced by virtually all plan sponsors as a result of poor equity markets over the past three years as well as declining interest rates.

Surplus/(Deficit)

The projected surplus balance at the end of 2003 is $11.5 million, $18.6 million better than anticipated immediately following the November, 2002 rate freeze, as a result of management actions and other factors contributing to the operating surplus variance.

OUTLOOK FOR 2004 AND BEYOND

IMO Operations

In 2004 and beyond, the role of the IMO will continue to include the provision of the following services:

- Directing operations
- Operating markets
- Settlements
- Assessment and compliance
- Market development
- Participant administration
- Customer services

Certainly, there have been some significant changes to the industry and the competitive markets in Ontario since the 2003-2005 Business Plan was crafted, although the majority of the work that the IMO must execute to effectively continue to provide these services will remain largely unchanged over the planning period. The resourcing decisions reflected in this business plan do, however, reflect the requirement for increased activities in some areas while recognizing cost savings and efficiencies in other areas. Some of these resourcing changes reflect obligations or needs on the part of the IMO that are not annual in nature while others directly relate to recent industry and environment changes and events.

Non-annual costs resident in the 2004 resource levels include such items as corporate credit ratings (from no less than two of the major credit rating agencies) and market rules-driven externally performed market audits/reviews (settlements/dispatch algorithm). Changes in the industry and the environment in which the IMO operates that impact the resource requirements in future years include:

- The MEP continues to represent critical work for ensuring a successful competitive electricity market in Ontario;
- The introduction of Bill 210, and the realization of needed change, is reflected in:
    - The continuation of numerous participant and stakeholder forums to support the IMO in moving the markets forward; and
    - A broadening of participant outreach to ensure participants and other impacted parties are comprehensively educated and engaged in the current market and future development.
- The North American blackout on August 14th demonstrated the need for:
    - Increased understanding and awareness by all stakeholders of industry issues;
    - Increased involvement by the IMO in inter-jurisdictional initiatives;

- A review of the current business risks associated with ensuring power system reliability, resulting in the allocation of additional staff resources;
- Further work in the area of emergency preparedness to ensure improved coordination by those directly involved in the electricity industry; and
- The necessity for IMO involvement in regulatory proceedings outside Ontario.

Evolution of Competitive Electricity Markets in Ontario

The introduction of Bill 210 by the Government of Ontario in December 2002 represented a clear signal that there was a need to address market issues being experienced at that time and to develop the electricity markets to better realize benefits for Ontario. In last year's business plan, the IMO recognized that need through the establishment of the MEP. Specifically, in last year's plan the IMO identified that the various elements of the MEP "are driven by the need to encourage generation investment, to achieve resource adequacy in Ontario, to address in a more complete way the high priority issues identified in the market operations, and to capture the advantages of broader and more seamless regional participation." These needs have not changed and this business plan recognizes this through the continued resourcing of the MEP. Other actions taken by the IMO in late 2002 and early 2003 were meant to help address these needs – that is, the establishment of the Market Advisory Council and other stakeholder/market participant committees. These committees will continue to operate in 2004 and beyond and the related resources are included in this Plan.

In this Plan, we have recognized areas where further resources are being directed to help address market evolutionary needs. Within Market Services, additional resources have been allocated to continue to increase the level and quality of interaction with market participants, and to more extensively effect participant outreach. Necessary components to achieving the goals of effective restructuring in Ontario include increased public information and education, as well as improved regulatory and institutional arrangements. In this plan, additional resources are allocated for these purposes within Corporate & Legal Affairs.

A broad set of policy goals has underpinned the restructuring of the electricity sector within Ontario. In summary these goals are:

- A reliable, adequate and environmentally sound supply;
- Reasonable prices;
- Investment in demand response measures, supply and transmission;
- Level playing field for buyers and sellers; and
- Consumer choice.

These policy goals remain valid today.

In meeting these policy goals and in meeting the electricity needs of Ontarians there are a number of enhancements that need to occur within the electricity market over the next three years. The IMO is engaged in various initiatives, outlined below, that will allow the market to further develop for the benefit of consumers.

Market Evolution Initiatives

Day-Ahead Market – The Ontario electricity market currently does not offer a Day-Ahead Market in which participants can buy and sell electricity in advance of real time. In other markets, the presence of a Day-Ahead Market has resulted in more transparent, predictable and less volatile prices. The IMO is in the process of working with market participants and other stakeholders to develop a Day-Ahead Market to bring these benefits to the Ontario market. A Day-Ahead Market could be operational in Ontario by late 2005.

Key to the success of a Day-Ahead Market is the need for Locational Marginal Pricing [2] in the Ontario wholesale market. Currently, Ontario has a uniform price but additional payments are required as a result of the transmission congestion that exists in certain areas of the province. A more efficient pricing system that reflects the congestion and losses of Ontario's electricity grid and the resulting locational differences in the value of electricity would encourage transmission and generation investment in the needed areas.

Long-Term Resource Adequacy - There is no single measure that will achieve a future reliable electricity system in Ontario. Long-term resource adequacy encompasses all interrelated aspects of the Ontario electricity market. This project will identify the steps needed to support development of the new generation, transmission and demand response initiatives that are essential for an adequate supply of electricity to meet future Ontario demand.

