October 15, 2014

BY EMAIL & COURIER

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge St, Suite 2701
Toronto ON M4P 1E4

Dear Ms. Walli:

Board File No. EB-2013-0416 Hydro One Networks
2015 - 2019 Distribution Rates Application
Energy Probe – Argument

Please find attached the Submissions of Energy Probe Research Foundation (Energy Probe) in respect of Hydro One Distribution in the EB-2013-0416 proceeding.

Should you require additional information, please do not hesitate to contact me.

Yours truly,

David S. MacIntosh
Case Manager

cc: Erin Henderson, Hydro One Networks Inc. (By email)
Anita Varjacic, Rogers Partners LLP (By email)
Donald H. Rogers, Rogers Partners LLP (By email)
Roger Higgin, Consultant to Energy Probe (By email)
Brady Yauch, Consultant to Energy Probe (By email)

Energy Probe Research Foundation 225 BRUNSWICK AVE., TORONTO, ONTARIO M5S 2M6

Phone: (416) 964-9223 Fax: (416) 964-8239 E-mail: EnergyProbe@nextcity.com Internet: www.EnergyProbe.org

EB-2014-0416

Ontario Energy Board

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, (Schedule B);

AND IN THE MATTER OF an application by Hydro One Networks Inc. for an order approving just and reasonable rates and other charges for electricity distribution to be effective January 1, 2015, each year to December 31, 2019.

Argument of the

Energy Probe Research Foundation

October 15, 2014

Contents

Hydro One Networks Distribution 2015-2019 Rate Proposal
Energy Probe Submissions

Overview of the Application

How these Matters Came Before the Board

Hydro One Networks Inc. ("Hydro One") filed a cost of service rate application with the Ontario Energy Board (the "Board") on December 19, 2013 under section 78 of the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, (Schedule B), seeking approval for changes to the rates that Hydro One charges for electricity distribution, to be effective January 1, 2015 and each year thereafter to December 31, 2019.

The Board issued a Notice of Application and Hearing dated January 24, 2014. Hydro One supplemented its application with additional material filed January 31, 2014 and with an evidence update filed on May 30, 2014.

The Board held a series of three transcribed technical conferences on April 1, 10 and 23 and also held a transcribed session on May 12, 2014 during which Hydro One senior management made a presentation on the application.

In Procedural Order No. 3, the Board established an Issues List for the proceeding and a schedule for written interrogatories and responses. Hydro One filed interrogatory responses on July 4, 2014, but the attachments to certain interrogatory responses were redacted or absent. On July 11, 2014, Hydro One filed the attachments with the Board, and requested confidential treatment of the attachments.

Following receipt of Hydro One's responses to interrogatories, a further technical conference was held on July 21 and 22, 2014.

The Board determined that it intended to hear as part of the oral hearing those issues which relate to the implementation of the Board's policy and framework for the Custom Incentive Rate-setting option, given that this was the first electricity rate application of this type. The Board recognized that some issues are not strictly policy related and could be suitable for settlement.

A Settlement conference was held on July 28, 2014 but no settlement was achieved.

The oral hearing for this proceeding began on September 8, 2014 and the evidentiary portion concluded on September 18, 2014. Hydro One presented oral argument-in-chief on September 24, 2014.

The Board established a schedule for written argument which set Board Staff submissions for October 7, 2014, intervenor submissions for October 15, 2014 and reply argument for October 27, 2014. A record of all procedural matters and correspondence in this proceeding is available on the Board's web site.

The Application

Hydro One Networks Distribution (Hydro One, HONI Dx) proposes a Multi-Year Custom Cost of Service (MYCOS) Plan that it claims is designed to meet the objectives of the OEB's Revised Regulatory Framework for Electricity. (RRFE)

Under the proposed plan, the Revenue Requirement will be set each year for a five-year period and other than the impact of incremental RR, rates will be fixed, subject to certain mechanical year-end adjustments such as allowed current rates of return, changes in tax rates, and working capital allowance.

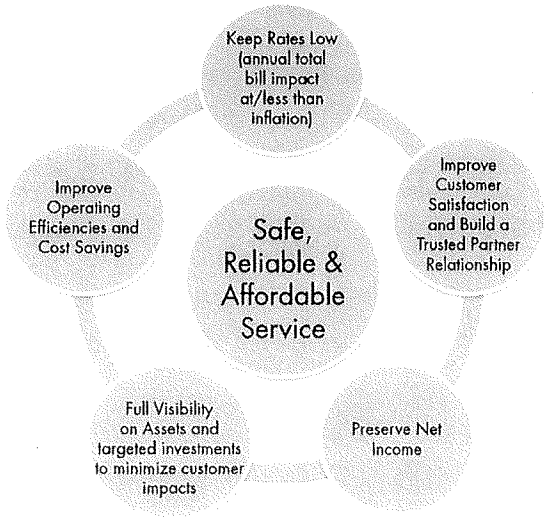
The Application seeks approval for revenue requirements of $1,415 million in 2015, $1,523 million in 2016, $1,578 million in 2017, $1,615 million in 2018 and $1,660 million in 2019.

The Application includes proposals for an entire 5 year rate setting plan which included an annual adjustment mechanism, off-ramp conditions, adjustments outside the normal course of business and annual outcome measurement reporting.

Other significant aspects of the application include a number of changes to Hydro One's existing cost allocation and rate design methodologies and a rate smoothing proposal over the 5 year period.

If approved as filed this Plan would result in the following claimed percentage increases in the Distribution portion of the average Residential Customer Bill: -1.4% in 2015, 3.8% in 2016, 2.3% in 2017, 1.2% in 2018 and 2.6% in 2019.

Hydro One Business Plan: Value Proposition[1]



Framework Issues related to RRFE

Issue 1.1 To what extent does the application reflect the objectives and approaches described in the RRFE Report?

Issue 2.2 Does Hydro One Distribution's Custom Application promote and incent acceptable outcomes for existing and future customers (including, for example, cost control, system reliability, service quality, bill impacts)?

Issue 2.3 Does the Custom Application adequately incorporate and reflect the four outcomes identified in the RRFE Report: customer focus, operational effectiveness, public policy responsiveness and financial performance?

The Board's policies on the key elements of the Custom Incentive Rate setting ("Custom IR") rate-setting method are summarized in the RRFE Report in Table 1 on page 13 of that report.

[1] Slide 4 PD-2- Presentation by HO Executive Panel to OEB May 12, 2014

Some intervenors may question whether the Hydro One MYCOS rate Plan fits with the framework set out in the RRFE. Board Staff has also addressed this comprehensively in its Submission.

Energy Probe will *not* argue whether the proposed plan technically fits with the options for regulation and rate setting for Electricity distributors. What is important is that the Plan has the features that the Board expects in any such rate regulation plan under the RRFE.

Hydro One relates the RRFE Outcomes to its proposed Outcome Measures in Exhibit I, Tab 2.03, Schedule 10, CCC 11.

RRFE Outcome	# of Outcome Measure
Customer Focus	1, 2, 3, 4, 5, 6, 7, 8
Operational Effectiveness	1, 2, 4, 5, 6, 7
Public Policy Responsiveness	3
Financial Performance	1, 2, 4, 5, 6, 7

We disagree with this broad classification by Hydro One and suggest the Plan must have Real and Tangible Outcomes:

- **Customer Focus - Measurable Outcomes that Benefit Ratepayers**
- **Operational Effectiveness - Benchmarking Input Costs and Productivity Gains**
- **Public Policy Responsiveness - Environment and Energy Policy**
- **Financial Performance is largely a Shareholder Consideration**

These are encompassed in the OEB's new Scorecard for Electricity Distributors.

The major deficiency in the Hydro One 5-year MYCOS Plan is that it is still a Cost-of-Service, Rate-of-Return, Revenue Requirement approach to setting rates. The Plan does not include mandatory incentives or productivity gains (Total Factor Productivity), such as in an Incentive Rate Plan that is- X factor, productivity factor and/or a stretch factor.

This lack of an explicit mandatory Productivity Factor is in Energy Probe's view, a critical flaw of the Hydro One MYCOS Plan. Hydro One attempts to offset this by drawing attention to certain cost savings resulting from historic projects. Energy Probe rejects Hydro One's "voluntary" proposals to reduce certain O&M (and some Capital) costs over the Plan period. This does not translate to a commitment to improved Productivity either in the definitional sense or in practice.

Productivity

How Productive is Hydro One?

In regards to efficiencies and cost-savings, Hydro One's application raises two key questions: is the company relying on past investments for its future productivity savings and are the productivity measures offered by the company actually cost savings and not, as it proposes, evidence in productivity enhancements? In short, can these proposals offered by Hydro One really be considered evidence of a more efficient and "lean" public utility capable of doing "more with less" or are they simply a result of past investments and financial savings that are part of an overall trend – in all industries, not just the public utility sector – to implement new technologies and business practices?

