

SHARED SERVICES - INFORMATION TECHNOLOGY

1.0 OVERVIEW

Information Technology (“IT”) refers to computer systems (hardware, software and applications) and data and voice communication systems that support business processes and allows employees to perform work activities.

IT work programs include both OM&A and capital items and include the ongoing maintenance and sustainment of existing and newly commissioned applications and technologies; the development and implementation of new technology processes; the provision of Business Telecom services; and the overall management and control of information technology capital projects. IT capital investments are made in accordance with approved business strategies and are described in Exhibit D1, Tab 3, Schedule 6.

OM&A costs associated with supporting Hydro One’s information technology assets are shown in Table 1 and are described below.

Table 1
Information Technology Summary of OM&A Expenditures
 (\$ Millions)

Description	Historic			Bridge	Test		DX Allocation	
	2006	2007	2008	2009	2010	2011	2010	2011
Sustainment	60.2	63.9	72.4	84.7	92.7	96.0	51.5	53.3
Development ¹	8.9	6.0	2.8	4.2	10.6	11.1	5.9	6.2
Business Telecom	18.6	17.2	17.2	18.9	22.5	23.2	10.4	10.7
IT Management & Project Control	5.0	6.7	7.5	16.4	23.9	24.9	11.3	11.7
Total Cost	92.7	93.8	99.9	124.2	149.8	155.3	79.1	81.9

¹ Cornerstone Development OM&A costs are shown in Exhibit C1, Tab 2, Schedule 10.

1 Sustainment costs are paid to Inergi LLP (“Inergi”) pursuant to the Outsourcing Contract.
2 March 1, 2010 will mark the start of year 9 of the 10 year contract. Sustainment costs are
3 costs to support the Hydro One information technology applications and technology
4 infrastructure

5

6 In 2009 and 2010 sustainment costs increase as the Cornerstone Phase 1 and Phase 2
7 projects move from project status into “in-service” status. When projects are “in-service”
8 the costs to sustain the applications are included in Sustainment costs. For 2009,
9 sustainment costs include full year costs for the Cornerstone Phase 1 implementation and
10 partial year costs for the Cornerstone Phase 2 implementation (post August 2009 go live
11 date). Costs for 2010 and 2011 are for full year sustainment costs for both Phase 1 and 2
12 implementations. Additional incremental costs are attributed to growth in license costs
13 due to company headcount increases as well as Enterprise Geo-Spatial Information
14 System (“GIS”) license and support contract renewal.

15

16 IT Development OM&A includes impacts of capital development projects, such as pre-
17 project costs, proof-of-concept pilots, business process re-engineering and
18 decommissioning, as well as development, enhancement and upgrade of non-capital IT
19 applications.

20

21 2010 and 2011 development costs include business improvement and enhancement work
22 within SAP and ancillary systems including associated business processes. Expenditures
23 include keeping the core systems within the vendors’ upgrade path as well as highlighting
24 business improvement areas through enhanced analytics and reporting.

25

26 Business Telecom costs include data and voice telecommunications and associated
27 maintenance of Hydro One’s telecom network, such as the addition of more bandwidth to
28 meet business performance requirements. Changes in costs vary directly with the number
29 of offices, their locations and the size of Hydro One’s workforce.

1

2 IT Management and Project Control costs relate to IT administration, project oversight
3 and reporting, program and spend coordination, and Quality Assurance (“QA”)/Quality
4 Control (“QC”) processes.

5

6 2009 and 2010 IT management costs increase due to the transfer of two departments into
7 IT due to the complementary nature of these groups. 2009 costs include the addition of
8 the Enablement Department (from Finance) for driving company-wide productivity
9 through enterprise process improvements and ensuring Hydro One leverages SAP and
10 related assets to their full potential. This includes adding new system functionality where
11 it delivers increased end user productivity, quality of work, and other measurable
12 business improvements. 2010 costs include the addition of the Information Assets
13 Department (from Asset Management) for managing data and applications in the domain
14 of bulk power systems assets and customer connectivity in support of key business
15 requirements such as IESO equipment registration, power system planning, network
16 modeling, work management, rate development, settlements, and connection agreements.