Interim Demand-Response Measures

Increased demand response is critical to the effective functioning of the Ontario wholesale market and represents a significant opportunity for providing meaningful consumer benefits. Demand-side responses will help limit and set prices during shortage or near-shortage conditions at levels that reflect the consumers' willingness to avoid curtailments. This will help to provide correct price signals for efficient investment levels. This initiative focuses on the introduction of short-term measures to facilitate demand response that will have immediate benefit on the resource adequacy situation. It is important that these short-term measures are compatible with and do not impinge on the movement towards the more comprehensive market evolution framework.

[2] *Locational Marginal Pricing is also referred to in this document as nodal pricing.*

Multi-Interval Optimization (MIO)

Currently, the Ontario market is dispatched on a five-minute basis where energy and operating reserve are co-optimized within the five-minute interval only. Operating experience with Ontario's market to date shows that optimizing the dispatch process over a longer period would address the current difficulties in the scheduling and dispatch of energy-limited and fast-ramping resources within the hour. These difficulties sometimes result in manual intervention to constrain on, and to constrain off, facilities to maintain the reliability of the IMO-controlled grid. MIO will modify the process to provide a rolling 55-minute optimized dispatch solution for each five-minute period. The optimized solution should reduce the overall level of constraint payments and reduce the need for manual intervention.

Real-Time Issues (Pricing, Dispatch, Aggregation)

The objective of this initiative is to resolve a number of outstanding dispatch and pricing issues that exist in the real-time market. These include:

- The use of "out of market" operating reserve for reliability reasons. This can lead to conditions in which prices in the pre-dispatch period appear quite high, but fall to low levels in the real-time dispatch. The result is a lack of transparency and predictability of market prices.
- The use of 12x ramp rate in the market schedule. The use of 12x-ramp rate in the current market schedule has the effect of increasing constraint payments. These constraint payments are seen as causing a lack of price transparency by distorting energy prices.
- Dispatch issues relating to facilities with multiple connections, cascade river systems and energy limited resources that hamper the efficient dispatch of these resources.
- Initiatives to minimise failed transactions. Failed import or export transactions in real-time can result in unexpected price movements.

Constraint Payment Changes

The IMO Market Surveillance Panel's report in July 2003 noted a number of concerns with the current regime of constrained on and off payments. While the current constraint payment regime would be eliminated by the introduction of nodal pricing, improvements to that regime are proposed pending decisions on the introduction of nodal pricing.

Access to Information

This initiative will continue the work already undertaken to provide non-discriminatory access to information by participants in order to provide greater market transparency. The main additional reports being provided are:

- Generator Capability Report;
- Generator Energy Output Report;
- Generator Planned Outage Report; and
- Zonal Demands Report.

Further reports have been requested by participants and will be considered by this initiative.

IT Changes and Improvements

A number of technical IT changes and improvements are contemplated that will improve the operation of markets. Many of these changes will form the building blocks on which the changes required to support market evolution will be built. These changes will include improvements to the participant interface and, where possible, will aim to gradually harmonize the technology used to support the operation of wholesale and retail markets.

Environmental Disclosure

This initiative is in response to the impending regulation that will require environmental disclosure on consumer bills. The IMO will need to manage the introduction and administration of the operation of systems and procedures that track the environmental attributes of each MWh of power produced and consumed in the Province. A separate fee mechanism is contemplated for this item and accordingly, environmental disclosure does not form part of the Business Plan. It is included here for information purposes only.

Continued Reliable Operation of the Power System

The IMO is a business that considers maintaining power system reliability to be one of its key objectives and operates the IMO-controlled grid to meet or exceed established industry reliability standards.

The August 14, 2003, blackout increased the public's awareness of the importance of power system reliability. The resourcing levels within this business plan will give heightened attention to a number of areas such as:

- Incremental initiatives and coordination with other jurisdictions in the areas of standards development.
- Increased attention to ensuring data utilized in operating the power system in a reliable manner is comprehensive, timely, and accurate. Examples of this include participant provided and updated facilities information and system limits.
- A sizeable increase in the effort the IMO expends on inter-jurisdictional initiatives, including staff time and travel costs.
- More expansive planning for communication and coordination in the event of an emergency, building on the experience following the blackout.

Financial Outlook 2004 – 2006

The financial outlook for the IMO in 2004 reflects continued prudent financial and overall cost management, resulting in no increase in 2004 to the 2002 and 2003 usage fee of $0.959/MWh. Further, the plan anticipates this usage fee level remaining constant in 2005 and 2006.

Carrying forward the surpluses achieved in prior years is a key factor in maintaining a level usage fee structure over the planning period. In 2003, we carried forward an accumulated surplus of $10.7 million, and are anticipating a modest surplus in 2003 of less than $1.0 million. Under this Business Plan, the cumulative surplus at the end of 2003 is carried forward and applied to usage fees in each of 2004, 2005 and 2006 thereby offsetting annual anticipated operating deficits occurring in each of these years. This strategy would be reviewed in light of any changed circumstances in each business planning cycle.