Hydro One maintains that it has been aggressive in its quest to cut costs, become more efficient and, ultimately, produce real and long-lasting savings for ratepayers.

> *The company has committed to an aggressive productivity improvement effort embedded in its forecast of essential costs over the next five years. The business plan is based on a rigorous bottom-up approach to budgeting which incorporates aggressive projective efficiency gains. These embedded efficiency gains have significantly reduced the forecast level of costs. In other words, but for these projected efficiency savings embedded in the forecast, the proposed revenue requirement would be much higher.*[2]

In its application Hydro One claims that without such efficiencies the revenue requirement would be, on average, $103 million higher each year.[3]

Yet, Energy Probe submits that many of the efficiency measures Hydro One has highlighted in its application are a result of programs that have already been implemented. Hydro One is in effect counting on its past investments for its efficiency and productivity savings going forward, particularly its Cornerstone Programs ($56-59 million) a year during the Plan.[4] [5]

Furthermore, Energy Probe believes that Hydro One is offering productivity measures and efficiencies that appear to be more a matter of normal business practices rather than a sustained and aggressive approach to becoming a more efficient utility for ratepayers.

In the oral hearing, Hydro One even admitted that many of its "aggressive" cost cutting and productivity savings are a result of programs that have already been implemented.

> *MR. AMODEO: Yes. The lion's share from back office, which is Cornerstone-related, business systems and business transformation, you can see the top three are – yes, they're stemming from older initiatives.*

---

[2] Tr. Vol 8, p. 3
[3] Exhibit A, Tab 19, Schedule 1, p. 2, Table 1
[4] Exhibit I 4.02 Schedule 1 Staff 62 page 3
[5] Undertaking J3.7

MS. LEA: So your new efforts between 2015 and 2019 are much less than those; is that correct?

MR. AMODEO: Yes, that's correct.[6]

Taken together, these two major shortcomings – a reliance on past productivity investments and, as we will show later, using savings as a measure of productivity in Hydro One's application, fail to prevent major rate increases for some ratepayers over the five-year plan. Furthermore, that increase in rates will occur even though Hydro One, in its own words, has "no plan to improve reliability" since the current level of reliability – which places Hydro One in the lowest ranked quartile of its peers and is, in its opinion, "appropriate for its customers."[7]

Hydro One itself admitted that it struggles at times to determine when investments made by Hydro One in the past can and should be considered "productivity" savings, particularly years after those investments were originally made.

MR. AMODEO: Well, I mean, I guess our logic in showing our savings is if we do something it does carry on each year, because we are getting those savings each year. I mean, it is a good question as to when do you axe it and say, okay, we're starting again. And I don't think, as -- I don't think we have really decided when that happens, but it is a very interesting question, and actually I question it myself as to when do we say, okay, let's stop tracking this.[8]

And;

DR HIGGIN: So the first question is, can you confirm that Cornerstone is, in essence, complete? And that is – it's done, dusted, and in place, and apart from a few tweaks on things such as CIS, it is done. All of the main investment capital-wise is done, and it is now pretty well finished.

[6] Tr. Vol. 3, p. 16
[7] Tr. Vol 1, p. 45
[8] Tr. Vol 3, p. 112

MR. AMODEO: Yes. I mean, most of it is in sustainment now. I mean, CIS we're still working on, as I think everybody knows, but for the most part the capital investment part of it, I believe, is complete.[9]

Energy Probe submits that in many cases these productivity savings put forth by Hydro One are really legacy savings and don't reflect a true culture of innovation and efficiency at the public utility. The Board should consider at what point past investments can still be counted as current savings. If, for example, a company invests in a new fleet of new efficient trucks, for how long can it compare those trucks to the older models and still claim those efficiencies?

We submit that at the most basic level, all companies should – and do – continually invest in efficiencies. To not do so would be bad a business practice and result in a loss of competitive advantage. Even though Hydro One doesn't face the same competitive pressures as a private company, it should be undertaking the same practices. Using its past investment as a sign of future efficiencies seems contrary to us and fails to consider that some investment should, and would, naturally be made to improve efficiency and cost savings. Hydro One's efficiency programs do not clearly show to Energy Probe that it is taking all the necessary steps to be more productive with its spending and operations.

In response to questions on why Hydro One lags behind its competitors when it comes to productivity, the company repeatedly claims that it is different and that it has no intention to benchmark itself against its peers.

MS. LEA: So at this time, at least, you do not intend to undertake any kind of benchmarking or analysis to establish a baseline for your productivity performance?

MS. FRANK: We have no such plans.[10]

[9] Tr. Vol 3, p. 112
[10] Tr. Vol 1, p. 85

And;

> *MS. FRANK: I believe the analysis -- we had commented early -- actually, many times on the PEG report and their approach, Pacific Economics Group's approach to doing this analysis, where we don't think they adequately reflect the nature of our system that we run, the -- or the customers we serve or where those customers are located. That the adjustments they make, when they come up with what they believe is their economic level of costing, doesn't really reflect what our distribution business must do.*
>
> *So it's the nature of the system that we've built as well that result in our performance being fourth quartile, and the cost to maintain it also higher because now we can't just do a switch and have people back on and deal with the repair at a convenient nine-to-five-type time. That is not how we can work. We have to get somebody out there, whatever hour it is, and diagnose the problem because we've got people out of power.*
>
> *So it is far more costly to operate a system that is built the way ours is built.*[11]

Energy Probe suggests that even with the geographical pressures faced by Hydro One, the Board should look closely at the incremental cost efficiencies that that the company will produce over the term of its application. Hydro One proposes that savings increase from $90.7 million in 2014 to $118.4 million in 2015, or $27.7 million – a 31% increase in annual savings. But thereafter, the *incremental productivity* savings decline, falling to $8.1 in additional savings in 2016, $3.8 million in 2017, $1 million in 2018 and $200K in 2019.[12] Energy Probe believes that by looking at incremental savings, ratepayers get a clearer picture of the types of productivity and efficiency measures the company is putting in place over the five-year application. We believe that the resulting picture isn't a positive one.

Starting from 2015, Hydro One is able to increase savings from productivity, adding up all of the annual incremental savings, by $40.8 million. Energy Probe believes that ratepayers will find that number paltry compared to the

[11] Tr. Vol 1, p. 89
[12] Exhibit A, Tab 19, Schedule 1, p. 4, Table 2

more than $1.5 billion the company is requesting in revenue and the overall 6.3% annual rate increase that is needed to meet that revenue requirement.

Board Staff highlighted this declining savings trend in their final argument.

Excerpt from "Table 2: Total Annual Savings - Distribution ($ million)" (Exhibit A Tab 19 Schedule 1 Page 4)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cumulative Annual Savings Included in Forecasts	12.3	17.3	37.9	68.0	90.7	118.4	126.5	130.3	131.3	131.5
Staff's Calculation of New Savings Each Year		5.00	20.60	30.10	22.70	27.70	8.10	3.80	1.00	0.20

Hydro One maintains that this decline in incremental savings is simply a matter of getting at the "low-hanging fruit" and it will get more challenging to find more savings in the later years of the application.

> *MS. FRANK: I would say that that is what you often find when people aggressively pursue productivity. The early years of finding the productivity are much more productive than the later years. You know, I think they characterize it "the low-hanging fruit." You get a lot in the early period, and then each additional dollar you go after gets more and more difficult, both to identify and then to extract. So this is, I would say, a normal type curve that you would see.*[13]

Yet, Hydro One has repeatedly stated that its productivity savings are "aggressive", but here says that its productivity savings will get all the low hanging fruit. We submit that the Board should consider which of these statements is more accurate: is the company only grabbing the low-hanging fruit – based mostly on past investments – or is it being "aggressive." Energy Probe believes that those two comments from the Company do not align with one another.

While Energy Probe believes strongly that Hydro One should be requesting the revenue – and the subsequent rates charged to ratepayers – needed to maintain a safe and reliable Distribution System, we believe that the

[13] Tr. Vol 1, p. 87

"productivity savings" tabled by Hydro One fail to impress and it is relying on its past efforts .

We also believe that Hydro One's record as one of the least productive utilities in the province – which it blames on factors such as large geographic base – shows that a far greater degree of savings should be possible. According to the Pacific Economics Group's study "Productivity and Benchmarking Research In Support of Incentive Rate Setting in Ontario",[14] Hydro One was ranked as the second least productive distributor in the province, meaning the "low-hanging fruit" in the case of Hydro One should be abundant, even with the challenging geographic conditions it faces.

Board staff has suggested an X-Factor, stretch factor or some other measurement of productivity. Energy Probe agrees with that submission and believes Hydro One needs to demonstrate more clearly how it is becoming a more "productive" company. It is currently offering voluntary savings, which Energy Probe believes is insufficient.

Productivity or Savings?

