

1 The DSC provides the minimum conditions a distributor must meet in carrying out its
2 obligation to operate, maintain, manage and expand distribution systems and requires
3 Hydro One to operate and maintain its system in accordance with “good utility practice.”
4 The DSC sets out the obligations of electricity distributors with respect to their
5 customers, including the rules governing the economic evaluation of distribution system
6 connections and expansions and also the minimum standards for facilities connected to a
7 distribution system. It also includes guidance on the form of the Connection Agreement
8 for load customers, and includes a Connection Agreement template for generator
9 customers, which covers the technical and commercial responsibilities for both Hydro
10 One and the customer.

11

12 The RSC sets the minimum obligations that distributors and retailers must meet in
13 determining the costs of electricity services. It sets the rules for Hydro One's customer
14 billing process and its interactions with retailers. The main aspects of the RSC include
15 rules for processing service transaction requests, calculating distribution losses on
16 customer bills, meter reading and billing cycles, and defining and setting timelines for
17 billing options (such as retailer consolidated bills).

18

19 Both codes have been periodically amended over time. Hydro One has incorporated, or
20 is in the process of incorporating, these amendments into its work practices and
21 procedures. Recent changes include updates in 2006 to facilitate distributed generation
22 and net metering, and updates in 2007 to connections and expansions, smart metering,
23 and the elimination of Long Term Load Transfers.

24

1 **3.0 ENVIRONMENTAL MANAGEMENT**

2
3 Hydro One Distribution is subject to a wide range of legislation. The following are the
4 major acts that govern Hydro One Distribution’s activities. Many others can apply in
5 specific circumstances but the following are applicable to most distribution work.
6

7 **3.1 Federal Legislation**

- 8
- 9 • *Canadian Environmental Protection Act*, which regulates the management of
10 hazardous substances such as Polychlorinated Biphenyls (“PCBs”).
 - 11 • *Fisheries Act*, which regulates fish habitat and pollution prevention in and around
12 water bodies that support fish.
- 13

14 **3.2 Provincial Legislation**

- 15
- 16 • *Environmental Protection Act*, which regulates waste management/disposal, spills
17 and Certificates of Approval.
 - 18 • *Ontario Water Resources Act*, which regulates discharges, sewage works and water
19 works.
 - 20 • *Pesticides Act*, which regulates the storage, use and application of pesticides.
 - 21 • *Environmental Assessment Act*, which regulates the planning and environmental
22 approvals of projects, such as high voltage stations that step down to distribution
23 voltages.
- 24

1 **3.3 Municipal Legislation**

2
3 Many municipal by-laws regulate noise, discharges to sewers, pesticide use and the
4 upkeep/maintenance of properties. The application of these will vary depending on the
5 municipality.

6
7 **3.4 Environmental Management and Governance**

8
9 In order to comply with all legislated requirements, Hydro One Distribution has
10 developed a number of environmental management programs. In addition, governance
11 activities such as management system maintenance, program monitoring and reporting
12 are provided by staff in the Health, Safety & Environment function.

13
14 The following is a summary of the major programs:

15
16 **3.4.1 Land Assessment and Remediation**

- 17
- 18 • Land and groundwater contamination is a legacy issue from spills, leaks and
19 historical use of persistent herbicides at distribution stations for vegetation control.
20 Underground tanks for fuel storage and dispensing have also been a cause of land and
21 water contamination. At the time that these herbicides were used by the former
22 Ontario Hydro, they were commonly used by North American utilities, and were
23 compliant with regulatory requirements in place at the time. There was no knowledge
24 of their potential negative environmental impact.
 - 25 • Program management and funding requirements are described in Exhibit C1, Tab 2,
26 Schedule 2.
- 27

1 3.4.2 Management of hazardous materials and wastes

- 2
- 3 • Hazardous materials such as PCBs and wastes (oils, solvents, etc.) are managed in
4 accordance with regulatory requirements and good management practices;
 - 5 • PCBs are a contaminant in a small percentage of oil-filled electrical equipment. The
6 amount of PCBs has declined due to a program of PCB phase-out and destruction,
7 which began in the mid-1980s. The continued removal of equipment from service in
8 the future will ensure that Hydro One Distribution becomes a PCB-free utility;
 - 9 • Occasionally spills, leaks and fires occur as a result of equipment failure, adverse
10 weather or other causes. Most spills involve mineral oil from electrical equipment
11 such as transformers. The environmental impact of spills is mitigated by a well-
12 developed spill reporting and response system. This involves the timely reporting of
13 spills to all appropriate authorities and the clean-up and remediation of areas
14 impacted by the spill.
 - 15 • Management of these programs and funding requirements are described in
16 Exhibit C1, Tab 2, Schedule 2.
- 17