Assumptions Over the Planning Period

- Load forecasts utilized in calculating the usage fee are based on the most recent 18-month and 10-year forecasts.
- The accumulated surplus at the end of 2003 is carried forward and will be applied to 2004, 2005, and 2006 in that order until it is fully utilized as outlined above.
- The long-term debt with the Province of Ontario is refinanced in 2005 at a floating rate with the ability for repayments twice annually.
- The floating interest rate paid on the long term debt, excluding the fixed rate debt with the Ontario Electricity Financial Corporation, will be in the range of 3.25% to 4.5% over the planning period.
- $100.0 million of debt will be repaid in November 2003 with a further $50.0 million repaid in 2005 and $30.0 million in 2006.
- Capital spending of $20.0 million per year, in addition to $35.0 million for Day-Ahead Market. [3]
- Shortened information technology infrastructure hardware and applications service life changes.
- Pension expense for 2004 based on actual pension plan returns to the end of August 2003 and the 2005 and 2006 expense based on plan returns of 7.25% annually, a rate of return consistent with the assumed expected long-term return on plan assets.
- Environmental tracking, and its related costs, is not included in this plan as it represents a stand-alone and separate fee submission.

[3] *The estimate for the Day-Ahead Market includes nodal pricing and represents management's early view as to the key components comprising this market and the related costs. This estimate is currently under further scrutiny by management and, accordingly, could be subject to change. Any such changes made, however, given that the DAM is planned to be implemented in the fourth quarter of 2005, would not impact costs in 2004 and would only modestly impact upon costs in 2005.*

The overall costs of the IMO in 2004 are expected to be relatively flat when compared to the anticipated costs of 2003. The total planned costs for 2004 are expected to be less than a one per cent increase over the prior year.

- The fee proposed for 2004 will remain at $0.959/MWh, the same level that was charged in 2002 and 2003.
- The total revenues and total costs in 2004 are budgeted at levels that are essentially the same as 2003, with changes in both categories of about one per cent.
- Capital spending of $20.0 million is budgeted for 2004, excluding Day-Ahead Market. This represents a spending level that is consistent with the projected 2003 spending level of $22.1 million.

The table below outlines the planned operating results over the planning period:

Figure 3: Planned Operating Results

($ millions)	2003 Projected	2004	2005	2006
Usage Fees	149.3	148.6	149.7	151.0
Settlement Clearing Account	5.0	5.1	5.1	5.1
Cost Recovery for Services	1.1	1.0	1.0	1.0
Total Revenues	**155.4**	**154.7**	**155.8**	**157.1**
OM&A Program Costs	78.6	83.1	85.1	87.9
OM&A Pension Expense	4.2	7.5	9.9	12.0
Market Evolution Program	3.8	1.7	-	-
Amortization	49.8	52.5	52.1	54.9
Interest	18.2	11.4	10.8	10.2
Total Costs	**154.6**	**156.2**	**157.9**	**165.0**
Operating Surplus/(Deficit)	**0.8**	**(1.5)**	**(2.1)**	**(7.9)**
Accumulated Operating Surplus	**11.5**	**10.0**	**7.9**	**-**

As depicted above, this Business Plan anticipates that the IMO will run operating deficits in each of the next three years. The Business Plan proposes to utilize the current accumulated surplus, largely a carry-forward from 2000, to fund these deficits and keep the usage fee at the same level as it is today. Recognizing that there always are large uncertainties over any planning period, if the business is able to live within the fee fixed through to 2006 as planned, then the IMO would have managed to keep its fee fixed for five consecutive years; while continuing to meet its objects and implement a Day-Ahead Market.

Revenues

Usage fee revenue is forecasted to increase modestly over the planning period[4], reflecting the following energy forecasts: 155.0 TWh in 2004, 156.1 TWh in 2005 and 157.5 TWh in 2006. These forecasted energy levels are based on the most recent 18-month and ten-year forecasts issued by the IMO and do not reflect any impact of demand-side management initiatives that might materialize over the planning period.

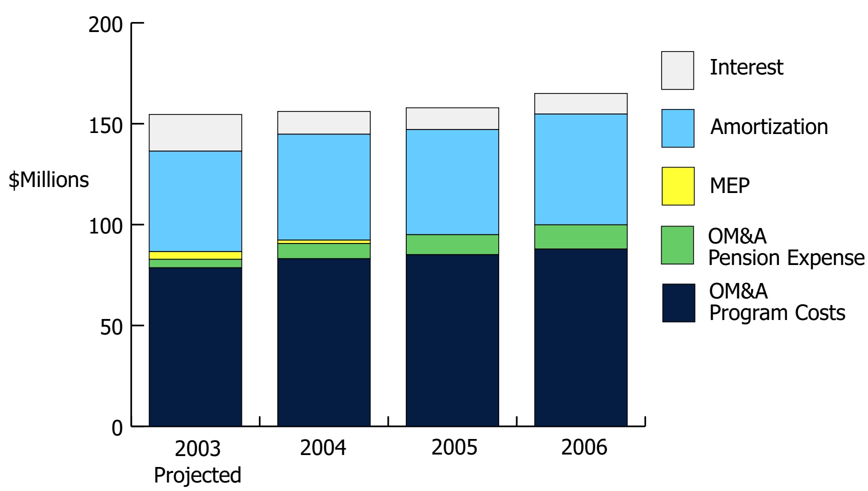
The settlement clearing account and cost recovery for services revenues are expected to remain at levels consistent with 2003. Settlement clearing account revenue continues to reflect investment income on market funds and cost recovery for services reflect connection assessments and participant training revenues.