The other issue at the heart of Hydro One's cost efficiency and productivity plans is a key question: is the company talking about productivity or are they simply highlighting cost savings? In its final submission Board staff asked the same question, but failed to offer any concrete examples of when Hydro One's productivity proposals were really just savings. Nonetheless, the Board rightfully and succinctly highlights the problem:

> "Staff submits that Hydro One confuses the concept of cost efficiency with the concept of productivity by characterizing forecasted cost savings as productivity. Staff submits that the Board needs to have confidence in how productive Hydro One is being, not just how much it is (or is not) spending."[15]

[14] Exhibit I 2.06 Schedule 1 Staff 34 PEG Report Table 4
[15] Board Staff Submission, p. 9

We contend that some of these efficiency measures are actually savings that would, in some cases, be standard at any company.

Take telephony as an example. Hydro One will produce more than $10 million in savings over the life of the application. While these savings are of benefit to ratepayers, Energy Probe cannot figure out how this is making Hydro One a more productive company and why it should be seen as a sign of improvement compared to other public utilities. The counterfactual – that Hydro One does nothing about its telephony contracts and video conferencing capabilities – would be unreasonable for it, or any company, to defend. In essence, such savings should be expected of Hydro One, regardless of it having to come before the Board.

Staff Flexibility is another area of concern. Here Hydro One expects to save more than $56 million over the life of the plan through a more "efficient use of skilled and non-skilled labour" and other deals with the backlog of work. Again, while Energy Probe fully supports Hydro One's move to lower costs through a more flexible labour force, we see this more as the company saving money for ratepayers in the short term, but not producing long-term productivity and efficiency enhancements for the company. Eventually the backlogs will be dealt with and the non-skilled and skilled workers given the correct tasks. The immediate savings are evident, but the long-term productivity enhancements are less clear.

The major components to Hydro One's efficiency program are Back Office, Business Systems and Business Transformations which are part of investments that have already been made or are near completion (as we stated above). Energy Probe cannot see how these should be considered as incremental productivity savings which in some cases would be several years after the initial investment was made.

Board Staff point out that while Hydro One defines productivity as "the effectiveness of productive effort, measured in terms of the rate of output per unit of input," the company never actually provides evidence on its past or projected "rate of output per unit of input." The examples Energy Probe cited above show that in many cases it appears that Hydro One is highlighting savings rather than a becoming a more productive company.

What If the Voluntary Productivity Never Happens?

Hydro One's Position on an external Productivity Benchmark is set out in its Argument-in-Chief (AIC):

> "There is, therefore, no need to superimpose a mechanistic X factor on the proposal because of hoped-for productivity gains. These gains are already embedded in the business plan. The addition of an X factor or a similar formulaic stretch factor in addition to the productivity gains embedded in the application would, I submit, be double-counting. It would, as well, set unrealistic and probably impossible targets[16].

As set out in a CME IRR[17] a CPI-X standard IRM would result in revenue requirement increase of about 1.6%. So the Hydro One Plan is NOT an incentive plan.

In fact as Undertaking J 2.3 shows, Hydro One is claiming $184,500,000 in savings. By Hydro One's calculations, the "voluntary productivity savings are equivalent to productivity factor of 0.85% or, as revised[18] 0.79%.

We challenge that calculation. By using *incremental savings ("productivity gains")* as suggested by Board Staff above, we suggest the resulting equivalent Productivity Factor is about 0.3% as shown in the second part of the Undertaking.

[16] Tr. Vol.8. HO AIC Page 3
[17] Exhibit I Tab 1.01 Schedule 5 CME 5
[18] Undertaking J4.2

If Hydro One achieves its voluntary "Productivity" Savings what is it going to do?

> "The company has in effect, committed to spending the entire allowed revenue requirement over the five-year period on programs regardless of the effect on its rate of return. Thus, any additional unforeseen productivity gains which may be realized will directly benefit the customer. If the company exceeds its ambitious productivity targets, the money, is placed back into the customer service or assets. If the company does not meet its projected and embedded productivity gains, it alone suffers the consequences".[19]

And, Undertaking J 5.11;

> If Hydro One finds $10 million in productivity savings from OM&A, the company will invest those savings back into its work program to address the system needs identified through continuous monitoring and re-prioritization. This will most likely be in other OM&A programs. However, given the revenue available with the approved rates, Hydro One might give priority to a capital investment that has a revenue requirement of $10 million. Due to resourcing and other constraints associated with capital projects, Hydro One will more likely invest the OM&A savings back into its OM&A work program.

This summarizes Hydro One's voluntary approach to "Productivity" savings. But what happens Hydro One does not achieve its proposed or planned voluntary "productivity gains" and savings?

Stretch Factor:

> Staff notes that parties representing various ratepayer groups asked Hydro One about the inclusion of an earnings sharing mechanism in its Custom plan that would share benefits after-the-fact. Staff believes that a stretch factor, which shares expected benefits with ratepayers up front throughout the IR term provides a more powerful incentive than an earnings sharing mechanism. In particular, Staff believes that monitoring and reporting will capture any over-earning by Hydro One at the expense of eroding service and/or reliability performance.

Hydro One justifies the lack of a direct productivity factor offset based on its claimed historic and forecast incremental savings. The future savings are as noted minimal and importantly are just forecasts that are voluntary and under control of Hydro One management, rather than an integral part of the MYCOS Rate Plan:

[19] Tr. Vol. 8.HO AIC Page 3

Board Staff notes in its Submission that it cross-examined Hydro One as to why it did not propose a custom index based on its forecasts as per the RRFE Report. HO responded that it would have been possible to translate its planned savings into a formulaic-type number, but did not see benefit of doing that. Rather, Hydro One included annual savings estimates into its forecasts associated with planned projects[20].

Staff indicates in its submission that it agrees that cost of service forecasts underpinning a cost of service application should include planned savings. Staff submits that a Custom IR rate setting index should, in addition include expectations for benchmark productivity and efficiency gains that are based on external benchmarks.

Customer Input, Costs, and Customer Impact

Customer Satisfaction

Energy Probe believes Hydro One has adequately surveyed its customers in order to understand what is most important to them. Not surprisingly the number one issue among ratepayers continues to be the size of their bill, a sentiment that Hydro One has repeatedly stated that it fully understands.[21]

Energy Probe's comment regarding customer satisfaction is that the Board should determine at what point a dissatisfied customer base would require some sort of action during the five-year application. Hydro One is proposing to increase customer satisfaction target to 85% by the end of the application.[22] Yet Hydro One has not proposed any action the Board should take if that target is significantly under-achieved.

[20] Tr. Vol. 1, pp. 80-81
[21] Exhibit A, Tab 5, Schedule 1, p. 5, Figure 1
[22] Exhibit A, Tab 4, Schedule 4, p. 12, Table 6

Hydro One commented that past declines in satisfaction were attributed to a "recession followed by a rate increase."[23] Hydro One's current application is tabling some significant changes to rates for some rate classes. Directionally, as discussed later by Energy Probe agrees most of those increases are justified as the company looks to better allocate costs and revenue collected from each rate class. However, customer satisfaction figures could be expected to be negatively impacted by rate increases, despite the company's more than threefold increase in Customer Experience spending.[24]

The Province last experienced a recession in 2009 so over the next five years a recession is certainly possible. If a recession were to occur then the customer satisfaction numbers are likely to be, again, negatively impacted.

Energy Probe submits to the Board that it direct Hydro One to submit annual updates on the customer satisfaction figures based on peer group surveys. If there is no improvement to the latest IPSOS survey, then the company should come before the Board for further questioning, unless the causes are out of control of the company.

The effect of rate impacts *are* in Hydro One's control as are the company's overall interactions with customers (billing etc.) that could result in a significant change in customer satisfaction levels.

A major component to the Renewed Regulatory Framework (RRFE) is Measuring Performance of distributors, particularly in their relationships with their customers. If Hydro One's customers are become increasingly dissatisfied with the company over the five-year plan, the Board would be correct to investigate the reasons for this change.

[23] Exhibit A, Tab 4, Schedule 4, p. 12
[24] Exhibit A, Tab 4, Schedule 4, p. 13

Customer Rate Impacts

Hydro One's Position on the Rate Impacts resulting from the MYCOS Plan is set out in its AIC:

> While a comparison of costs on a percentage basis can be misleading, it is true that the proposed smooth rate revenue requirement, the revenue requirement, will increase by about 6.3 percent over the next five years annually on a smooth basis.
> I do not minimize these increases on a percentage basis, but it must be stated that these increases in revenue requirement have a relatively small effect on the average total customer bill. It is below the rate of inflation, all other things being equal. And I ask the Board to remember that the business plan itself is based upon an assumption of an inflation rate of 2 percent per year over the test period, over the five-year period.
> After rate smoothing, the change to the average residential customer's distribution bill will be about 2 percent per year, about the rate of inflation.[25]

Energy Probe suggests this is a totally inappropriate and misleading claim. The 2015-2019 average revenue requirement increase of an average 6.3% a year at existing rates would mean that increase would flow through to all classes *absent any cost allocation and rate design changes*. In fact, Hydro One shows that Rates Revenue at existing 2014 rates is $1,158,859,444, compared to proposed 2015 $1,367,101,526.[26]

However, because the Residential Classes currently have Revenue to Cost ratios of between 0.93 and 1.15[27], the impact of cost and rate increases is masked when this R/C ratio is changed. Absent the proposed major movement of Revenue Requirement (costs) and revenues away from these classes, existing Residential rates would increase more than the average 6.3% a year[28].

