

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

COST EFFICIENCY

BACKGROUND

Hydro One identifies cost efficiency initiatives as part of its business planning processes, and also uses benchmarking to help identify areas requiring improvement. Provided below is an overview of Hydro One's efforts to improve cost efficiency in the past and initiatives being undertaken to continue improving cost efficiency in the future.

In the OEB's Decision With Reasons on Hydro One's recent Transmission rate filing (Ref EB-2006-0501), issued on August 16, 2007, the Board stated "in the [compensation] study that Hydro One is [now] preparing, the Board expects it to provide empirical evidence which reveals the relative productivity of its workforce in comparison to other utilities". Since the Transmission Decision was issued on August 16, 2007, the day after Hydro One was required to submit its 2008 Distribution revenue requirement application, the Company has provided the additional information on cost efficiency initiatives which follows. This information includes a broad indicator of workforce productivity improvement which has been benchmarked against other large Ontario LDC's.

1.0 INTRODUCTION

Cost efficiency is a core element of the Hydro One Distribution strategy. Hydro One will continue to make prudent and responsible economic efficiency improvements consistent with its business strategy in order to deliver steady financial performance, sustain company assets and deliver safe, economic and reliable electrical energy. In this context, the focus on cost efficiency supports the Corporation's 2010 strategic performance goals and targets provided in Exhibit A, Tab 3, Schedule 1 including: creating an injury free work place with zero serious injuries and zero near misses; becoming a leading customer-

1 focused company with a 90% level of customer satisfaction for all customer segments;
2 and, becoming a leading (“top quartile”) distribution and transmission utility in
3 reliability, based upon like for like comparisons.

4
5 Hydro One Distribution has a strong track record of implemented initiatives and related
6 cost savings over the past 6 years, having achieved over \$380 million in cost savings, as
7 it has focused on all aspects of the business including: labour utilization and productivity;
8 new technology improvements; material and services costs; overhead costs; fleet costs;
9 facility costs; business processes; and, out-sourcing of non-core business activities.
10 Many of these business aspects are addressed elsewhere in the prefiled evidence. This
11 exhibit summarizes and describes a number of the initiatives undertaken by Hydro One
12 Distribution to manage costs in the past and other gradual improvements which are
13 presently being undertaken.

14
15 Going forward, Hydro One is faced with a unique confluence of challenges:

- 16 1. Major growth in work programs;
- 17 2. IT infrastructure end of life; and
- 18 3. Staff demographic and hiring challenges;

19 These coincident changes in the operational environment provide Hydro One with an
20 opportunity to transform its business in a step level change over the next few years.
21 Through this business transformation, Hydro One anticipates that beyond the 2008 test
22 year, it may be capable of rising to the challenge of meeting an annual 1% productivity
23 target, as was the case in the OEB’s second generation IRM.

24 25 **2.0 PAST AND CURRENT COST EFFICIENCY INITIATIVES**

26
27 Inline with the Company’s continued focus on its core distribution business in Ontario, a
28 number of new initiatives will be or have been identified and introduced in 2007 and

1 2008 to further streamline the business. These are in addition to many initiatives that
2 commenced prior to 2007, as identified in the Company's evidence filed in EB-2005-
3 0378 and EB-2006-0501, which have been or are being fully implemented or enhanced
4 over the 2007-2008 period and beyond.

5
6 The following is a summary list of some major cost savings initiatives that have provided
7 or will provide incremental cost savings for the distribution business over the 2004 –
8 2008 period. These initiatives have been selected based on their illustrative nature and
9 their broad significance across the Hydro One Distribution business contributing to the
10 resulting incremental cost savings:

- 11 • Developing a more multi-skilled workforce
- 12 • Increased staffing flexibility (e.g. use of hiring hall) to execute peak seasonal and
13 project work
- 14 • Implementation of focused trades training programs
- 15 • New tools and technologies, such as the full implementation of information
16 technology used for new connections
- 17 • Implementation of new processes and tools in the field to enable improved planning,
18 scheduling and reporting of work
- 19 • Improvements in the fleet management business.
- 20 • The full use of temporary headquarters for work crews, which will reduce travel time
21 and thereby increase “wrench” time on the job
- 22 • Targeted savings from strategic sourcing initiatives
- 23 • The centralized operation of the transmission and distribution systems
- 24 • Continued outsourcing of non-core work activities
- 25 • Improvements to collective agreements
- 26 • Integration and bundling of work, such as improvements to the management of
27 equipment outages
- 28 • Smart meters installation

1 The company continues to look for opportunities to drive efficiencies and reduce
2 compensation costs with its unionized staff, through joint participation between
3 management and the unions on work efficiency improvements, as well as collective
4 agreements. The gains associated with Hydro One's labour agreements are described in
5 Exhibit C1, Tab 3, Schedule 2.

6
7 Hydro One also uses benchmarking and best practice information to find better ways to
8 run its business, thus gaining cost efficiencies and improving work program
9 effectiveness, as well as to provide some indication of progress across the key elements
10 of Hydro One's 2010 strategic goals and performance targets (see Exhibit A, Tab 3,
11 Schedule 1 pages 1 and 2). Hydro One's benchmarking efforts consist of both internal
12 and external studies. The internal studies compare best practices between the various
13 geographic work centres; this helps promote internal competition and ensures internally
14 developed best practices are leveraged across the company. The primary purpose of the
15 external studies is to identify best practices others are using which may improve Hydro
16 One's performance. Examples of recent Hydro One benchmarking efforts are contained
17 in Exhibit A, Tab 15, Schedule 2 – Distribution Benchmarking Studies. Benchmarking
18 and best practice results are provided to our planners and service provider staff to help
19 them develop performance and productivity improvement initiatives. Examples include;

- 20 • Lowering costs through use of Hiring Hall resources for lower skill manual brush
21 cutting work.
- 22 • Reviewing forestry practices to ensure that the most effective methods of forestry
23 management are being used. (e.g. using mechanical brush cutting)

24
25 The identification and implementation of additional cost efficiency initiatives will be a
26 greater challenge as identifiable incremental efficiency gains are expected to be smaller
27 in terms of potential cost savings and implementation is typically more challenging for a
28 number of reasons including the need to leverage information technology based solutions

1 coupled with business process changes and the challenges of implementing
2 improvements which cross business unit boundaries.

3
4 For purposes of the business planning model, the cost savings are identified as year over
5 year “incremental savings” defined as savings over and above those already embedded in
6 the costs of individual programs. Accordingly, the first year impact of a new initiative or
7 enhancements to an initiative are identified and the target associated with that initiative is
8 subsequently monitored to establish the actual savings achieved. Under this concept of
9 incremental savings, the savings beyond the first year are considered to be “embedded”
10 savings for purposes of the annual business plans and are therefore not included in the
11 annual estimates of incremental savings unless enhancements to those initiatives are
12 made. As a result, the incremental savings estimates substantially understate the savings
13 from those initiatives that have a cost efficiency impact over more than one year.

14
15 Table 1 identifies the estimated total incremental cost savings achieved from 2004 to
16 2006, as well as the incremental savings to be achieved in 2007 through to 2008 for
17 Hydro One Distribution. While all savings estimates are for gross savings, it should be
18 noted that the implementation costs are taken into consideration as part of the business
19 planning process described in Exhibit A, Tab 14, Schedule 1.

Table 1
Total Incremental Cost Savings – Distribution

	2004	2005	2006	2007 Bridge	2008 Test	Total
OM&A Savings (\$M)	13.4	10.5	5.9	3.3	7.5	40.7
Capital Savings (\$M)	9.5	8.1	4.6	1.0	2.1	25.4
Total Savings (\$M)	23.0	18.6	10.5	4.4	9.6	66.1
Total Spend** (\$M)	618	679	797	1,006	1,055	4,155
Savings as % of Total Spend	3.7%	2.7%	1.3%	0.4%	0.9%	1.6%

** Total Spend includes capital plus OM&A expenditures

As compared to the first half of this decade, incremental savings between 2006 and 2008 are trending lower and are projected to remain lower, both in absolute and percentage terms, with the completion of many major cost efficiency initiatives and the implementation of smaller, fewer, and more challenging cross-business unit opportunities. Despite the challenges associated with identifying and implementing further efficiency gains, Hydro One anticipates that beyond the 2008 test year, it may be capable of rising to the challenge of meeting an annual 1% productivity target. As outlined in the following section, coincident changes in Hydro One's operational environment provide the Company with an opportunity to transform its business in a step level change over the next few years, which in turn may facilitate meeting this productivity target.