Total Costs: 2004-2006

Over the three-year planning period, total annual costs are expected to increase by more than $10.0 million. This level of spending represents an increase of less than seven per cent from the projected 2003 spending level. On an annual basis, in 2004, the total costs of the business are budgeted to increase by approximately $1.6 million, or about one per cent. In 2005, total costs are forecast to increase by a further $1.7 million, again about one per cent. In 2006, total costs are forecast to increase by about $7.1 million (four percent) versus 2005. This planned increase is due primarily to higher pension expense and the DAM-related amortization reflecting a full year's amortization offset by no planned MEP spending and lower interest costs. The details of each of these items will be further explained below.

The following chart demonstrates the changes to IMO costs over the period 2003 – 2006.

Figure 4: IMO Costs 2003-2006



[4] *Based on a usage fee of $0.959/MWh*

The increases over the planning period reflect the following:

- A modest increase in staff levels to address current needs for reliable execution of the IMO's objects;
- Increasing pension expense;
- Capital expenditures being placed in-service, including the Day-Ahead Market, resulting in increased amortization; and
- Repayment of debt and lower interest rates, resulting in reduced interest costs over the plan period.

The following sections provide the detail and rationale for the changes in each cost category.

OM&A Program Costs

The following table outlines the OM&A program costs over the planning period.

Figure 5: OM&A program Costs

($ millions)	2003 Projected	2004	2005	2006
Staff Costs	51.4	55.4	57.7	60.1
Computer Support, Maintenance and Equipment	12.0	11.8	11.9	12.0
Consultants and Contract Services	5.3	6.7	6.3	6.6
Administration	6.0	6.1	6.1	6.2
Telecommunications	3.9	3.1	3.1	3.0
Total OM&A Program Costs	**78.6**	**83.1**	**85.1**	**87.9**

In 2004, OM&A program costs are budgeted to increase by approximately $4.5 million, or just less than six per cent. The primary drivers for this increase relate to staff costs.

Staff Costs

The IMO is a business that is capital and staff intensive in nature. Specific to staffing, over the planning period, staff costs represent over thirty-five per cent of the total costs and over sixty-seven per cent of the total OM&A program costs, excluding OM&A pension expense, which although categorized separately relate to regular staff. Factoring in the pension expense, staff-related costs would account for at least forty per cent of total costs in each year of the planning period.

Specifically, in 2004, staff costs are budgeted to increase by about $4.0 million, or almost eight per cent. This planned cost increase is a result of:

- Increased staff levels of approximately four per cent, with about half of the planned increase related to requirements identified in the follow-up to the blackout of August 14, 2003;

- Compensation increases that are in line with market trends;
- Increased travel due to increased inter-jurisdictional involvement and initiatives directly related in large part to the renewed focus resulting from the blackout;
- Increased training costs, reflecting the ongoing need for the business to invest in its staff; offset by:
- Reduced overtime, a trend continuing from 2003.

The following outlines the budgeted staff levels over the planning period:

Figure 6: Budgeted Staff Levels

	2003 Actual [5]	2004	2005	2006
Market Operations & Forecasts	130	141	143	143
Information, Technology & Infrastructure	117	118	119	120
Market Services	77	78	79	79
Corporate & Legal Affairs	27	31	31	31
Finance	23	21	23	23
Market Assessment & Compliance	15	14	14	13
Human Resources	13	14	13	13
Internal Audit	3	5	5	5
Chief Executive Officer	2	2	2	2
Total	**407**	**424**	**429**	**429**

As outlined above, this Plan has staff levels increasing to 424 from the current level of 407 staff. Of the net staff increase of seventeen, fifteen are within Market Operations & Forecasts and Corporate & Legal Affairs. Specifically, the following outlines the planned staff changes over the planning period for those two business units:

Market Operations & Forecasts

- To fill current vacancies, increasing the staff level to 134.
- Incremental staffing to address issues arising from August 14th.
  - Standards development work, including the related coordination with neighbouring jurisdictions.
  - Increased planning of communication and coordination during emergencies.
  - Increased analysis to review and confirm system capability and limits.
  - Increased ongoing analytic analysis and support of market and system operations.
- A further increase in staffing in 2005 and 2006 for the estimated impact of the Day-Ahead Market.

[5] *As at September 25, 2003.*

Corporate & Legal Affairs

- Reflecting the increased need for fostering better and broader understanding of the industry and the related issues, requiring increased staffing in Corporate Relations and Communications.
- An increase in resources directed at regulatory proceedings, reflecting the recognized need for increased direct involvement of the IMO at regulatory proceedings both within and external to Ontario.
- The potential addition of another internal legal counsel, reflecting the continued large volume of legal work associated with the IMO's operations.

It is important to point out that no permanent staff hires will occur without the prior authorization of the President & CEO of the organization. This is to recognize and maintain the required flexibility given the uncertainties over the planning period. Any additional staff, throughout the organization, will only be added when the need is completely grounded and is considered in the context of the total business needs.

Staff levels are projected to increase by a further five in 2005, largely reflecting the expected additional work demands associated with a Day-Ahead Market.

Computer Support, Maintenance and Equipment

Computer support, maintenance and equipment costs are budgeted to remain at a level relatively consistent with the projected 2003 spending level. A modest reduction is due to the net impact of the cost savings associated with the decommissioning of the Data Acquisition and Computer Systems ("DACS"), somewhat offset by increased support costs associated with hardware that is coming off warranty and lease costs associated with the network hardware.