The corollary of changing Revenue to Cost ratios is that very large shifts in revenue responsibility occur for other impacted classes.

---

[25] Tr. Vol. 8. HO AIC Page 6
[26] Exhibit G1-4-2 Attachment 1
[27] Ibid. 20
[28] Exhibit A, Tab 3, Schedule 1, page 6.

Whether implementation of Hydro One's proposed cost allocation and rate design changes are appropriate, given the major increases in Revenue Requirements will be discussed further under Cost Allocation and Rate Design.

Reasons for the Proposed Revenue Requirement & Rate Increases

Hydro One's position is stated below:

> First, remember we are entering a period where there must be a rebasing following a year of no rate change in 2012, and thereafter upon a two-year formulaic performance-based rate interval for 2013 and 2014, a three-year period.
>
> During that period the company committed extensive capital to improve the deteriorating distribution system. It put its money at risk, and now is entitled to depreciate those assets and recover a return on the investment it made in used and useful assets which have now come into service.[29]

As shown in Undertaking J1.2 Hydro One had a notional Revenue Requirements $1.318 billion 2014 under the second year of the two year Approved IRM period.

In fact, Hydro One operated to a notional revenue requirement of $1.426 Billion in 2014. Rates were set on the basis of Increases in Revenue relative to 2012 of 1.4% in 2013 and 2.6% in 2014[30].

Hydro One has clearly ignored the Regulatory Contract under The IRM Plan that it would bring capital and operating costs in line with the amounts collected in rates and in fact deliberately overspent with the result that it did not meet its approved ROE in either 2013 or F2014[31].

---

[29] Tr. Vol. 8 HO AIC Page 7
[30] Undertaking J3.3
[31] Exhibit I Tab 6.03 Schedule 6 VECC 76

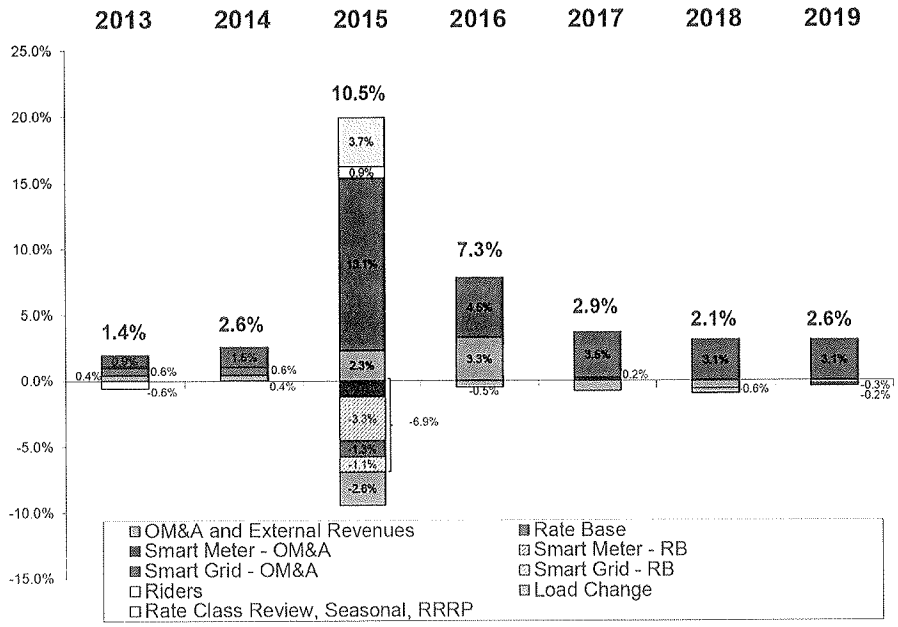
The increase in rates faced by Hydro One customers is due to the 19% growth in revenue requirement in 2015 relative to 2011, arising from increases in gross plant, reflecting in-service additions made to rate base during the IRM period from 2012 to 2014, the costs of which were not fully recovered in rates.

In addition, amounts previously recorded as regulatory assets ($564.9 million of Smart Meter, Smart Grid and Distributed Generation gross fixed assets previously recorded as regulatory assets and tracked in deferral accounts) are being transferred into rate base in 2015.

The result is that Hydro One has dug a "big hole" ($266.6 million revenue deficiency) and now seeks to boost rates to recover its overspending in 2013 and 2014.

It has attempted to mask this history by stating that its aging infrastructure needed more investment and it had to overspend relative to the amount being collected in rates.

Distribution Rate Increase



- Rate adders and riders causes changes to rates as collections or refunds begin and end[1]
- Rate base component of rate change increases due mainly to in-servicing of capital projects

Hydro One clearly recognizes historic Capital Expenditures are one of the primary drivers for the rate increase in 2015.

In-service gross plant has risen from the approximately $7.6 billion when last approved by Board in 2011 to about $10 billion in 2014; approximately a 32 percent increase since it was last approved. Essentially this represents plant coming into service during the IRM period from 2012 to 2014, as well as regulatory assets being transferred into rate base over this period. Exhibit D1, tab 31, schedule 1, page 2.

Exhibit **J3.3, attachment 1.** shows us graphically the causes for the rise in revenue requirement. And this shows the increase per year attributed to growth of rate base and all the elements that underlie the proposed revenue requirement increase.[32]

[32] Tr. Vol. 8 HO AIC page 8

Rate Smoothing Proposal

As a result of the large increase in revenue requirement in 2015, Hydro One was forced to include a rate smoothing proposal in its application[33] . Hydro One proposes to establish a rate-smoothing deferral account to allow rates to be charged to customers on a smoothed annual basis over the five-year rate setting period. In the first 3 years of the 5-year rate setting period, rates will be lower than full recovery of annual revenue requirements would require.

Recovery of part of the 2015, 2016 and 2017 Revenue Requirements will be deferred until 2018 and 2019, to reduce the impact of the 2015 rate increase and facilitate rate stability through the 5-year period. The adjustments to rates revenue requirement as a result of using the new deferral account are:

2015	($52.3) million
2016	($68.7) million
2017	$22.4) million
2018	$41.1 million
2019	$102.1 million

The smoothing will be accomplished through negative and positive rate riders in each of the five years. The amounts listed above do not include any carrying charges, but Hydro One indicated that if the proposed amounts are approved, the account will be managed consistent with other Hydro One Distribution variance and deferral accounts and Board prescribed interest rates would be applied to the account balances.

[33] Exhibit F1/Tab2/Schedule1

Earnings Sharing

Hydro One has a history of overspending relative to its Revenue Requirement. This has resulted in lower than Allowed Return on Equity.[34]

Regardless of this recent history Energy Probe believes that an earnings sharing Mechanism is still appropriate, to protect Ratepayers, given the only ROE off ramp is 300 Basis points above the allowed ROE.

Energy Probe asked Hydro One to provide an example of a typical ESM[35]. Details of how this type of ESM will work together with the Rate smoothing account have been discussed by Hydro One[36] [37] and an example provided in J2.4.

Incentive mechanisms such as a Stretch Factor as proposed by Board Staff at page 19/20 of their submission [Table 3: Illustration (stretch factor, cumulative 1% per year, beginning in 2016)] may influence the structure of the deadband and sharing, but not eliminate the need for an ESM.

Similarly, the Total Compensation Cost reductions Energy Probe has proposed under O&M reductions, could influence, but not eliminate the ESM structure in regard to an appropriate deadband and sharing formula.