17

18 Technology costs are subject to an IT governance process at Hydro One. IT Governance
19 has evolved from a project centric model to a more structured corporate enterprise wide
20 model which looks proactively at IT strategy, project expenditures and service delivery is
21 integral to allowing the lines of business to meet their objectives and aligns technology
22 spend with business and corporate objectives.

23

24 The IT governance model involves the senior business managers who provide guidance,
25 direction and support to the decision-making for corporate technology decisions. The
26 Line of Business executives act as an IT Steering Committee to which the CIO reports to
27 at regular intervals ensuring alignment between business needs and technology solutions.
28 The Steering Committee’s mandate is to review and prioritize IT investments on a
29 corporate enterprise basis.

30

1

2 **2.0 IT SUSTAINMENT OM&A**

3

4 Table 2 shows the specific expenditures for IT sustainment of the Information
 5 Technology infrastructure.

6

Table 2

7

OM&A Sustainment of Information Technology

8

(\$ Millions)

Description	Historic			Bridge	Test		DX Allocation	
	2006	2007	2008	2009	2010	2011	2010	2011
Base IT Sustainment Services	45.9	43.5	51.4	53.4	54.4	55.0	29.1	29.5
OMS Incremental Sustainment	6.8	6.5	6.2	6.2	6.1	6.0	4.9	4.8
Other Incremental Sustainment	7.5	13.9	14.8	25.1	32.2	35.0	17.5	19.0
Total	60.2	63.9	72.4	84.7	92.7	96.0	51.5	53.3

9

10 IT OM&A Sustainment work includes help desk support; implementing system patches;
 11 applying fixes for application, resolving application problems; security patching;
 12 decommissioning or installing software applications or equipment; maintaining and
 13 operating Hydro One equipment located at offices and the data centre: data storage
 14 capacity and data storage management; help desk support and facilities leases.

15

16 Sustainment OM&A costs also include amounts which are paid to third parties for
 17 software licenses, annual maintenance fees and equipment operating leases.

18

19 IT sustainment work is broken down into the three categories discussed below.

20

21 **2.1 Base IT Sustainment Services**

22

23 The term “Base” IT Sustainment Services refers to those IT services, including the
 24 sustainment services discussed above, that were part of the original scope of work

1 outsourced in March, 2002 to Inergi and which are scheduled in the negotiated contract.

2 The Inergi contract was entered into through a competitive bid process.

3

4 Base IT services include charges for Inergi pension costs (approximately \$1.5 million
5 each year) and the Base IT costs are adjusted for Cost of Living changes (COLA).

6

7 The COLA factor is “based upon the Statistics Canada Indices of total wages, salaries,
8 and supplementary labour income in Ontario, and total number of employees in Ontario”
9 and uses 2001 as a base year. The COLA factor for each year is calculated by comparing
10 the annual Statistics Canada Indices for that year with the 2001 values.

11

12 In 2009 the COLA cost factor was \$9.9 million. In 2010 it is estimated at \$11.3 million
13 and in 2011 at \$11.3 million.

14

15 Base IT services are discussed under the five categories below.

16

17

1 Hardware Maintenance/Software License Fees

2

3 Application software license costs and maintenance fees are costs paid to third party
4 vendors for software applications which are used by Hydro One.

5

6 At the inception of the outsourcing agreement \$13.4 million of application costs were
7 transferred to Inergi to administer on a pass through basis. Over time many of these
8 contracts have migrated back to Hydro One, and are now administered by Hydro One. In
9 the test years the remaining administered contract cost reflected in the base fee is \$4.0
10 million. Contract costs which are now being managed by Hydro One, and administered
11 by Inergi, are reflected in Other Incremental Sustainment costs.

12

13 License or maintenance agreements are usually subject to annual increases as part of the
14 contractual terms with the vendor. These fees are subject to annual audits by third party
15 vendors to confirm the fees match the services provided.

16

17 Application Support

18

19 Application support includes the work to maintain, address and fix matters associated
20 with approximately 680 Hydro One business applications used by the various business
21 units across the Province. Within these applications there are strategic or business critical
22 software applications used in major functional areas, such as those shown in Table 3,
23 which support business processes across the enterprise.

24

25 Based on support levels established by IT and the respective business operations,
26 applications are managed in a problem management framework. Application problems
27 and user inquiries are logged, prioritized, and managed through to resolution.