3.0 CONTINUED COST EFFICIENCY FOCUS & STEP LEVEL CHANGE

An ongoing focus for Hydro One's Distribution business has been the implementation and nurturing of a continuous improvement culture that recognizes the need to look for

1 positive change in everything we do. As discussed in the previous section, this
2 continuous improvement culture has resulted in the realization of substantial
3 improvements and productivity gains earlier this decade and smaller gradual
4 improvements more recently.

5
6 In addition to continuing to utilize benchmarking and best practice information, Hydro
7 One is taking advantage of a unique set of circumstances to transform its business in a
8 step level change over the next few years. Through this business transformation, Hydro
9 One anticipates that beyond the 2008 test year, it may be capable of rising to the
10 challenge of meeting an annual 1% productivity target. These coincident unique
11 circumstances include:

- 12
- 13 • **Major growth in work programs** requiring increased staffing resources and
14 support systems. This work program growth is driven by changes in conservation
15 initiatives, installation of smart meters, vegetation management, increased
16 demand in specific geographic areas, the need to replace aging assets, system
17 expansion and generation mix. This will provide the opportunity to achieve
18 greater economies of scale, leverage standardized processes and design standards,
19 implement new work methods, etc
 - 20 • **Replacement of the core enterprise wide IT systems**, which have reached end-
21 of-life. Many of these systems are being replaced within an integrated corporate
22 business transformation project named Cornerstone. This project will facilitate
23 changes in business processes to allow for more effective use of information
24 resulting in improved work execution.
 - 25 • **Substantial shift in staff demographics** which will result in a large proportion of
26 current staff retiring over the next decade, and backfilling with new staff on a
27 relative scale not seen in decades. As the result of a renewed collective
28 agreement, new Society-represented staff will be brought in at lower salary ranges

1 (the salary range for all bands will be equivalent to 70-100% of current bands,
2 replacing the existing 80-115% ranges); different skill mixes could be sought
3 while at the same time allowing for skills and knowledge transfer from senior
4 staff; different work methods can be implemented; new staff will be trained on the
5 new replacement core business process and IT systems (as noted in the previous
6 bullet) and will not need retraining as required by existing staff, etc.

7

8 This set of changes in the operational environmental provides Hydro One with an
9 opportunity to transform its business in a step level change over the next few years which
10 will result in a variety of efficiency and effectiveness improvements over this period.