In 2005 and 2006, these costs are budgeted to increase very modestly, reflecting inflation.

Consultants and Contract Services

Consultants and contract services are budgeted to increase by approximately $1.4 million. This increase reflects the following:

- A third party review, by a major credit rating agency, of the default exposure of market participants in order to determine whether the current prudential contruct needs to be amended.
- The attainment of credit ratings from two or more major rating agencies in order to address the need to refinance long-term debt in 2005.
- Consistent with the recently amended market rules, the need to have external audits performed of the dispatch algorithm and the second settlements review.

- An increased focus on Corporate Relations and Communications, requiring an increased volume of external support and services.
- An increased presence and involvement by the IMO in the regulatory arena, including outside of Ontario. This will necessitate obtaining specialized support through external consulting services.
- The continued use of customer surveys with a broadening of the population surveyed.

Administration
Administrative costs are budgeted to remain largely constant over the planning period. Administration includes memberships in the Northeast Power Co-ordinating Council, rent, utilities, materials & supplies, rental facilities, building services, and property taxes.

Telecommunications
Telecommunication costs are budgeted to decrease by approximately $0.8 million in 2004, or about twenty per cent. This reduction reflects the cancellation of services associated with DACS. In 2005 and 2006, further minor reductions are budgeted, reflecting continued success in rationalizing services and renegotiating contracts.

OM&A Program Costs By Business Unit
OM&A program costs are set out above by cost type, explaining the associated work. Those same costs are set out by business unit in Appendix 1.

OM&A Pension Expense

As a result of many factors, including reductions in the discount rate and plan returns that are at lower than planned levels, pension expense continues to increase over the planning period. In 2003, the pension expense is anticipated to be $4.2 million, increasing to $7.5 million in 2004, $9.9 million in 2005 and $12.0 million in 2006. The impact of this, from an accounting perspective, is that a component of cost within the business has gone from a revenue item of $2.9 million in 2001 to an expense item of $12.0 million in 2006 – a swing of almost $15.0 million in five years.

This continued large change relative to the 2003 pension expense, which reflects current entitlements, is primarily due to:

- A reduced discount rate; and
- Past actual returns that are lower than the 7.25% long-term expected rate of return, reflecting the poor equity markets of the last three years.

This situation is not unique to the IMO. Corporations are experiencing similar results across the board. The impact of poor equity markets has affected both pension expense, as evidenced above, and the funding position of virtually all defined benefit plans. Recognizing the impact of poor investment returns over the last three years, the IMO is planning on making the following cash contributions to the registered pension plan: $4.4 million in 2003; $5.4 million in 2004; $6.4 million in 2005; and $7.2 million in 2006.

Amortization

The amortization expense over the planning period directly relates to the IMO's plans in terms of capital spending.

Capital Spending
Over the planning period, the intent is to spend $20.0 million per year on capital projects, in addition to $35.0 million for the Day-Ahead Market.

The annual $20.0 million spending level is consistent with the $22.1 million that is forecast for 2003. Given the ongoing need for changes and reprioritization, and consistent with past practice, the IMO does not utilize the business planning process as a mechanism for capital project approval. Rather, through business planning, an appropriate capital envelope for future years is established bearing in mind the suite of candidate projects. The capital funding level of $20.0 million proposed in this business plan reflects the need for the IMO to continue to:

- invest in its information technology infrastructure in each of the next three years ($12.0 million - $15.0 million per year);
- expend resources on improving the market applications that are critical to the reliable operation of the power system and the IMO-Administered Markets ($3.0 million - $6.0 million per year); and
- perform other necessary capital work, such as software purchases and upgrades ($2.0 million per year).

This annual spending level is $5.0 million a year higher than the level identified in the 2003-2005 Business Plan, primarily the result of a need to spend more capital on ensuring the information technology infrastructure is robust, reliable, and current. This realization is not entirely new, since the information technology infrastructure is an area that is constantly changing. However, with more than a year of experience in maintaining the infrastructure supporting the operation of the market and the power system, the requirement for increased future expenditures is more fully apparent. This change in capital spending is consistent with the shortening of asset service lives used for amortizing information technology infrastructure hardware and applications.

In addition to the $20.0 million in capital spending discussed above, the IMO intends on spending capital to put in place a Day-Ahead Market ("DAM"). Feasibility and scope development work continues to be undertaken, and reflects about $3.3 million of Market Evolution Program operating costs planned for 2003 and 2004. Until more of that work is completed, it is not certain if a DAM will be implemented nor is a detailed cost estimate available. Based on the IMO's best estimates at this time, a capital spending level of $35.0 million for DAM is being identified. This estimate makes some allowance for simple nodal pricing implementation. Management will continue to work with market participants and external consultants in further scoping the desired DAM best suited for Ontario. Accordingly, there exists a degree of uncertainty that must be attributed to this estimate. Further discussion on DAM, LMP and the other components of the Market Evolution Program are included in the MEP discussion found on pages 15, 16 and 17 of this document.

Expense over the Planning Period

The following table outlines the amortization expense over the planning period:

Figure 7: Amortization Expense

($ million)	Assets In-Service at the End of 2003	$20 Million of Capital Per Year [6]	Day-Ahead Market [7]	Total Amortization
2003 Projected	49.8	-	-	49.8
2004	51.0	1.5	-	52.5
2005	44.5	6.1	1.5	52.1
2006	35.4	10.7	8.8	54.9

Interest Expense

The interest expense over the planning period is based on the following financing strategy.