28

1

Table 3

2

Strategic Information Technology Systems

IT Systems	Description
Desktop Applications	These include Microsoft Office XP/2003 (for example, Word, Excel, Access, and PowerPoint), e-mail, Internet browser, and various other applications such as anti-virus and directory functions. Hydro One's e-mail system processes approximately 80,000 e-mails per day.
SAP™	<p>This is an integrated enterprise asset management (EAM) application suite that provides Asset and Work Management, Purchasing and Supply Chain functions as well as Inventory Management functions. The application is being implemented through a series of phases which will see it replace the Peoplesoft application in 2009.</p> <p>In order to be compliant with Federal Tax regulations Hydro One is required to retain the Passport application as a reference application for the next 7 years. Some support costs are required to maintain the Passport system and the related database to be compliant with regulatory requirements.</p>
PeopleSoft™	<p>This Financial and HR application suite provides General Ledger, Accounts Receivable, Fixed Assets, Project Accounting, Payroll, and Pension functions. These applications are planned to be replaced or upgraded as part of the Cornerstone Program. Work has commenced through Cornerstone Phase 2 to replace these systems as part of the Cornerstone project.</p> <p>After their replacement these applications will also need to be archived to enable Hydro One to be compliant with federal tax regulations</p>
Customer Information System	The CIS is an application suite providing billing and services support through sub-systems of Customer Service System (CSS) and Open Market Systems that interface with each other. The CIS application is also scheduled for replacement under the Cornerstone Program though no replacement application has been selected. Timing of the application replacement is partially dependent on the timing and implementation of Smart Metering.
Contact Centre Technology	This suite of applications enables contact centre operators to respond to customers (service requests, billing inquiries, information), including telephony interfaces and call centre technology and provides operators scheduling and service quality-monitoring functions.
Open Market Systems (OMS)	These are a set of applications that provide for meter data collection, sending/receiving of electronic business transactions with market participants, bill calculations, and settlement functions with the Independent Electricity System Operator.
Field Design Tool (ArcFM)	This is a geographic application that is used to design and modify customer connections to the electrical distribution system.
Outage Response Management	ORMS is used for the reporting of distribution outages and managing the service

IT Systems	Description
System (ORMS)	restoration, which includes outage repair scheduling and dispatching of field crews
Work Execution Project (WEP)	WEP consists of 3 applications (Pragmacad, P3e,e-time) which are used to plan, schedule, dispatch and report on work completion. The applications are used for work planning, crew scheduling and for both planned and unplanned field work. The applications are “out of the box” and are cross linked to ArcFM, Passport and to Customer One through the use of the enterprise bus or enterprise middleware.

1

2 Data Centre Services

3

4 Data centre services include the operations, maintenance, and management of hardware
5 (servers, mainframe, storage area network and data storage devices), operating systems,
6 associated applications and infrastructure located at the data centre facilities. This
7 hardware is used to run enterprise business applications, noted above, such as SAP,
8 PeopleSoft, Market Ready OMS and the Customer Information Systems that are critical
9 to operating the business.

10

11 Data Centre service levels have been established to ensure the reliable operation of
12 business applications and are based on system criticality. The system hardware is located
13 at production and development data centres, which have the required system
14 redundancies including 24/7 monitoring. Hydro One utilizes the development and test site
15 as a back up data centre facility or Disaster Recovery site in the case it is unable to
16 operate from its production data centre.

17

18 Distributed Server Sustainment

19

20 Distributed server sustainment includes the support services that maintain and operate the
21 application and file servers that are located at various Hydro One facilities across the
22 province. The servers are used to run business applications and administration systems
23 such as file sharing, e-mail exchange, web hosting and security monitoring systems. This

1 work is required to maintain the reliability of the servers and the business applications
2 supporting business operations.

3
4 Help-Desk & Desktop Support

5
6 Help-Desk and Desktop Support includes daily and emergency IT maintenance services
7 delivered to employees across the Province.