11

12 **3.1 MAJOR GROWTH IN THE WORK PROGRAM**

13

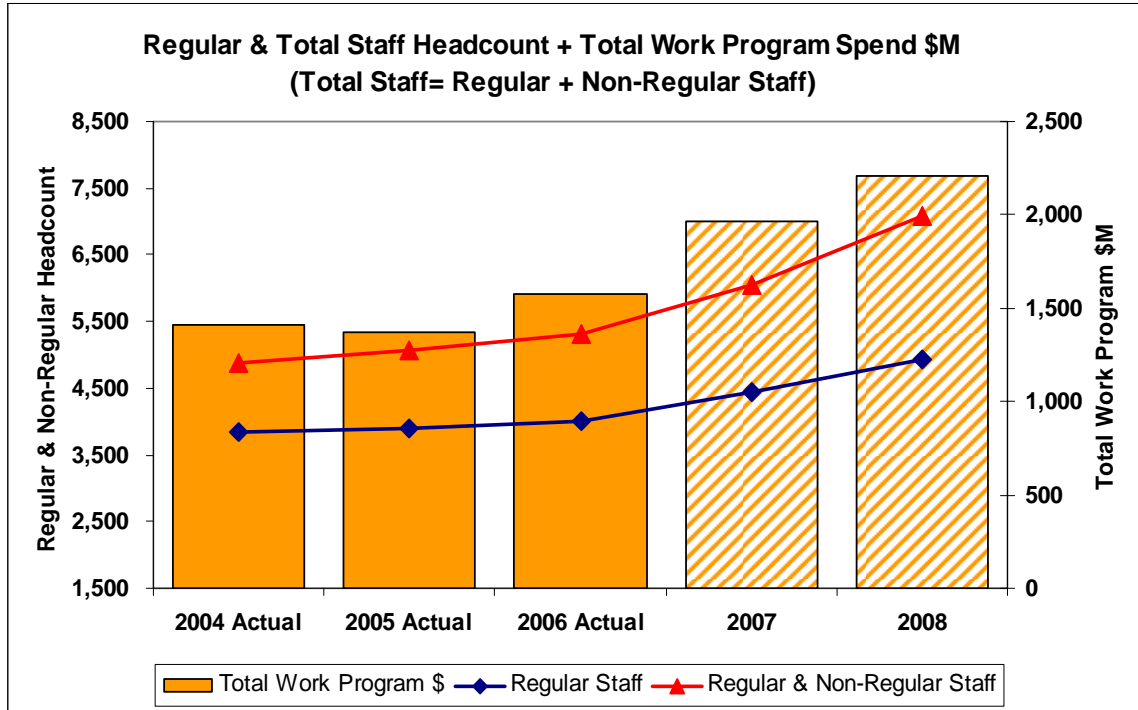
14 The growth in the total work program over the 2004 to 2008 period provides Hydro One
15 with an opportunity to achieve better utilization of staff to accomplish this work.

16

17 One broad indicator of the better utilization of staff is shown in the following Figure 1
18 which provides a snapshot of the growth in Networks total work program expenditures
19 (the sum of Distribution and Transmission business OM&A and capital expenditures) and
20 total staffing resources (both permanent or regular and temporary or non-regular staff).

1

Figure 1



2

3

4 Despite a projected 40% increase in Hydro One Networks Distribution and Transmission
5 businesses' work program expenditures between 2006 and 2008, whereas over this same
6 time period the regular staff count is expected to only have grown by 23% and total staff
7 resources (regular and non-regular) by 34%. This is an indication that Hydro One is
8 getting more work done without a corresponding increase in resource levels.

9

10 The increase in the work program has also been enabled by Hydro One's work-based
11 approach to staffing as discussed in Exhibit C1 Tab3 Schedule 1. Specifically, to address
12 the fluctuating and seasonal nature of work programs, the Company maintains as much
13 flexibility as possible by not hiring all regular (permanent) staff. Rather, knowledgeable,
14 experienced and highly skilled internal staff plan and direct the "peak" work of non-
15 regular (temporary, hiring hall and contract) staff, which provides the needed flexibility
16 to manage in a cost effective manner. This flexibility provides a variable workforce

1 which is matched to the peaking requirements of the workload at minimum costs.
2 Specifically, the workload volume ramps up in the second quarter of the year and peaks
3 in the third quarter; the flexible external workforce of non-regular staff is engaged in
4 numbers to match this varying volume of work. To the degree possible, within the
5 constraints of our labour agreements, contractors are also engaged to undertake “turn-
6 key” projects.

7
8 Other work program improvements that leverage economies of scale include:

- 9 • Strategic alliances with suppliers and contractors can be modified to enable
10 faster turnaround times for material and services.
- 11 • Hydro One has the opportunity to use higher efficiency customized transport
12 and work equipment versus off-the-shelf equipment at an advantageous cost
13 that is available to the Company because of the large volume of transactions it
14 does with fleet equipment suppliers.