[34] Exhibit I Tab 6.03 Schedule 6 VECC 76
[35] Exhibit I Tab 1.04 Schedule 11 EP 6
[36] Tr. Vol.1 Pages 162 and 163
[37] Tr. Vol. 2 Pages 98-99

Revenue Requirement

OM&A Expenses

Table 5

Hydro One Distribution EB-2013-0416
Operations, Maintenance and Admin. Expenditures by Major Category
2010 - 2019, $ millions

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Sustaining	305.9	317.1	307.9	318.1	320.4	329.5	374.4	380.1	363.2	358.1
		3.7%	-2.9%	3.3%	0.7%	2.8%	13.6%	1.5%	-4.4%	-1.4%
5 years from 2014 to 2019										11.8%
Development	12.3	15.8	14.7	12.1	18.4	15.4	17.7	17.0	17.3	17.8
		28.5%	-7.0%	-17.7%	52.1%	-16.3%	14.9%	-4.0%	1.8%	2.9%
5 years from 2014 to 2019										-3.3%
Operations	18.6	18.1	21.0	22.8	30.4	30.3	34.4	34.8	42.3	41.0
		-2.7%	16.0%	8.6%	33.3%	-0.3%	13.5%	1.2%	21.6%	-3.1%
5 years from 2014 to 2019										34.9%
Customer Services	114.7	113.3	116.7	137.3	133.7	117.8	116.3	114.7	113.5	115.4
		-1.2%	3.0%	17.7%	-2.6%	-11.9%	-1.3%	-1.4%	-1.0%	1.7%
5 years from 2014 to 2019										-13.7%
Allocated Common Corporate Costs	94.9	85.5	88.6	102.8	73.8	66.7	62.5	62.4	62.4	62.3
		-9.9%	3.6%	16.0%	-28.2%	-9.6%	-6.3%	-0.2%	0.0%	-0.2%
5 years from 2014 to 2019										-15.6%
Property Taxes & Rights Payments	4.6	4.6	4.5	4.5	4.6	4.7	4.9	5.0	5.2	5.4
		0.0%	-2.2%	0.0%	2.2%	2.2%	4.3%	2.0%	4.0%	3.8%
5 years from 2014 to 2019										17.4%
Total OM&A ($ millions)	551.0	554.4	553.4	597.6	581.3	564.4	610.2	614.0	603.9	600.0
		0.6%	-0.2%	8.0%	-2.7%	-2.9%	8.1%	0.6%	-1.6%	-0.6%
5 years from 2014 to 2019										3.2%

Source: Exhibit C1/Tab 2/Schedule1

As shown in the Table, the increase in OM&A over the 5 year period is 3.2%. that compares to an inflation forecast of about 2% per year.

Hydro One states:

> While OM&A expense is going up for such essential activities as line clearance and vegetation management, the increase to the total OM&A expenses over the test period are relatively flat, as I have demonstrated on the graph and as I think you can see at Exhibit C1, tab 2, schedule 1, table 1. The fact is that some elements of the OM&A Expense cost basket have been dramatically increased during the 2013 2014 IRM Period.[38]

[38] Tr. Vol. 8 HO AIC page 10

Common Corporate Costs

Common shared corporate costs include shared Corporate Costs and Shared Services and Assets. Energy Probe has reviewed evidence on the 2014 Base/Bridge Year Common Costs and Hydro One evidence about future Outsourcing costs and the review by Black of CCF&S costs and Shared Assets by Black and Veatch.

We accept the CCF&S costs (as updated) for the 2015 year, but only for 2015.

There are two issues that directly impact on the *both the quantum of common costs and their allocation to HONI Dx and Tx and Affiliates for 2016-2019*. Hydro One has not addressed these adequately.

- Replacement of the Inergi Outsourcing contract
- Updates to the allocation of CCF&S cost during the MYCOS Plan

Replacement of the Inergi contract is scheduled for 2015. We have no specific information on the basis of the costs projected for 2015-2019[39], except that they are based on the extension of the current contract at a lower cost and an ISG Benchmarking Study (redacted) that only indicates that current Inergi costs are within the normal range for the 6 categories of services examined.

[39] Exhibit C1-2-7Appendix B

We note that in a Letter and Shareholder Declaration dated October 16, 2013, the Minister has directed Hydro One to outsource its services in Ontario[40]. We also note that Hydro One has agreed to have the Union represent the outsourced employees[41]. Hydro One witnesses agreed these constraints would likely result in higher costs than a purely market-based procurement.

The Contract Replacement has two possible outcomes. First, that the total outsourcing costs differ from t projected, the second that a different mix of services and associated costs may result.

The combination of these means that <u>both</u> costs and the allocation to Hydro One and affiliates, may change from those shown in Exhibit C1-Tab 2, Schedule 7, Appendix B. This will impact on The CCF&S Schedules filed at C1, Tab 5, Schedule 1, Tables 1-5.

> DR. HIGGIN: So there is no plan, other than getting approval of your board, to report the forward costs for the replacement contract to the OEB or anyone else outside of your own board of directors? Is that my understanding? You will not disclose those costs? Because under a normal process of procurement, then that is quite often done. The winning bid costs are made public.
> MR. STRUTHERS: I am assuming there would be a press release, which would indicate -- I am sure the vendor would want to have a press release indicating that they won the RFP and what those costs of that RFP were.[42]
>
> AND
>
> DR. HIGGIN: So my main point is coming back to my proposition that updating of the allocations of costs between distribution, transmission, and affiliates on a relatively frequent basis, one to two years, is something that is important. $10.8 million, if you put that as against your threshold of materiality of 7.5 million, you could confirm that that's well above that threshold.
> MR. STRUTHERS: As I think we have said before, the company's willing to sort of absorb any of the changes that occur as a result of itself. So I think the $7.5 million was actually relating to a third party that would have -- or a third-party influence that would have created that 7.5 million revenue requirement.

[40] Exhibit C1-2-7Appendix C
[41] Exhibit C1-2-7 Page 11
[42] Tr. Vol. 3 Page 124

Just with respect to common corporate costs. While there is an allocation, they also -- those common-area costs also get allocated to capital and OM&A.[43]

The Board needs to ensure CCF&S costs are appropriate and properly allocated during the 5-year Plan period. Otherwise, HONI Dx and Tx may be paying too much or too little.

Hydro One should be directed to file an updated copy of Exhibit C1-Tab 2, Schedule 7, Appendix B post contract award and update its CCF&S and Asset Management schedules for 2015. Black and Veatch should be retained to update the Common costs (CCF&S and Shared Assets) allocation in time for 2016 (potentially HO Transmission's next rate case).

Any significant changes to either Common Costs, or the allocation of these should be reported in the 2015 Report/Update and Application for 2016 rates.

Total Compensation Costs

Notable among *controllable* OM&A costs is Total Compensation.

There are 3 elements of Hydro One Base 2015 year Total Compensation costs that in our view are not acceptable and should be adjusted going forward:

- Head Count and Associated Salaries and Wages
- Total Compensation Costs (relative to HO one peer group)
- Pension Costs (employer vs employee contributions)

[43] Tr. Vol. 3 Page 129

Head Count and Associated Salaries and Wages

An examination of C2 Tab2 S1 Attachment 1 and J3.6 Attachment 1 shows that regardless of Hydro One manipulating the definition of FTE for Casual Employees on the above schedules, as part of its "Rebasing" in 2014, Hydro One increased Headcount by 520 FTE (from 7703 FTE in 2013 to 8223 FTE in 2014) and Payroll by $49.7 million (from $757,074,052 in 2013 to estimated $806,769,780 in 2014).

This corresponds to 6.7% and is unprecedented and inappropriate when Distribution rates were under constraint as part of the 2013-2014 IRM Plan.

Total Compensation Costs (relative to Hydro One peer group)

Adding to the big increase in Payroll costs for 2014 and carrying into the 2015 -2019 Plan is the fact that Hydro One compensation is not competitive relative to its Comparator Peer Group.

The Mercer Report[44] based on 2013 data, shows that there is some small improvement in Union Compensation relative to the Hydro One peer group, but overall, Hydro One Compensation is 10% over the Median, The peer group includes similar Industry Peers, most of whom are regulated by the Board.

If the 2014 total compensation is benchmarked then:

> Hydro One requested Mercer to estimate the dollar difference between the 2013 weighted average total compensation for Hydro One employees and the 23 weighted average median for the participants in the study. Tr. Volume 3, September 11, 2014, page 196, line 10 and 11.

[44] Exhibit C1 Tab 3 Schedule 2 Attachments 1&2

Using the same methodology as used in the Mercer Study, Mercer has determined the difference to be $60.8M, approximately 25.29% of which is allocated to Distribution. The resulting Distribution OM&A portion is $15.38M payable compensation over market median[45].

Accordingly, Hydro One has both increased Head Count dramatically in 2014 and at the same time its Average Salaries and Wages component of Total Compensation is still too high. Hydro One has no clear plan to address these two major deficiencies in its cost structure.

MS. LEA: Now, you are still 10 percent above the market median. Is it your view that you still need to make efforts to approach the median?
MR. STRUTHERS: Yes, the company intends to approach the median. That's one of its objectives.
MS. LEA: And how do you intend to do that over this five-year plan?
MR. STRUTHERS: The progress will be made through collective bargaining, and it will be what we will be able to negotiate with the Power Workers Union and the Society of Professional Engineers.[46]

Total Compensation for Hydro One (Dx and Tx) (2013 base) totals $1,067 million. The 2014 Total is $1,091 million.

Total Comp.	2013	2014	2015	2016	2017	2018	2019
Salaries & Wages	$778 m	807 m					859 m
Pension Costs	160 m	160					
OPEBs	129 m	124					
Total	1,067	1091					

Sources: C1T3 S 2 Attach 1&2; C1T3S 3; IT4.3 S 1 Staff 73(g)

Hydro One projections are that Salaries & Wages costs for the Corporation (Dx TX and Affiliates) will increase from $806.7 million in 2014 to $859 million in 2019.6.7% or 1.3% a year. If these projections come true it could be said this increase is reasonable. However, based on past experience, Ratepayers have no reason to trust Hydro One to manage its controllable costs.