Financing Strategy

The long-term debt comprises the following notes payables:

- $275.0 million held by the Province of Ontario, bearing a fixed interest of 6.24% repayable on November 3, 2003, subject to extension provisions contained within the agreement, at which time the interest rate will float based on Bankers Acceptance plus fifty basis points . Under the extension provision, the debt must be repaid no later than March 31, 2005.
- $78.2 million held by Ontario Electricity Financial Corporation ("OEFC"), repayable on May 1, 2009, bearing a fixed interest rate of 7.9%

[6] *Based on an average in-service date of September 1st each year and an average service life of 4.35 years.*
[7] *Based on an in-service date of October 31, 2005 and a service life of four years.*

The debt with OEFC is expected to remain in effect for the duration of the planning period and will result in $6.2 million of interest annually.

The IMO will take advantage of the current extension provisions contained within the $275.0 million loan agreement with the Province of Ontario, while repaying $100.0 million on November 3, 2003 being the date the extension comes into effect. The extension provisions state that the loan will bear interest equal to Bankers Acceptance rate plus fifty basis points, reset quarterly. Over the planning period, the following are the assumed interest rates on this debt:

- November 2003 – April 2004: 3.25%
- May 2003 – July 2004: 3.50%
- August 2004 – March 2005: 4.00%

In 2004, the IMO intends on obtaining credit ratings from no less than two of the major credit rating agencies, in preparation for refinancing the Province of Ontario debt in 2005. The plan is to place the debt via a private placement at floating rates similar to the rates that would be paid under the agreement with the province. Only $125.0 million of the debt held by the province is anticipated to be refinanced at the end of March 2005 reflecting a further repayment of $50.0 million planned in 2005. It is then assumed that cash flows will allow for repayment of $20.0 million in April 2006 and a further $10.0 million in October 2006.

The following are the assumed interest rates on the refinanced debt for the duration of the planning period.

- April 2005 – March 2006: 4.25%
- April 2006 – December 2006: 4.50%

Expense Over the Planning Period

The financing strategy above results in a significant reduction in long-term debt outstanding over the planning period. The resulting interest costs reduce significantly, as follows:

- $21.4 million in 2003
- $12.5 million in 2004;
- $11.9 million in 2005; and
- $11.0 million in 2006.

These interest costs will be partially offset by investment income earned on cash held by the business. The assumed rates of return on investments are 3% in 2004, 3.5% in 2005 and 3.75% in 2006. The assumed average cash balances held are $39.9 million in 2004, $32.2 million in 2005, and $20.9 million in 2006.

The resulting expected investment incomes are:

- $3.2 million in 2003;
- $1.1 million in 2004;
- $1.1 million in 2005; and
- $0.8 million in 2006.

As a result, the budgeted net interest expense is $11.4 million in 2004, $10.8 million in 2005 and $10.2 million in 2006.

Market Evolution Program

The Market Evolution Program ("MEP"), a program that was identified in last year's Business Plan and has been discussed with participants at various forums, continues to move forward in 2004.

As identified in last year's Plan, the Market Evolution Program was developed by the IMO in recognition of the need to evolve Ontario markets - a need endorsed by stakeholders and the Market Surveillance Panel in 2002, and again throughout 2003.

The Market Evolution Program continues to be critical in the IMO's execution of its strategy of creating a more effective, reliable and mature market to better serve the needs of Ontario. A particular focus is being brought to integrating the consideration of the various MEP elements, which include the following:

- Day-Ahead Market
- Wholesale/Retail Market Structure
- Better Optimization Over Time
- Environmental Information Tracking
- Short-term Resource Adequacy
- Long-term Resource Adequacy
- Locational Marginal Pricing

Further details of the MEP, beyond those included on page 14 of this document, can be found on the IMO web site at:
www.theimo.com/imoweb/pubs/consult/mep/mep_overview.ppt
www.theimo.com/imoweb/pubs/consult/mep/mep_pres_MAC2003Feb18.ppt
www.theimo.com/imoweb/pubs/consult/marketDev.asp

Funding of MEP

The budgeted IMO usage fees for 2004-2006 will accommodate the required funding for MEP, with the exception of Environmental Information Tracking ("ET") and the implementation of solutions related to Long-term Resource Adequacy ("LTRA"). ET is expected to be funded through a separate and stand-alone fee, consistent with the related draft regulations. A separate ET fee submission will be made by the IMO to the Ontario Energy Board shortly after the passage of the related regulations. LTRA measures may flow from a combination of other MEP elements, and some approaches may have little or no resource impact on the IMO. Accordingly, no separate funding for the implementation of LTRA measures has been included in this business plan.

The current forecast for the MEP (including DAM) is approximately $45.3 million. This cost forecast is comprised of $5.5 million of costs that will be charged to operations ($3.8 million in 2003 and $1.7 million in 2004) and $39.8 million that will be capitalized. The operating costs are reflected in the total costs for 2003 and 2004, discussed on page 10. The capital costs, excluding ET, are incorporated into capital spending levels discussed on pages 25 and 26.

Financial Statements

Financial statements for the periods 2003 through 2006 are included as Appendix 2 and reflect the revenues, costs, financing strategy, capital spending, and pension funding strategies discussed in this plan.