15 The implementation of the IT Architecture Strategy, as discussed in the next section, will
16 also provide Hydro One with additional opportunities to glean further economy of scale
17 savings as its work programs expand. For example, as Hydro One streamlines its
18 businesses processes in conjunction with implementation of Cornerstone Phase I, with the
19 increased volume of the Company’s work programs, it will gain further savings than it
20 otherwise would have.

21
22 In addition, one of the primary contributors to the increase in work program expenditures,
23 installation of smart meters, when in place throughout Hydro One’s distribution system
24 early in the next decade, will in itself provide a live flow of high quality, detailed
25 information which previously was not available. Hydro One is planning to apply, and
26 leverage to the extent its economical, this new information to the advantage of its
27 customers, by making more effective and efficient operating, replacement, maintenance
28 and system expansion decisions.

1 **3.2 IT ARCHITECTURE STRATEGY**

2
3 The improvement of internal business processes is facilitated by an IT Architecture
4 Strategy, which is driven by the need to replace outmoded end-of-life core business
5 information systems. The replacement of these core IT systems will allow standardization
6 and streamlining of work processes along with the integration of multiple databases that
7 are currently used by different organizational units across the company. Implementation
8 of Cornerstone Phase 1, as discussed in detail in Exhibit D, Tab 3, Schedule 5, is
9 anticipated to contribute productivity gains through its lifetime, for total cost efficiency
10 gains equal to about \$200 million cumulative over the seven year lifetime of the new IT
11 systems beginning in 2009.

12
13 These cost efficiency gains are derived largely from three key value levers underpinned
14 by the Cornerstone Phase 1 application, process and organizational changes. These value
15 levers are:

- 16 1) A single asset registry with a uniform hierarchy and selective integration to
17 legacy databases. This saves time when inputting data, processing information,
18 and searching for information.
- 19 2) Greater process transparency, integration and collaboration (enabled through
20 the application and process changes) across Hydro One's lines of business.
21 This results in fewer unique business processes thereby reducing learning and
22 time to complete work tasks. This improves the quality of the information for
23 better decisions and reduces the cross checking time required to reconcile
24 errors.
- 25 3) Enhanced compliance to the underlying processes and data requirements.

26
27 As the various phases of Cornerstone are implemented, further benefits from each phase
28 are anticipated. With the move to an integrated and off the shelf vendor supported

1 platform, Hydro One will also consider the integration of its GIS applications and
2 implementation of integrated mobile technology solutions. It is expected that the use of
3 mobile work applications and the use of GIS information will increase field force
4 productivity. By leveraging all the new data which implementation of the IT Architecture
5 Strategy and the smart meters program will deliver, Hydro One will become an even
6 more proactive company in managing its assets. The extent of these future efficiency and
7 productivity improvements is not yet fully known; preliminary work is being carried out
8 to assess how best to use integrated technology platforms.