8
9 The support function is provided through two key service areas: the Help Desk which
10 provides centralized call handling through a 1-800 number and through e-mail; problem
11 resolution and escalation or referral for all IT and telecom service areas; and Desktop
12 Workstation Support which provides physical desk side support to fix hardware and
13 software problems for laptops, desktops and rugged tablet computers. Desktop
14 Workstation Support includes the support for IT peripherals such as printers, plotters,
15 scanners and other equipment. Help Desk support includes work comprising a number of
16 functions including handling trouble calls, trouble or requested service e-mails, providing
17 application support and resetting or enabling application or system passwords.

18
19 Desktop and Help Desk support is available to all users across the province and
20 assistance can be provided by telephone, remotely through the data network, or if
21 necessary through the use of Inergi field technicians. On a monthly basis, approximately
22 7,000 help desk calls are logged, dealt with and cleared. Effective and timely response to
23 these calls ensures the efficient operation of the technology infrastructure which enables
24 Hydro One staff to perform their work unimpeded.

25
26 **2.2 Open Market Systems (“OMS”) Incremental Sustainment**

27
28 This category is incremental to the base sustainment identified and was sourced to Inergi
29 in 2002. Specifically, the work addresses OMS and consists of the support functions

1 performed to sustain the OMS hardware and software applications. The OMS is
2 comprised of a suite of software applications that have been bundled together to provide
3 the required functionality using service oriented architecture and middleware
4 applications. The support for the OMS was contractually “locked in” and is supported by
5 Inergi at an annual cost of \$6.1 million in 2010 and \$6.0 million in 2011. The OMS suite
6 is used to enable wholesale and retail settlement processes. The processes provide
7 interaction with the IESO and other market participants and are required for the business
8 to operate under the Province’s open market policies, driven in part by the *Electricity Act,*
9 *1998* and related legislative policies.

10

11 **2.3 Other Incremental Sustainment**

12

13 Other Incremental Sustainment includes additional sustainment services provided in order
14 to support and manage hardware and business applications, commissioned since March,
15 2002. These costs include license and software costs (which have transferred to Hydro
16 One as noted earlier in Section 2.1), new services, as well as volumetric changes in
17 service levels due to staff growth and new business requirements.

18

19 New applications are being continually commissioned or added to meet evolving business
20 requirements. Additionally service levels increase as demand for services increase.
21 Contractually, Hydro One is required to pay for these increased service levels and is
22 required to purchase revised volumes (“lock in”) when service level demand meets
23 specific volumes. Since 2002, the incremental sustainment cost has increased as
24 additional hardware and applications have been added annually through capital projects,
25 such as Cornerstone, and also through development projects.

26

27 As noted above, included in the Incremental Sustainment charges are costs related to
28 additional application software licences or supported services, volume changes, hardware

1 maintenance costs for new equipment, as well as contracts which when they expired were
2 transferred back to Hydro One for direct payment.

3
4 The increase in support costs for the SAP application modules implemented in
5 Cornerstone Phase 1 is \$2.8 million for 2009 compared to 2008 as 2009 represents a full
6 year of sustainment (June 2008 go live). Estimated application support costs for
7 Cornerstone Phase 2 after the project warranty period is \$1.0M in 2009. 2010 and 2011
8 include SAP application support costs estimated at \$10M for full year support for both
9 Phase 1 and Phase 2 implementations. It is anticipated that overall SAP sustainment
10 costs will decrease in subsequent years as the application and support services stabilize.
11 This will be counter-balanced with the addition of new SAP functions and further
12 integration of other enterprise applications into SAP.

13
14 New sustainment costs in 2009 are application costs for projects such as Sharepoint and
15 Enterprise Content Management. Cost increases are expected for growth in 3rd party
16 contracts due to increases in license counts and costs for Microsoft Enterprise License
17 Agreement, BEA support agreement renewal, IBM H/W maintenance renewal, and HP
18 Mercury test tools.. 2010 will include further incremental license costs for additional
19 growth as well as for Enterprise GIS license and support contract renewal.

20
21 Cost increases are projected for growth in data storage services and through making
22 additional enterprise or business critical applications available in a disaster scenario, such
23 as the CADD engineering and Blackberry applications. These increased annual costs are
24 included in the total incremental sustainment costs for 2009 and onwards.

25
26 A list of planned incremental capital projects, excluding Cornerstone, which in turn will
27 create incremental sustainment needs when these projects are commissioned, is found in
28 Exhibit D1, Tab 3, Schedule 6.