[45] Undertaking J3.2
[46] Tr. Vol. 2, p. 142

Pension Costs (Employer and Employee contributions)

Another part of Total Compensation where Hydro One is not Competitive, relative to either its peers or Industry Best Practice is the sharing of Pension Contributions between Hydro One and its employees.

In sum, despite repeated Board Direction in the last several Rate Decisions, Hydro One is still contributing too much and is out of line with the industry. As the Board is aware, Jim Leach, the Special Advisor to the Minister of Finance specifically pointed out this situation in his Report[47]:

> ***Compared to other public-sector pension plans, the DB plans in the electricity agencies are generous, expensive and inflexible. They generally require lower contributions from employees, while providing substantial benefits. Furthermore, electricity sector employers are responsible for a larger share of pension contributions compared to most other public-sector employers. In addition, as single-employer pension plans (SEPPs), the employers bear all risks, such as investment performance, interest rate changes and increased longevity. These risks increase both the amount and the volatility of pension costs, which is ultimately borne by ratepayers, customers and the shareholder.[48]***

The Board needs to address this situation on behalf of Ratepayers and since the Hydro One approach is to rely purely on negotiations with the Union to achieve changes in Pension Contribution cost sharing, another approach is required.

Energy Probe suggests that the Board, as part of its approval of the proposed MYCOS Rate Plan, require Hydro One to move to a 50:50 Contribution cost sharing formula by 2019 from the 2015 level of 72% (Hydro One evidence).

[47] CME Compendium K 2.1 Tab 8 Leach Report Page 21
[48] Report on the Sustainability of Electricity Sector Pension Plans, p.8

Hydro One indicated that it is also planning on an increase in the employee pension contribution percentage from 28% in 2015 to 35% in 2019, showing some progress in moving the contribution ratio to 50/50, which is the norm for public sector defined benefit pension plans.[49] This would require notional or real reduction in sharing.

It is suggested that as an incentive to achieve parity, a reasonable *notional* reduction of 5% less in Employer Contributions each year is appropriate and the notional change in costs would be recorded in an amendment to the Pension Cost Deferral Account as an offset to pension costs.

The Board would not allow recovery of this amount (difference between notional and actual), unless Hydro One provides evidence that the cost sharing ratio has reduced when compared to the notional schedule. The amount of Employer Contribution to be recovered from ratepayers in each year would be the lesser of the notional amount or the actual.

The balance not approved for recovery would be carried forward and the calculation performed next year as part of the disposition of Deferral Accounts. Over the 5 year period only the amount of contributions consistent with the sharing schedule will be recovered in rates.

[49] Exhibit I/Tab 4.03/Staff 68

Illustrative Example

Employer Contribution	HO Target (a)	Incentive Plan (b)	Notional Deferred Amount (c)=(b)-a)	HO Actual Share (d)	% Amount excluded from rates (e)=(b)-(d)
2015	72	**72**	0%	72	**0%**
2016	70	**67**	2%	70	**3%**
2017	68	**62**	6%	68	**6%**
2018	65	**57**	8%	65	**8%**
2019	65	**52**	13%	60	**8%**

The shareholder has other non-regulatory avenues to deal with this issue, ratepayers do not.

Providing an Overall "Productivity" Incentive related to Total Compensation

We suggest that the Board needs to protect ratepayers by dealing directly with Hydro One's expensive Cost Structure in the MYCOS Rate Plan in the following ways.

As Board Staff have also noted, there is no Productivity offset (X-factor or equivalent) or other tangible productivity factor as part of the proposed MYCOS Plan, (purely a voluntary "productivity" cost saving objectives). Energy Probe suggests the Board should require Hydro One to provide a Targeted "Productivity" offset based on Total Compensation. As noted above, Hydro One Total Compensation is at least 10% above its peer group and the other components- OPEBS[50], Employer Pension costs are above industry norms.

[50] Exhibit TCJ1.19

This proposed Total Compensation Productivity Offset would be based on the following parameters:

- A 2015 Headcount Cap of 8200 FTE (for HONI Dx and Tx)
- Target Total Compensation Costs- Salaries &Wages, OPEBs and Employer Pension Costs are reduced by 10 % ($2015) over the Plan period 2015-2019 relative to 2014 Bridge/Base Year. *50% of the reduction is attributed to Dx.*

This Scenario is conservative and results in a smaller offset than the J3.12 estimate of Mercer ($15.8 million above median).

With regard to the Salaries and Wages, the Table below shows the impact of the stepwise "productivity" offset on Hydro One Distribution,

Current HO Salaries & Wages Costs*					Proposed "Productivity" S&W Costs			
Year	HO Headcount FTE (a)	HO Total Wages $Million (b)	Average S&W/FTE (b)/(a) (d)		Headcount Cap FTE (e)	Average S&W/FTE (e)/(b)*0.99 (f)	Salaries & Wages Cap $ Million (g)	Difference $ Million (b)-(g) (h)
2015	8218	816.679	$99,377		8200	$98,591	808.446	8.23
2016	8202	827.610	$100,903		8190	$100,041	819.336	7.66
2017	8184	838.360	$102,439		8180	$101,464	829.976	8.38
2018	8169	848.747	$103,899		8170	$102,847	840.260	8.49
2019	8162	859.044	$105,249		8160	$104,222	850.452	8.59
Total		4190.44					4148.47	41.35

Data Source:J3.6 (Note S&W costs are aggregate for HO Dx and Tx, reduction 2015-19 is 5% for Dx)

The result shows S&W reductions of $41.4 million over the Plan period or an average of $8.3 million a year.

Implementation of the S&W "productivity" offset would be similar to that for the Stretch Factor proposed by Board Staff.

Illustrative calculation for 2015 is provided below.

Urban (UR)	2015	2016	2017	2018	2019
Monthly Service Charge $ (59%)	20.29	21.02	20.68	20.01	19.65
Distribution Volumetric Rate (41%)	1.789	1.819	1.788	1.742	1.725
Revenue from rates Offset Factor *	-0.6%				
UR Rate Adjustment					
Monthly Service Charge $ (reduction)	20.16				
Distribution Volumetric Rate c/kWh (reduction)	1.778				

Source: G1-4-2 Attachments 1-5

*Calculated as -$8,300,000/$1,363,255,917=-0.6%

UR Revenue Reduction: $90,620,391/$1,363,255,917=6.65% or $551,950/yr.

Allocation: Fixed/Variable Split 59/41 $325,650/$226,299. Total UR kWh = 1,965,000,000

UR customers=209,756

Reduced Monthly Charge (($51,060,802-$325.650)/209756)/12=$20.16

A Total Compensation "Productivity" offset will provide a direct incentive for Hydro One to manage its controllable O&M costs

The alternative is to let Hydro One manage its controllable Total Compensation costs without constraint and for it to return in 2019 with the same uncompetitive cost structure. Hydro One's track record shows that it may not be capable on its own of controlling these costs.

Energy Probe urges the Board to require Salaries and Wages and Pension Contribution Costs Adjustments in its Decision.

Rate Base

The growth in gross plant in 2015 primarily reflects the in-service additions made to Hydro One's Distribution property, plant and equipment during the IRM period from 2012 to 2014 as well as amounts previously recorded as regulatory assets. For instance, as of January 1, 2015, $564.9 million of Smart Meter, Smart Grid and Distributed Generation gross fixed assets previously recorded as regulatory assets and tracked in deferral accounts were transferred into rate base.

Energy Probe Requests that the Deferred Smart meter (as Adjusted), Smart Grid and Distributed Generation Assets be amortized over the 5-year MYCOS Plan to mitigate rate increases. This amortized recovery would be incorporated into the Hydro One Rate Smoothing Proposal.

Energy Probe also requests the Board to order Hydro One over the term of the Rate Plan, to track and report Actual vs Forecast In-Service capital additions.

In addition, as for Hydro One Transmission, [EB-2014-0140 Hydro One Transmission Settlement Proposal], the Board should order an In-Service Asset Variance Account. The In-Service Asset Variance Account would capture the revenue requirement impact of the difference between forecast ISA's and Actual in the historic year and adjust the opening Rate Base accordingly for the next Rate Year.