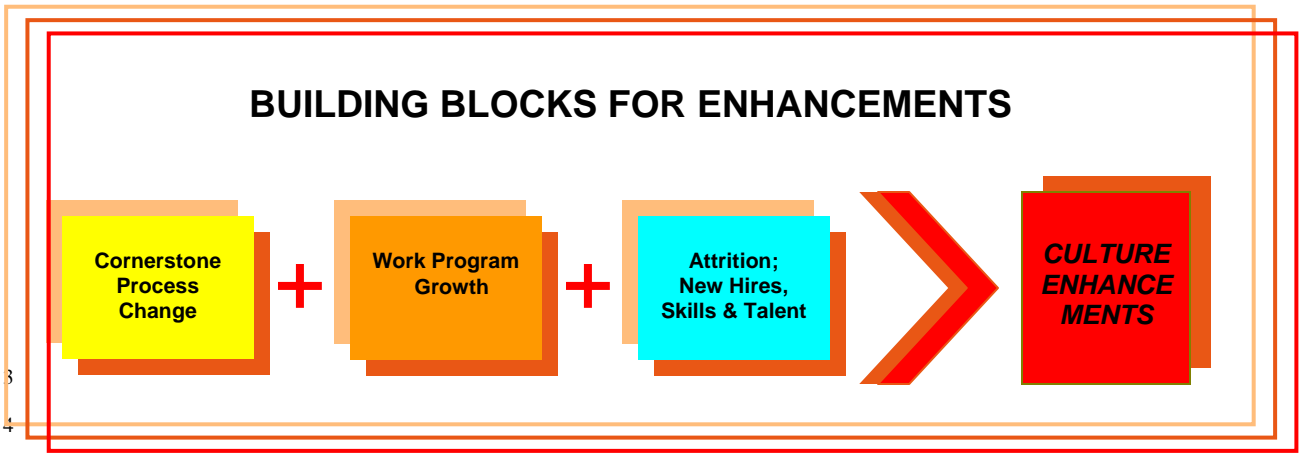
9
10 **3.3 CULTURE CHANGE**

11
12 With the impending substantial staff attrition due to demographics and coincident
13 creation of new positions due to work program growth, Hydro One will use this
14 opportunity to build on the existing corporate culture to further enhance its core
15 characteristic of continuous improvement. As discussed in detail in Exhibit C1, Tab 3,
16 Schedule 1, the Hydro One staffing strategy is focused on hiring through partnering with
17 universities, colleges and Hydro One unions, as well as skills development and retention.
18 In parallel with this, the enhanced corporate culture will build on the existing employee
19 engagement, enthusiasm and innovation. Employees will continue to be encouraged and
20 challenged to provide new ideas to move the company forward, in a collegial, motivating,
21 and supportive environment.

22
23 As outlined earlier and illustrated below, Hydro One is at a stage in its evolution where
24 the major change in its operational environment is providing an opportunity to build on
25 the existing corporate culture so as to enable further productivity gains.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

Figure 2



The rollout of the enhanced culture change process is currently underway:

1. A revised Human Resources Strategy has been approved by the Hydro One Board of Directors.
2. The Hydro One management team is ensuring that all levels in the organization are aware of the strategy, and are adhering to it.
3. Senior managers will be meeting directly with staff to ensure they understand the required cultural emphasis in the company.
4. Managers will be held accountable for ensuring that this emphasis is occurring in their organization
5. In order to assist with the change process, a new corporate template for change has been approved and is into the process of being rolled out. It is called "Organizational Alignment", and will ensure each unit approaches change in the same manner.
6. This will be a long term program, and will coincide with the significant staff turnover which will be taking place over the next five to ten years.

Additional keys to the culture change being undertaken include:

- 1 • Hiring to a set of cultural selection criteria based on corporate values
- 2 • Expedited technical training and development
- 3 • Increased emphasis on leadership and cultural development programs based on
- 4 corporate values

5

6 Concurrent factors to the culture change include:

- 7 • Increasing the level of business skills within the company to complement the
- 8 technical skill base.
- 9 • An increase in the use of a balanced performance reporting system to identify
- 10 effectiveness not just efficiency improvements. In addition, this balanced
- 11 reporting will be cascaded down to the first line manager levels which will be
- 12 populated by the new staff over time.