29

1 **3.0 IT DEVELOPMENT OM&A**

2

3 Table 4 lists the expenditures driven by non-Capital small IT projects and the OM&A
 4 portions of capital projects.

5

Table 4

6

OM&A Development Expenditures

7

(\$ Millions)

Description	Historic			Bridge	Test		DX Allocation	
	2006	2007	2008	2009	2010	2011	2010	2011
Small Projects	9.1	5.6	2.7	3.9	10.4	11.0	5.8	6.2
Impact of Capital Projects	(0.2)	0.3	0.1	0.3	0.2	0.1	0.1	0.0
Total	8.9	6.0	2.8	4.2	10.6	11.1	5.9	6.2

8

9 **3.1 Small Projects**

10

11 Small Projects include those individual projects that are valued at less than \$2 million
 12 each and do not meet Hydro One's accounting requirement for capitalization. Small
 13 projects include enhancements made to existing applications or new software for minor
 14 process automation improvements, software upgrades or task defined software
 15 replacements.

16

17 The number of small projects and the associated small project costs varies each year
 18 depending on the work projects requested by the lines of business to meet their needs and
 19 programs. Small projects costs and programs are reviewed with the IT steering committee
 20 on a regular basis.

21

22 Small project costs for 2009 include application rationalization, upgrades to the ArcFM
 23 GIS application, enhancements to workflow and customer relationship management
 24 systems in support of Distributed Generation connections, and changes to the customer

1 information system to support rate changes and other enhancements. Expenditures in 2010
2 include completion of the call centre IVR application upgrade, purchase of additional
3 security software and continuing application upgrade work. 2011 costs include
4 continuation of business-driven application enhancements as well as application/database
5 rationalization.

6

7 With the transfer of the Enablement organization (refer to section 5.0 for a description of
8 Enablement) from Finance into IT, their business improvement and enhancement work
9 program is added to this category of expenditures as of 2010. The work is similar to small
10 projects with a focus on leveraging SAP assets and ancillary systems to their full
11 potential including associated business processes, data and interfaces.

12

13 Expenditures in 2010 include: enhancements to enterprise analytics and reporting by
14 further leveraging SAP Business Intelligence/Business Warehouse (BI/BW); performance
15 management improvements through the development of key performance indicators
16 (KPI's) for SAP-enabled processes; and improvements to work management and supply
17 chain processes. 2011 costs include a continuation of these processes and system
18 enhancements including keeping enterprise systems within the vendors' upgrade paths as
19 well as leveraging the KPI's to streamline processes and systems for greater efficiency
20 and productivity.

21

22 **3.2 Impact of Capital Projects**

23

24 The item "Impact of Capital Projects" includes business process re-engineering costs
25 such as training and change management work efforts that are required to implement and
26 train the line of business personnel when new or revised IT applications are introduced.
27 These costs are associated with the IT capital projects discussed under Exhibit D1, Tab 3,
28 Schedule 6, and do not include any Cornerstone related costs, and typically reflect an
29 OM&A cost equal to 10% of the Capital project.

1

2 In accordance with Hydro One's accounting practices, the cost associated with this
 3 implementation work (training and business process change) is not capitalized. The
 4 implementation work ensures each new business application or upgrade is properly
 5 introduced and has the necessary user understanding and support.

6

7 **4.0 BUSINESS TELECOM**

8

9 Business Telecom provides the data and voice telecommunications services, network
 10 operations management and field service repairs which are required for the company to
 11 operate from its province wide locations. The business telecommunications data network
 12 is comprised of a mixture of company owned and leased facilities and equipment. Costs
 13 incurred in this area are primarily costs for third party services.

14

15

Table 5

16

Business Telecom OM&A Expenditures

17

(\$ Millions)

Description	Historic			Bridge	Test		DX Allocation	
	2006	2007	2008	2009	2010	2011	2010	2011
Operations and Carrier Management	3.2	4.2	4.4	4.8	5.0	5.2	2.3	2.4
Field Services	4.1	3.8	2.7	3.5	4.5	4.3	2.1	2.0
Voices Services	5.4	4.1	4.7	4.9	6.1	6.3	2.8	2.9
Data Network Services	6.0	5.1	5.4	5.7	6.9	7.4	3.2	3.4
Total	18.6	17.2	17.2	18.9	22.5	23.2	10.4	10.7

18

19 The work involved in ensuring adequate Business Telecom services for the company is
 20 \$18.9 million in 2009 and \$22.5 million in 2010. Increases from 2009 reflect increase in
 21 services for the increased size of the Hydro One workforce, the increase in costs for

1 services provided by Hydro One Telecom and in 2010 an expected ongoing increase in
2 costs associated with the renewal of the Bell contract.