Fee Proposal

The fees proposed for 2004 reflect the various revenues and costs discussed earlier in this Business Plan, and the use of the accumulated surplus anticipated at the 2003 year-end to hold rates stable at the current level over the planning period.

Revenue Sources

There are several sources of revenue for 2004:

- Cost recovery for services
- Deferral account balance
- Settlement clearing account
- Fees

There is also investment income that is considered as an offset to interest expense, as outlined on pages 27 and 28.

The following sections elaborate on the contributions to revenue requirements for the year 2004 and specific approvals requested from the OEB.

Cost Recovery for Services

The IMO will continue in its plan to recover the cost of services that are directly attributed to a participant, such as training, assessments, and other services on a cost recovery basis. In aggregate, total revenues from cost recovery in 2004 is estimated to be approximately $1.0 million.

Deferral Account Balance

The deferral account balance (i.e. cumulative surpluses) at the end of 2003 is projected to be some $11.5 million. The deferral account is proposed in this Business Plan to be allocated to each of 2004, 2005 and 2006 sequentially until it is utilized. As explained earlier, it is the cumulative surplus balances that would allow the IMO to support a fixed fee structure over the planning period, offsetting the annual operating deficits occurring in each of these years.

Settlement Clearing Account Balance

As per the market rules, at the end of each year, the monies in the IMO settlement clearing account bank account balance, which have been earned from interest on funds in this account, are transferred to the IMO's corporate accounts and applied to off-set the IMO administration charge in the following year. The budgeted revenues in this account are projected at approximately $5.1 million for 2004.

The IMO's Fees

The IMO's fee methodology was approved by the OEB in 2000. The fee structure, which has been in effect since market opening, includes an application fee of $1,000 per application plus a $/MWh usage fee. The application fee revenue is expected to be negligible in 2004.

Usage Fee

This fee is already in place, and it recovers the IMO's revenue requirements. For the period of this Business Plan, a credit from the anticipated deferral account balance as of year-end 2003 is used each year to hold the usage fee at the same level as was in effect in 2002 and 2003.

The calculation of the IMO usage fee starts by calculating the revenues to be recovered by this fee as shown in the following table:

Figure 8: Revenue Requirement for IMO Usage Fee

($ millions)	**2004**	**2005**	**2006**
Revenue Requirements	**156.2**	**157.9**	**165.0**
Less: Other Revenues			
- Settlement clearing account	5.1	5.1	5.1
- Cost recovery for services	1.0	1.0	1.0
- Credit from Deferral Account	1.5	2.1	7.9
Revenue Requirements to be recovered by IMO Usage Fee:	**148.6**	**149.7**	**151.0**

The second step is to estimate the charge determinant for the usage fee. It is the total AQEW (Allocated Quantity of Energy Withdrawn) for the year, including exports out of Ontario.

Figure 9: Charge Determinant for Usage Fee

Year	**18-Month & 10-year Outlook Demand Forecast (TWh)**	**-**	**Transmission Line Losses (TWh)**	**+**	**Exports (TWh)**	**=**	**Forecast AQEW (TWh)**
2004	154.8	-	4.6	+	4.8	=	155.0
2005	156.0	-	4.7	+	4.8	=	156.1
2006	157.5	-	4.7	+	4.7	=	157.5

The third step is the rate calculation:

Figure 10: Rate Calculation

Year	**Revenue Requirement To Be Recovered ($ Million)**	**/**	**Forecast AQEW (TWh)**	**=**	**Usage Fee ($/MWh)**
2004	148.6	/	155.0	=	0.959
2005	149.7	/	156.1	=	0.959
2006	151.0	/	157.5	=	0.959

The usage fee level proposed is unchanged from the fee charged in 2002 and 2003.

APPENDIX 1: OM&A PROGRAM COSTS BY BUSINESS UNIT

($ Millions)	2003 Budget	2003 Projected	2004	2005	2006
Information, Technology and Infrastructure	36.6	31.8	31.6	32.2	33.1
Market Operations and Forecasts	20.3	18.9	21.3	22.1	22.9
Market Services	10.4	9.8	10.6	11.2	11.5
Corporate and Legal Affairs	6.3	6.1	6.8	7.0	7.2
Finance	4.5	4.2	4.5	4.7	5.0
Chief Executive Officer	3.3	3.2	3.3	3.3	3.3
Human Resources	2.6	2.6	2.8	2.7	2.8
Market Assessment and Compliance	2.1	2.0	2.2	2.3	2.3
Internal Audit	1.4	0.9	1.4	1.0	1.2
Board of Directors	1.7	1.4	1.3	1.3	1.3
Corporate Items	2.0	1.9	4.8	7.2	9.3
Total OM&A	**91.2**	**82.8**	**90.6**	**95.0**	**99.9**
Less: Pension Expense	**4.3**	**4.2**	**7.5**	**9.9**	**12.0**
Total OM&A Program Costs	**86.9**	**78.6**	**83.1**	**85.1**	**87.9**

APPENDIX 2: PRO FORMA FINANCIAL STATEMENTS

Pro Forma Statement of Operations and Accumulated Surplus/(Deficit)
For the Year Ended December 31
(in Millions of Canadian Dollars)