Capital Expenditures

Over the course of the 5 year plan, Hydro One's total investment is planned to grow from $624.5 million the 2014 bridge year to $669.1 in 2019, an increase of 7.1%

Table 5

Hydro One Distribution, EB-2013-0416
Capital Expenditure by Major Category
2010 - 2019, $ millions

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Sustaining	314.0	274.2	261.8	303.0	286.4	308.2	335.2	359.7	380.4	383.5
		-12.7%	-4.5%	15.7%	-5.5%	7.6%	8.8%	7.3%	5.8%	0.8%
5 years from 2014 to 2019										33.9%
Development	162.9	157.1	185.9	193.0	200.2	223.3	206.3	185.7	183.5	199.1
		-3.6%	18.3%	3.8%	3.7%	11.5%	-7.6%	-10.0%	-1.2%	8.5%
5 years from 2014 to 2019										-0.5%
Operations	1.2	1.3	2.7	8.9	5.1	9.4	18.8	7.0	7.0	4.2
		8.3%	107.7%	229.6%	-42.7%	84.3%	100.0%	-62.8%	0.0%	-40.0%
5 years from 2014 to 2019										-17.6%
Customer Service - Smart Grid	18.4	30.1	43.1	16.3	22.9	22.6	9.9	3.9	0.0	0.0
		63.6%	43.2%	-62.2%	40.5%	-1.3%	-56.2%	-60.6%	-100.0%	n/a
5 years from 2014 to 2019										
Common Corporate Costs	93.2	133.0	142.5	127.8	109.9	85.4	84.5	83.1	84.2	82.3
		42.7%	7.1%	-10.3%	-14.0%	-22.3%	-1.1%	-1.7%	1.3%	-2.3%
5 years from 2014 to 2019										-25.1%
Distribution Capital	589.7	595.7	636.0	649.0	624.5	648.9	654.7	639.4	655.1	669.1
		1.0%	6.8%	2.0%	-3.8%	3.9%	0.9%	-2.3%	2.5%	2.1%
5 years from 2014 to 2019										7.1%

Source: Exhibit D1/Tab3/Schedule 1

Hydro One positions its Capital Program as both required/necessary and reasonable.

> As stated previously, the primary reason behind any increase in revenue requirement over the test period can be found in the company's capital program.

Sustaining Capital

The largest growth in sustaining capital is in station refurbishments and pole replacement programs outlined in the evidence and canvassed thoroughly by Mr. Brown on panel 3 in oral testimony.

As a result of the size of these programs, both are being tracked as part of the outcome measures proposed in this case. They are big expenditures, and the company thinks they should be monitored and has so proposed.[51]

In terms of "productivity" capital cost improvements, in response to IR Exhibit I/Tab 3.02/Energy Probe 30, Hydro One indicated that the cost of a conventional 44kV station is approximately $2.4 million and that the average cost of a complete refurbishment, utilizing an integrated modular distribution station (iMDS) for a 44 kV distribution station based on the pilot of this technology in 2013 was $1.9 million.

However, Hydro One did not commit itself to achieving these savings, claiming it is too early in the pilot project to quantify efficiencies gained or cost savings.

Energy Probe's major concern, as well as the huge increase in CAPEX is the lack evidence of *tangible unit cost reductions*.

In Exhibit D1 Tab 3 Schedule 2 at page 28 Hydro One details its proposal to increase spending on wood pole replacements from $320.2 million over the historical period to $529.8 million over the forecast period. This represents an increase of approximately 66% in both spending and the number of wood poles replaced compared to the previous period. *But there is no evidence of significant unit cost reductions.*

> MR. BROWN
> So that's what we're faced with going forward. There will be some increased volumes and bigger multi-circuit poles that still require replacement, and those will be more expensive to do from a unit cost perspective.
> MR. DeROSE: So from my simple understanding, one of the reasons why the budgets are going up by 65 percent is because, in 2013, you elected to go and do all of the easy, cheap poles, and now all that is left is the more expensive, hard poles.
> MR. BROWN: It is a factor. It is not the only factor. *Escalating prices*

[51] Tr. Vol. 8 HO AIC page13

around labour and materials are also factors in the escalating unit costs for poles.
MR. DeROSE: Okay. Am I right to assume that labour and the cost of poles is not going up 65 percent?
MR. BROWN: Well, the volumes are going up tremendously.
MR. DeROSE: I appreciate the volumes, but I mean labour is not going up 65 percent.
MR. BROWN: I wished it was.[52]

And;

MS. LEA: So you're not going to achieve economies of scale by replacing more poles during the planning period?
MR. IRVINE: The economies of scale are still built into this. We've got some new equipment, such as a pole setter, that we're using that is going to help mitigate these cost increases. The price per unit would be higher had we not been using this kind of equipment.
And so we're also looking at labour mix around the increase of poles and things of that nature, which are already built into and I believe have been discussed under the cost efficiencies discussion panel 2.[53]

Furthermore, Hydro One in response to questions at the oral hearing admitted that even with its dramatic increase in pole spending, it's still not going to fully clear its backlog in old or defective poles.

MR. STEPHENSON: Okay. And so -- but the reality simply is that if we use the 62 as a proxy for end of life and no more, but a proxy, the number of poles that's going to be reaching 62 on an annual basis for the next 25 years isn't 25,000, it's more like 35,000 or 40,000. That's the reality, isn't it?

MR. BROWN: There's probably an increasing number than 25,000 as we go forward based on --

MR. STEPHENSON: It's not a small number over 25, it's a big number over 25. It's several thousand a year more than 25,000.

MR. BROWN: I would have to do all of the calculations, but, yes, there's no doubt that it's increasing over the next number of years. We are going to need to do more poles.[54]

[52] Tr. Vol. 4 Page 183
[53] Tr. Vol. 5 page 58
[54] TR. Vol. 5, p. 96

Hydro One is proposing a dramatic increase in spending on pole replacement, yet is offering no evidence of significant unit cost reductions, while failing to fully address its backlog in pole management. Energy Probe is concerned with such a situation.

Another example is Hydro One's proposal to increase spending on 'Station Refurbishments' from $63.4 million over the historical period to $203.3 million over the forecast period i.e. ~ 220% increase.[55]

Again there is no evidence of unit cost reductions, except for the iMDS pilot program discussed above

We suspect the lack of volume cost-efficiency is because Hydro One's embedded cost structure is too rigid and cannot generate volume- based cost reductions. We suggest this inability to achieve unit cost reductions must be addressed now.

If procurement of more equipment is not resulting in volume discounts and lower unit prices this should be remedied. If procurement is not the problem, then Hydro One's labour costs and burden rates for engineering, civil and installation are the problem.

We expect AMPCO to address this unit cost issue and urge the Board to adopt their recommendations.

Energy Probe suggests that Hydro One's Budgets for Pole replacement and Station Refurbishments be reduced by 20% *with no reduction in target achievement*. This proposal is based on the traditional 0.8 volume factor associated with capital hardware volume discounts.

[55] Exhibit D1 Tab 3 Schedule 2 pg 8,

Development Capital

> Development capital rises in the first test year from $200 million or so in 2014 to $223.3 million in 2015, but then declines over the remaining test years. The development capital expense -- **and it is a big item -- is largely determined by annual demand for new customer connections. These are beyond the company's control, but they are expected to increase over the test years.**[56]

Energy Probe has no specific submissions on Development Capital.

Load and Revenue Forecast

Hydro One has provided evidence on how its forecasts compared with actual from 1997 to 2013.[57] The average variance of customers' energy purchase forecast compared to the weather corrected actual energy consumed is within one standard deviation of the forecast.

An area of concern for Energy Probe regarding the Load Forecast is the impact that Hydro One's rate increases will have on demand, also known as *price elasticity of demand.*

In response to an Energy Probe interrogatory[58] Hydro One said it has "not done any studies" on the elasticity of customer power demand and prices. Energy Probe suggests that, given the proposed increases in rates, calculating price elasticity could also provide useful information to the Board when it sets rates for Hydro One and other distributors.
Hydro One's customers are situated across the province and reside in both urban and rural parts of the province. The company should have taken the time to understand what the impact of its rate increases would have on the

[56] Tr. Vol 8. HO AIC page 14
[57] Exhibit A Tab 16 Schedule 2, Table 1
[58] Exhibit I, Tab 6.06, Schedule 11 EP 50

demand of its customers to better understand how those increases would have impacted its wide base of customers. Energy Probe submits that the Board, when considering the company's request for rate increases, note that Hydro One failed to fully understand the impact that its rates would have on it customers – even though interveners questioned the company on this topic.[59]

As it currently stands, without price elasticity estimates, neither Hydro One nor the Board has a complete understanding of the impact on demand as a result of the company's proposed material and sustained rate increases. Energy Probe believes that Hydro One has the data and expertise to undertake such a study and present it to the Board. This is a major shortcoming of its Load Forecast.

The other major Issues are the Customer Addition Forecast and the adjustments for CDM. Energy Probe accepts that although lacking transparency, the Customer Addition forecast is reasonable.

We have concerns regarding the contributions to the Target for the new 5-year CDM Plan under the 2013 Long Term Energy Plan (LTEP).

Hydro One Networks has broken its CDM forecast down into a four categories that are slightly different from those used by the OPA in the 2013 LTEP and consist of Codes & Standards, Historical Program Persistence, Target Program Persistence and Forecast Savings from Future Programs[60].