3
4 **4.1 Operations and Carrier Management**

5
6 Operations and Carrier Management costs relate to telecommunications management
7 services provided by Hydro One Telecom. Hydro One Telecom (“HOT”) provides both
8 power system telecommunications monitoring and network operations monitoring for the
9 power system and the business operations of Hydro One. Costs reflected in Operations
10 and Carrier Management reflect the contracted costs with HOT to provide Hydro One
11 with telecommunication management services and operations oversight and control for its
12 business operations. The affiliate agreement is found in Exhibit A, Tab 8, Schedule 3.

13
14 In 2005 an independent industry review concluded that the service level agreement for
15 the Hydro One Telecom operation centre, and for the services provided by it, reflects
16 market conditions and that Hydro One Telecom has provided an advantage to Hydro One
17 in respect of telecom administration and the resultant costs. The study also concluded
18 there are unique requirements for operating the telecommunication system of an electric
19 utility which are not easily delivered through a third party non-electric utility carrier.

20
21 In 2006 and 2008 updated independent assessments were undertaken by The Shpigler
22 Group to benchmark the costs of services being provided by Hydro One Telecom. The
23 assessment process included looking at the contracts and statement of work for services
24 to be covered in the regulatory review period. The reports considered the revised services
25 which will be performed in the years covered and the costs to be charged by Hydro One
26 Telecom in providing those services.

27
28 Consistent with the opinion provided in earlier studies undertaken, the 2008 study states:
29 “In our opinion, the unique voltage potential of a power system has created the need for

1 electric utilities to create their own telecommunications entities that can isolate and
2 insulate the telecommunication infrastructure, which protects communications during
3 electrical disturbances. Protecting electrical equipment requires sophisticated systems
4 that need to communicate between substations and power plants. The need to isolate
5 electrical and telecommunications facilities for safety and service reliability has
6 supported the development of large utility telecommunication entities. Even with fiber
7 optic channels negating some interfacing concerns, the need for end electronics
8 equipment to interface with optical equipment at risk to voltage surges still exists.
9 Network operation centers of public and private telecommunications companies rarely
10 have the experience or knowledge necessary to manage a power systems
11 telecommunication system. Therefore, for benchmarking purposes, we determined that
12 the most meaningful and comparative data would need to be obtained from similar
13 Canadian utility telecommunication entities.”

14
15 The report concluded the proposed contracted costs for 2009 and 2010 are indicative of
16 fair market value. The reports reaffirmed the conclusion that Hydro One obtains
17 commercial and operations benefit through its relationship with Hydro One Telecom.
18 These costs were deemed acceptable by the Board in the EB-2008-0272 Transmission
19 proceedings.

20
21 The increase in 2009 reflects the added security monitoring services implemented during
22 2008, and a further increase in network size and monitoring requirements. 2010 and 2011
23 reflects a general increase in costs rather than additional services.

24
25 Work performed by Hydro One Telecom includes operating and monitoring the business
26 telecom and data networks, management of security firewalls, security patching,
27 management of network interfaces with third parties, spam control, managing data and
28 voice system problems, obtaining and managing fibre services from third party vendors,
29 and directing other telecom service providers and vendors to change, maintain, and

1 restore the networks as required. On an ongoing basis, this function includes managing
2 third party supplier contracts as well as analyzing and processing bill payments to 3rd
3 party common carriers and other telecom service providers.

4
5 Telecom service firms who provide fibre and network access include common carriers
6 such as Bell Canada, Telus and MTS/Allstream. These companies lease telecom data and
7 voice circuits to Hydro One at competitive market rates. The management of these
8 services requires the contracted services of Hydro One Telecom to proactively liaise with
9 the many common carriers in Ontario and other service suppliers.

10
11 Operations and Carrier Management also provides oversight of the Bell Field Services
12 contract as described below.