18 3.4.3 Vegetation Management (Herbicide Use)

- 19
- 20 • Herbicide use is an integral part of the vegetation management program associated
21 with maintenance of the distribution system, including rights-of-way and stations.
22 Environmental impacts are minimized through the use of approved product types, and
23 approved methods and procedures for application. Property owner approval is
24 obtained prior to the application of any herbicide on private properties. Vegetation
25 management programs and funding requirements are fully described in Exhibit C1,
26 Tab 2, Schedule 2.
- 27

1 **4.0 ELECTRICAL SAFETY AUTHORITY**

2
3 The Electrical Distribution Safety Regulation 22/04 established objective-based electrical
4 safety requirements for the design, construction and maintenance of electrical distribution
5 systems owned by licensed distributors. It requires:

- 6
7 • Approval of equipment, designs and plans.
8 • Inspection and certification of construction before it is put into use.
9 • An assessment of plant based on the Ontario Electrical Safety Code prior to selling
10 plant to non-distributors.
11 • Approval by the utility to place objects at a distance less than CSA clearance
12 standards from distribution lines.
13 • Disconnection of unused lines.
14 • Reporting of serious electrical incidents.
15 • Annual compliance audits of processes.
16 • Safety due diligence inspections conducted by the ESA to ensure safety standards are
17 met.

18
19 Electrical safety is a very high priority for Hydro One Distribution as indicated in the
20 strategic goals in Exhibit A, Tab 3, Schedule 1. To address this priority Hydro One
21 Distribution has implemented comprehensive training programs to ensure all Electrical
22 Distribution Safety Regulations are adhered to across the corporation. The associated
23 program management and costs are described in Exhibit C1, Tab 2, Schedule 2.

24
25 **5.0 SMART METERS**

26
27 The Government of Ontario, as part of achieving a conservation culture, is proceeding
28 with time-of-use (TOU) electricity pricing and the installation of smart meters throughout

1 Ontario by 2010. The enactment of the *Energy Conservation Leadership Act*, and
2 changes to the *Electricity Act* and the *Ontario Energy Board Act*, along with new
3 regulations, have defined the Government's Smart Meter Initiative, prescribed the
4 technical and functional requirements of the smart meter solutions (Advanced Metering
5 Infrastructure – AMI), and set the path for mass deployment of the meters across
6 Ontario.

7
8 Regulations passed in August, 2006 (O. Reg. 425/06, 426/06 and 427/06), designate the
9 smart metering activities of Hydro One Networks Inc. (among those of other utilities) as
10 authorized discretionary metering activities and prescribe:

- 11
- 12 • the criteria and requirements for all smart meters and related equipment, systems and
13 technology,
 - 14 • the principles for related procurement activities and
 - 15 • the principles and process for cost recovery.
- 16

17 In line with the legislative and regulatory requirements, Hydro One has begun full
18 implementation of its smart metering program, including smart meter deployment,
19 communication network development, and updating the customer information system
20 (CIS) and associated processes to enable it to support TOU and Regulated Price Plan
21 (RPP) implementation. These activities will require on-going investments in 2008 and
22 beyond, as identified in Exhibits C1, Tab 2, Schedule 2 and D1, Tab 3, Schedule 2.

23
24 Hydro One's smart metering costs for 2005 through 2007 are included in a deferral
25 account that is being requested in Exhibit F1, Tab 1, Schedule 1.

26

1 **6.0 CONSERVATION AND DEMAND MANAGEMENT**

2
3 The CDM program which Hydro One developed to utilize its Market Adjusted Rate of
4 Return (MARR) funding will be substantially complete by the deadline of September 30,
5 2007. However, on May 22, 2007, Hydro One obtained an extension through April 30,
6 2008 and will dedicate the additional time to the completion of its Low Income/Social
7 Housing program and also to complete the work on its Distribution Loss Reduction
8 program.

9
10 Hydro One has participated in all four of the OPA sponsored CDM initiatives: Summer
11 Savings; Residential and Small Commercial Demand Response; Business Incentive
12 Program; and the Great Refrigerator Roundup. Hydro One intends to continue
13 participating in future OPA-administered CDM programs and will look for opportunities
14 to expand those programs, as appropriate, including possibly extending relevant programs
15 to Transmission customers. Hydro One is also actively involved in implementing in-
16 house power cost monitoring devices and a “Double Returns” program, which was in
17 place last Winter and will be adopted for Summer 2007. Initial feedback from these
18 programs shows they were successful, and Hydro One will consider extending these
19 programs into future year, as appropriate. Funding for these initiatives will be recovered
20 through the OPA and is not included in revenue requirement requested in this
21 Application.