	2003 Budget	2003 Projection	2004	2005	2006
REVENUES					
IMO usage fees	$145.0	$149.3	$148.6	$149.7	$151.0
Settlement clearing account	1.1	5.0	5.1	5.1	5.1
Cost recovery for services	0.9	1.1	1.0	1.0	1.0
Total Revenues	$147.0	$155.4	$154.7	$155.8	$157.1
EXPENSES					
OM&A program costs	86.9	78.6	83.1	85.1	87.9
OM&A pension expense	4.3	4.2	7.5	9.9	12.0
Market evolution program	7.3	3.8	1.7	-	-
Amortization	46.0	49.8	52.5	52.1	54.9
Interest	20.3	18.2	11.4	10.8	10.2
Total Expenses	$164.8	$154.6	$156.2	$157.9	$165.0
Operating Surplus/(Deficit)	(17.8)	0.8	(1.5)	(2.1)	(7.9)
Accumulated Surplus - Beginning of the year	10.7	10.7	11.5	10.0	7.9
Accumulated Surplus/(Deficit) - End of Year	**$(7.1)**	**$11.5**	**$10.0**	**$7.9**	**-**

APPENDIX 2: PRO FORMA FINANCIAL STATEMENTS, CONTINUED

Pro Forma Statement of Financial Position
As at December 31
(in Millions of Canadian Dollars)

	2003 Budget	2003 Projec-tion	2004	2005	2006
ASSETS					
Current Assets					
Cash & cash equivalents	$9.2	$33.7	$43.5	$17.2	$20.2
Temporary investments	-	6.3	7.6	9.0	10.5
Accounts receivable	15.2	15.0	15.0	15.0	15.0
Short-term prepaid expenses	1.5	1.5	1.5	1.5	1.5
	25.9	**56.5**	**67.6**	**42.7**	**47.2**
Property & Equipment					
Propery & equipment in service	344.2	329.3	355.5	410.5	430.5
Less: accumulated amortization	(108.0)	(111.9)	(164.4)	(216.5)	(271.4)
	236.2	217.4	191.1	194.0	159.1
Construction-in-progress	5.0	6.2	25.0	-	-
	241.2	**223.6**	**216.1**	**194.0**	**159.1**
Prepaid pension expense	**20.1**	**24.6**	**22.5**	**19.0**	**14.2**
TOTAL ASSETS	**$287.2**	**$304.7**	**$306.2**	**$255.7**	**$220.5**
LIABILITIES					
Current Liabilities					
Accounts payable & accrued liabilities	$12.5	$12.4	$12.5	$12.4	$12.4
Accrued interest	2.7	1.7	1.9	0.9	0.9
	15.2	**14.1**	**14.4**	**13.3**	**13.3**
Long-term debt	**253.2**	**253.2**	**253.2**	**203.2**	**173.2**
Other post employment benefits	**25.9**	**25.9**	**28.6**	**31.3**	**34.0**
TOTAL LIABILITIES	**294.3**	**293.2**	**296.2**	**247.8**	**220.5**
ACCUMULATED SURPLUS/(DEFICIT)	**(7.1)**	**11.5**	**10.0**	**7.9**	**-**
TOTAL LIABILITIES & ACCUMULATED SURPLUS/(DEFICIT)	**$287.2**	**$304.7**	**$306.2**	**$255.7**	**$220.5**

APPENDIX 2: PRO FORMA FINANCIAL STATEMENTS, CONTINUED

Pro Forma Statement of Cash Flows
For the Year Ended December 31
(in Millions of Canadian Dollars)

	2003 Budget	2003 Projecti-on	2004	2005	2006
OPERATING ACTIVITIES					
Operating surplus/(deficit) for the period	$(17.8)	$0.8	$(1.5)	$(2.1)	$(7.9)
Amortization	46.0	49.8	52.5	52.1	54.9
Decrease in prepaid pension expense	4.3	4.2	7.5	9.9	12.0
Increase in other post employment benefits	2.5	2.5	2.7	2.7	2.7
Changes in non-cash items related to operations	(2.9)	(3.8)	0.3	(1.1)	-
Cash Provided from Operations	**$32.1**	**$53.5**	**$61.5**	**$61.5**	**$61.7**
INVESTING ACTIVITIES					
Net (purchase)/sale of temporary investments	65.2	58.9	(1.3)	(1.4)	(1.5)
Investment in property & equipment	(35.9)	(22.1)	(45.0)	(30.0)	(20.0)
Pension contributions	-	(4.4)	(5.4)	(6.4)	(7.2)
Cash Provided/(Used) in Investing Activities	**$29.3**	**$32.4**	**$(51.7)**	**$(37.8)**	**$(28.7)**
FINANCING ACTIVITIES					
Retirement on long-term debt	(100.0)	(100.0)	-	(50.0)	(30.0)
Cash Used in Financing Activities	**$(100.0)**	**$(100.0)**	**-**	**$(50.0)**	**$(30.0)**
NET CHANGE IN CASH FLOW	**(38.6)**	**(14.1)**	**9.8**	**(26.3)**	**3.0**
CASH & CASH EQUIVALENTS - BEGINNING OF YEAR	**47.8**	**47.8**	**33.7**	**43.5**	**17.2**
CASH & CASH EQUIVALENTS - END OF YEAR	**$9.2**	**$33.7**	**$43.5**	**$17.2**	**$20.2**