13
14 **4.2 Field Services**

15
16 Field Services includes the maintenance and repair of voice and data telecom equipment.
17 Field Services also includes the handling of connection changes for moves, additions,
18 changes, and deletions (“MACDs”). Since 2004 this work has been outsourced to Bell
19 Canada after a competitive process.

20
21 The Bell Canada maintenance agreement evolved from a time and materials arrangement
22 into a three-year contract with an extension option. Hydro One has exercised this option
23 for another two years to August of 2009. Additional costs in 2009 reflect the tendering of
24 this contract and associated costs for negotiating a new agreement. Through the
25 competitive tendering processes, costs in 2010 are anticipated to be higher than the
26 current costs paid under the existing contract. Increased costs are also anticipated in 2010
27 and 2011 to accommodate staff additions and relocations in support of the capital work
28 program.

1 The MACD agreement was based on a competitive bid process that was undertaken
2 earlier in 2004 and applied to Hydro One's provincial support requirements for data and
3 voice support. The agreement came into operation in September 2004 with the first full
4 year of operations under the agreement being 2005. This agreement calls for Bell Canada
5 technicians to be dispatched to resolve any telecommunications issues. These include
6 MACDs and preventive maintenance at any of the Hydro One sites across the entire
7 Province. Selected Bell Canada staff has been specifically trained to work at the Hydro
8 One sites and facilities and to work safely in a high voltage environment.

9

10 **4.3 Voice Services**

11

12 Voice Services investments consist of payments made to common carriers and vendors to
13 use and lease voice circuits and equipment. Rates charged by common carriers are
14 competitive. Voice Services include monthly charges, usage fees and equipment rentals
15 for voice grade business telecom (local and long distance).

16 Cost increases in 2006 reflect additional charges for bills in dispute between Hydro One
17 and a large carrier. These invoices were resolved and resulted in a one-time increase in
18 costs for data and voice services.

19

20 Costs increases in 2010 and 2011 reflect an increase in headcount and new site builds
21 due to growth in real estate to accommodate increased core SDO work programs, largely
22 due to the *Green Energy and Green Economy Act, 2009*.

23

24 Total Voice Service costs have varied over time as a result of contract renewals and
25 renegotiations. Hydro One obtains discounted market level services and rates as part of
26 the effective management of telecom services.

27

1 **4.4 Data Network Services**

2

3 Data Network Services investments consist of payments made to third party common
4 carriers such as Bell, MTS/Allstream, and Telus to lease data network circuits and
5 equipment at market rates. The data network is used to connect servers and computers
6 across the province for software applications.

7

8 Hydro One continues to monitor and upgrade band width as applications are deployed to
9 field offices in order to support business processes and business requirements.
10 Bandwidth upgrades have occurred in each of 2006, 2007 and 2008 as part of a regular
11 review of application performance at Hydro One’s office sites.

12

13 While network capacity grows each year to accommodate sharing more data among more
14 functions, to address increases in office size and to address connectivity requirements
15 from distributed enterprise applications, the Company has maintained strong cost control
16 on data network components. Downward cost pressure is maintained through
17 investments in efficient up-to-date IT hardware and by ensuring a competitive process for
18 services.

19

20 **5.0 IT MANAGEMENT & PROJECT CONTROL**

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22 Table 6 lists the associated costs for IT Management and for Project Support and Control.

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Table 6
IT Management & Project Control Expenditures
 (\$ Millions)

Description	Historic			Bridge	Test		DX Allocation	
	2006	2007	2008	2009	2010	2011	2010	2011
IT Management	4.2	5.6	4.4	12.0	18.1	19.5	8.0	8.7
Project Support and Control	0.8	1.1	3.1	4.4	5.8	5.4	3.3	3.0
Total	5.0	6.7	7.5	16.4	23.9	24.9	11.3	11.7

As the enabler and project controller, IT Management and project Support and Control develops and implements IT strategies, policies and processes along with IT architectural standards for application interoperability, infrastructure capacity, network security, regulatory compliance and IT governance, and telecom capabilities and communications security. Within the scope of these costs is work associated with hardware procurement, training, detailing vendor responsibilities, architecture development, and research services that are required to match IT solutions to known business needs and opportunities. Work performed also includes keeping current on industry trends, product innovations, technology changes in infrastructure and applications, research, as well as planning for future investments.