22
23 **7.0 BILL 198 – INTERNAL CONTROLS, DECEMBER 9, 2002**

24
25 Bill 198 requires that the controls that oversee the processes and systems that impact how
26 the company initiates, records, processes, and reports transactions in significant
27 accounts must be documented and evaluated on an annual basis. The Ontario Securities
28 Commission (OSC) responded to Bill 198 with new Multilateral Instruments (MI) that
29 govern internal controls. These require the CEO and CFO of Hydro One Inc. (as a public

1 debt issuer) to attest to the appropriateness and effectiveness of internal financial controls
2 and financial disclosure processes for the Company's consolidated financial information.

3
4 By the end of 2006, Hydro One completed its project to ensure compliance with Bill 198
5 requirements. This entailed changes to processes and technologies to ensure appropriate
6 documentation is in place for the first year of compliance (2007). In addition, a unit has
7 been put in place to sustain the Bill 198 requirement on an on-going basis. The Company
8 is currently completing its 2007 compliance process. Further details of Hydro One's
9 work in this area are provided in Exhibit A, Tab 12, Schedule 1, with associated costs in
10 Exhibit C1, Tab 2, Schedule 6.

11 12 **8.0 DISTRIBUTION CONNECTED GENERATION**

13
14 The Provincial Government's objective to achieve a cleaner supply mix, and OPA
15 procurement programs in support of this, have and will substantially increase Hydro One
16 Distribution work and investments related to new generation connecting to the
17 distribution system. The Renewable Energy Standard Offer Program (RESOP), which
18 was launched in November, 2006, has generated some 1,000 projects expressing interest
19 in potential connection to Hydro One's system, and of these, the Company has had
20 several hundred applications for full Connection Impact Assessments. The OPA has also
21 recommended a Clean Energy Standard Offer Program (CESOP) for combined heat and
22 power and other projects. This project will be launched in the Fall of 2007. Its impact on
23 Hydro One Distribution is uncertain at this time.

24
25 Assessing the feasibility of connecting so many potential projects to the system, and
26 particularly the cumulative impact of such projects, has proven to be a technical and
27 administrative challenge. Further challenges are anticipated as projects move to the
28 phase of requesting cost estimates and potentially signing agreements to connect. Hydro

1 One Distribution has undertaken a number of initiatives to deal with this as outlined in
2 Exhibit D1, Tab 3, Schedule 3.

3
4 **9.0 ACCESS TO INFORMATION (FIPPA) AND PERSONAL PRIVACY**
5 **(PIPEDA)**
6

7 On December 10th, 2003, Hydro One Inc. became subject to Ontario's Freedom of
8 Information and Protection of Privacy (FIPPA) legislation. On January 1st, 2004, Hydro
9 One Inc. also became subject to Canada's Protection of Individual Privacy and Electronic
10 Documents Act (PIPEDA). And most recently, on November 1st, 2004, the Corporation
11 also became subject to Ontario's Personal Health Information Protection Act.

12
13 These pieces of legislation require that the Corporation provide public access to business
14 records, as well as appropriate access to (and protection of) personal information. The
15 personal information of customers and, in specific circumstances, employees, is now
16 subject to legislated standards of protection.

17
18 Funding for these on-going activities is included in Shared Services OM&A (see Exhibit
19 C1, Tab 2, Schedule 6).

20
21 **10.0 BILL 100 ELECTRICITY RESTRUCTURING ACT, 2004**
22

23 Bill 100, the Electricity Restructuring Act, 2004, which was passed at the end of 2004,
24 enabled changes to electricity market settlement and billing processes. These changes
25 included the implementation of the Provincial Benefit for customers billed on spot market
26 commodity price and the introduction of the RPP. Hydro One made changes to its billing
27 and settlement systems in order to calculate, settle and bill the Provincial Benefit, and the
28 RPP. This included adjusting the two-tiered pricing and consumption thresholds in May

1 and November of each year, plus changes to settlements with the IESO due to differences
2 between the spot price and the two-tiered regulated price. Costs for this initiative are
3 included in the Customer Care OM&A expenditures for 2008 that are detailed in Exhibit
4 C1, Tab 2, Schedule 5.

5