13

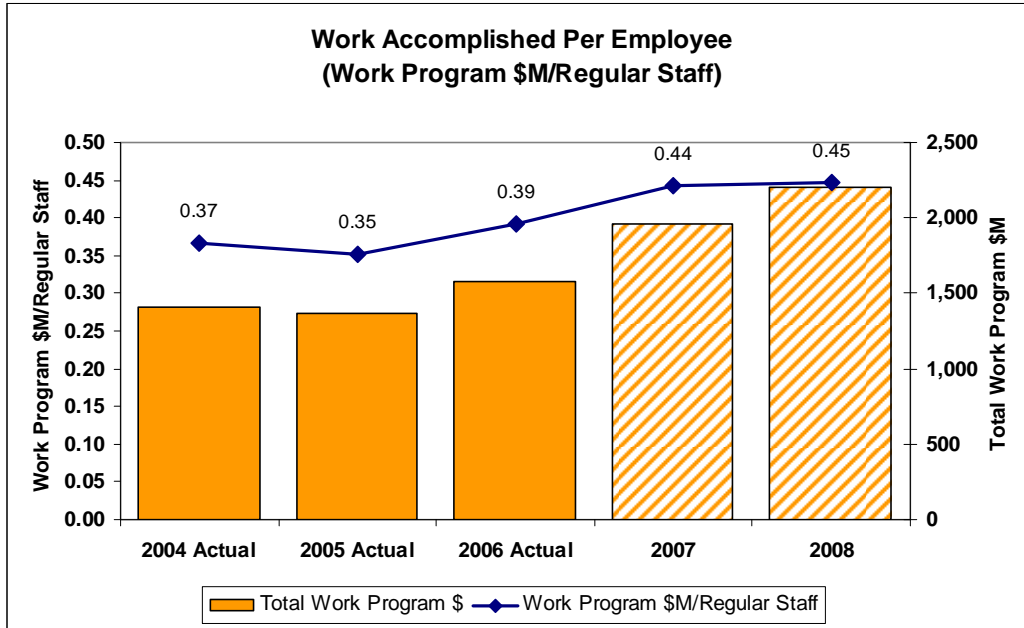
14 **4.0 PRODUCTIVITY INDICATOR**

15

16 In the OEB's Decision With Reasons on Hydro One's recent Transmission rate filing
17 (Ref EB-2006-0501), issued on August 16, 2007, the Board stated "in the [compensation]
18 study that Hydro One is [now] preparing, the Board expects it to provide empirical
19 evidence which reveals the relative productivity of its workforce in comparison to other
20 utilities". A broad indicator of workforce productivity improvement is provided in Figure
21 3, which displays the amount of work accomplished per regular staff count (as indicated
22 by work program spend in \$million per regular staff count) for Hydro One Networks
23 (total Distribution and Transmission businesses).

1

Figure 3



2

3

4 Between 2004 and 2008 the work program accomplished (in \$million) per regular staff
 5 count is projected to increase by 22% while the work program is expected to increase by
 6 over 50% in the same period. As outlined earlier in section 3.0, Hydro One is taking
 7 advantage of a unique set of circumstances to transform its business in a step level
 8 change over the next few years; this will enable the Company to continue to successfully
 9 and efficiently undertake increased work programs with proportionally fewer full-time
 10 staff.

11

12 As shown in the following Table 2, using the 2006 to 2008 data provided in their most
 13 recent rate filings, Hydro One Networks accomplishes substantially more work per
 14 regular staff count than the three largest Ontario LDC's. This is the case even when the
 15 large proportion of non-regular staff engaged by Hydro One to complete work, under the
 16 direction of regular staff, are factored into this measure. Note that it is Hydro One's
 17 understanding that LDC's typically employ large numbers of non-regular staff, however

1 quantitative data on non-regular staff was not provided by LDC's in their most recent rate
2 filings.

3
4

Table 2
Work Accomplished Per Employee+

Work Program \$M/Regular Staff	2006 <u>Actual</u>	2007 <u>Forecast</u>	2008 <u>Forecast</u>
Hydro One	0.39	0.44	0.45
Hydro One Total Staff**	0.30	0.33	0.31
Horizon Utilities Corporation*	0.17	0.23	0.26
Ottawa Hydro	0.23	0.24	0.22
THESL *	0.22	0.22	0.23

+ A larger number is favourable as it indicates more work accomplished per employee

*Regular Staff FTE's

** Total Staff = Regular + Non-Regular Staff

5
6
7
8

5.0 SUMMARY

9 In combination with ongoing incremental cost efficiency initiatives under way across the
10 Company, three new major initiatives will together allow Hydro One Networks to
11 transform its business in a step level change over the next few years:

- 12 1. Utilization of better economies of scale due to the larger OM&A and Capital
13 work programs;
- 14 2. Implementation of the IT Architecture Strategy and Cornerstone; and
- 15 3. The culture change program currently underway.

16

1 Through these efforts, beyond the 2008 test year Hydro One anticipates that it may be
2 capable of rising to the challenge of achieving an annual 1% productivity target, as was
3 the case in the OEB's second generation IRM.