IT Management includes the cost to coordinate, manage and plan the extensive IT infrastructure, to manage the daily issues around IT outsourced services, and to oversee projects. IT Management performs work covered through needs assessment, business case preparation, planning, development, and service delivery to the lines of business.

Projects or programs that the IT Management or Project Support and Control will manage or deliver in 2010 and/or 2011 including Mobile IT, Bar Coding and Warehouse Management, development and application migration; architectural design and compliance policies (particularly around SAP); application rationalization; data

1 architecture and data management; updating IT policies and technology roadmaps; Bill
2 198 compliance; ongoing security requirements and enhancements (including Cyber
3 security) including documentation, training and testing; re-architecting and implementing
4 the Sharepoint collaborative user application as an enterprise application; negotiation of
5 contracts ; supporting hardware purchases for major projects (Cornerstone, Smart Meter)
6 and for growth; supporting the outsourcing renewal process with Inergi; implementation
7 of the Enterprise Content Management project for record retention; and selection and
8 implementation of more self service products for end users. In addition to the above,
9 project support and control functions will provide QA/QC review and compliance
10 verification on 3rd party work, and provide an unbiased perspective on RFP technology
11 assessments. 2010 and 2011 will also include additional costs related to the Inergi
12 Outsourcing contract reaching end of term. Services will be required to establish new
13 outsourcing terms and to procure and negotiate a new outsourced services contract.

14
15 2009 (and onward) expenditures include the transfer of the Enablement department into
16 IT from Finance. Enablement costs in 2009, 2010 and 2011 are \$6.6M, \$7.3 million and
17 \$7.9 million respectively. Of these amounts, \$3.2 million in 2010 and \$3.5 million in
18 2011 are allocated to Distribution. Year-over year increases are to support new SAP
19 functions as they are configured and commissioned. The transfer in of the Enablement
20 function is one of the main drivers of the IT Management cost increases starting in 2009.
21 2008 represented the formation of the Enablement group and represented a partial year
22 cost of \$2.3M within Finance .

23
24 The Enablement group is the corporate owner for the SAP application which is
25 accountable for process and data management, performance improvement, and training
26 and business solutions related to the systems and processes implemented by the various
27 phases of the Cornerstone program. The Enablement group supports the organization in
28 the effective and efficient use of the SAP system.

1 The Enablement group will drive productivity through enterprise process improvements
2 and ensure Hydro One leverages SAP and related assets to their full potential. This will
3 include adding new functionality where it delivers increased end user productivity,
4 quality of work, and other measurable business improvements. It will also govern data as
5 an asset and drive better analysis and decision making. The costs include staff and other
6 expenses to provide technical expertise, business analysis, problem solving, governance,
7 and continuous improvement to deliver these accountabilities. The Enablement Group
8 will be instrumental in facilitating and providing the corporate governance to ensure the
9 cost savings identified in the Cornerstone OM&A (Exhibit C1, Tab 2, Schedule 10) and
10 Capital (Exhibit D1, Tab 3, Schedule 7) exhibits are obtained.

11
12 The remaining 2009 increased costs are largely attributable to the transfer in of three full-
13 time staff into IT from Finance to manage IT's financial control and acquisition
14 processes.

15
16 2010 (and onward) expenditures include the transfer of the Information Assets
17 Department into IT from Asset Management. Information Assets costs in 2010 and 2011
18 are \$5.2 million and \$5.3 million respectively. Of these amounts, \$1.9 million in 2010
19 and \$1.9 million in 2011 are allocated to Distribution. The transfer in of the Information
20 Assets function is one of the main drivers of the IT Management cost increases starting in
21 2010.

22
23 The Information Assets Department manages data and applications in the domain of bulk
24 power systems assets and customer connectivity in support of key business requirements
25 such as IESO equipment registration, power system planning, network modeling, work
26 management, rate development, settlements, and connection agreements. There roles and
27 accountabilities span: data quality and change control; data integrity and application
28 integration; and management of legacy tools that support real time operations and overall
29 asset management.

1

2 The remainder of 2010 incremental costs reflects a required increase to support new
3 specialty technologies such as BI/BW and GIS.