Energy Probe (and others) had concerns about Hydro One's methodology for estimating CDM impacts, including the assumption of Hydro One 18% of the Provincial CDM.[61] The release of the OPA provisional targets has

[59] Tr. Vol. 6 Page 170.
[60] Exhibit A/Tab 16/Schedule 4, page 32
[61] Exhibit I Tab 6.06 Schedule 11 EP 46

provided an updated estimate. However the breakdown remains of concern since if the components do not meet the forecast the overall impact will be affected.

Energy Probe has worked with VECC on this issue so we will await the submissions of VECC to see if there are any remaining issues regarding the CDM reductions in the Load Forecast.

The Other Revenue Forecast is reasonable and should be accepted.

Outcome Measures and Reporting Requirements

Metrics & Scorecard

Hydro One has proposed that the MYCOS Rate Plan Outcomes be measured on a set of 8 Metrics presented as a Scorecard.

Hydro One has proposed outcome measures at Exhibit A, tab 4, schedule 4. The Board will recall that there are eight outcome metrics which are proposed for annual reporting. These have been chosen for a number of reasons. Two separate stakeholdering sessions solicited input from stakeholders concerning appropriate outcome measures.

There was no clear consensus as to what would be appropriate. However, there was general agreement that only a manageable number of metrics should be chosen and that they should be transparent and measurable.

Hydro One proposes eight metrics based on several criteria. First, it looked for outcome measures in areas where major expenditures are to be made, as I have said, such as vegetation management, station refurbishment, and pole replacement.[62]

The HO Metric/Outcome Scorecard proposal [Undertaking J3.3] has received criticism in the Technical Conference and Hearing. We address our concerns under the following topics:

[62] Tr. Vol. 8 HO AIC page 15

- **Consistency with the desired outcomes in the RRFE**
- **Input Measures and Metrics (such as Poles Replaced and Vegetation Cleared) rather than Output measures**
- **Outcome measures that are flawed due to external factors (such as force majeure) mask the actual output change**
- **Weighting the Scorecard? (to reflect outcomes critical to customers)**
- **Why did Hydro One not adopt the new OEB Scorecard for Electricity Distributors? (as a basis for its Outcomes and provide its 5 year forecasts and evidence in that format)**

Consistency with the desired outcomes in the RRFE

As noted earlier, Hydro One relates the RRFE Outcomes to its proposed it's Outcome Measures in Exhibit I Tab 2.03 Schedule 10 CCC 11.

RRFE Outcome	# of Outcome Measure
Customer Focus	1, 2, 3, 4, 5, 6, 7, 8
Operational Effectiveness	1, 2, 4, 5, 6, 7
Public Policy Responsiveness	3
Financial Performance	1, 2, 4, 5, 6, 7

These are the same 4 broad RRFE categories that the Board has set out in its new Scorecard for Electricity Distributors.

As can be seen Hydro One's position is that ***all*** of its Outcome metrics respond to Customer Focus and Operational Effectiveness except in the latter case Return on Equity. As noted earlier we dispute this claim and will demonstrate the problems with Hydro One's proposed Metrics and Scorecard.

Input Measures and Metrics rather than Output measures

Two of the 8 metrics - Poles Replaced and Vegetation Cleared are not Output measures. The latter is linked to an output measure (number tree contacts resulting in lower SAIFI). However, as discussed below the use of SAIFI as an output measure is not appropriate due the high variability resulting from Force Majeur events.[63] Undertaking J5.3

As such it is questionable whether either of these Output Metrics is appropriate and the Board should consider this in its determination of this Issue.

Outcome measures that are flawed due to external factors

Energy Probe notes there are several factors (such as force majeure) that can mask the actual change for any output measure based on SAIDI. This is true for Vegetation Management and for Poles Replacement and other Metrics. This problem is not unique to HO but is particularly so for Hydro One's proposed Metrics. If the Metric is to be retained, Hydro One should measure Force Majeure events and adjust the Output Metric.

Hydro One has in recent years experienced an increase in outages as a result of force majeure. In response to an Energy Probe interrogatory[64], Hydro One showed that force majeure events contributed to a 46% increase in SAIDI from tree contacts and a 17% increase in SAIDI from defective equipment. These results should be considered when it comes to outcomes as customers do not distinguish between a normal outage and force majeure.

[63] Exhibit A Tab 6 Schedule 1 Page 20 Figure 6
[64] Exhibit I, Tab 2.02, Schedule 11 EP 17

	Actuals					Targets					
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Proposed: Number of Interruptions (excluding force majeure)	6,445	6,116	6,113	6,953	5,791	6,300	6,300	6,300	6,200	6,100	6,000
Number of Interruptions (including force majeure)	8,572	7,747	14,047	9,797	17,279	11,500	11,500	11,500	11,400	11,300	11,100

Undertaking J5.3

Other Considerations

Weighting the Scorecard?

Many Performance Scorecards are weighted to reflect the relative importance of the Components. We suggest Hydro One be required to submit a revised set of Metrics and a Weighted Scorecard that weights Customer- focused Outcomes and Operational Effectiveness as the major Outcomes.

Why did Hydro One not just adopt the OEB Scorecard for Electricity Distributors?

The new OEB Scorecard for Electricity Distributors contains the 4 main outcomes set out in the RRFE and then presents a set of Metrics and Measures that are to be reported annually. Hydro One has provided its 2013 Scorecard [J4.5].

From a comparison of this Scorecard with the Hydro One Scorecard, 4.9 that shows the costs and outcomes, it seems that many Metrics are the same and the ones that are either Service Quality Metrics that customers value or Metrics that are Inputs rather than Outcomes.

Accordingly, we suggest that the Board direct Hydro One to use the Board Scorecard in parallel with its own MYCOS Plan Scorecard BUT to also to provide with its 2015 Draft rate order a copy of the OEB Scorecard with a *multi-year forecast of Metrics Measures and Outcomes* based on the projections in J4.9.

The Board should also ask Hydro One to review J4.9 and make modifications as suggested by Energy Probe and Others and then file this as a Hydro One specific Scorecard for the 5-year Plan Period.

The OEB Scorecard 2015-2019 projections, together with the modified Hydro One Scorecard would be the Metrics and Targets by which HO Performance would be measured over MYCOS Rate Plan.

Annual Adjustments and Annual Reporting

Hydro One has proposed 3 routine annual plan adjustments – updates of cost of capital and working capital as well as clearance of variance accounts. These updates would be accomplished through an annual Draft Rate Order approval process.

Hydro One summarizes its position in its Argument-in-Chief

> In considering what reporting would be appropriate, the Company observes that it is already committed or required to submit to a substantial amount of annual information to the Board as outlined in response to Exhibit J5.7, such items as the OEB scorecard, the Hydro One outcome scorecard, and annual monthly and quarterly reporting as required by the electricity reporting and recordkeeping requirements.[65]

[65] Tr. Vol 8. HO AIC page 17

In considering Hydro One's proposals for Annual and other Adjustments it is necessary to return to Hydro One's evidence about what Revenue Requirement cost/revenue items may be adjusted either annually, or as required in the normal course of business and which items are outside the normal course of business and will only be adjusted or require other action due to circumstances out of control of management.

- Annual adjustments for recurring events that are mechanical in nature.
  - cost of capital (including cost and amount of debt issues by Hydro One for both Dx and Tx
  - working capital
  - clearance of variance accounts.
- Adjustments to the Allocation of Common costs, that vary materially from those filed in evidence. This will require a review by Black and Veatch on a two year cycle, to coincide with applications by Hydro One Tx which is expected to remain on Cost of Service Regulation.

Energy Probe agrees with these adjustments, plus the addition of a provision to update the allocation of Common Costs.

- Adjustments outside of normal course of events will be sought for unexpected materially impactful events outside of HO control
  - industry restructuring;
  - major change to HO's service territory.
  - new government directives or legislation,
  - material changes to codes or standards, or
  - material unforeseen weather events.

Energy Probe agrees with Board Staff that treating these or other outside of normal course events, as additional off ramps is not appropriate and Hydro One should apply for a rate adjustment as a z-factor if needed:

- Off Ramp provisions to be applied where warranted; and
- Annual Reporting of agreed upon Outcome Measures [PD2 May 12 2014]

Energy Probe has further submissions on Annual Reporting below.

With respect to materiality, Hydro One proposes a materiality threshold for these adjustments of 0.5% of test year revenue requirement as an alternative to the materiality threshold found in the Board's Filing Requirements for Electricity Distribution Rate Applications. Energy Probe accepts in principle this 0.5% threshold for Hydro One.

However Hydro One needs to clarify in its Reply Argument what type and level of change(s) in costs or revenue is encompassed and whether a single change or combination of factors can qualify.

Stakeholder Engagement

Hydro One Summarizes its proposed Annual Reporting in its AIC in reference to Undertakings J4.8:

Hydro One proposes to submit at the time of the annual RRR filing, a Distribution 10 Business Plan Memo approved by the Hydro One Board in November of the prior year 11 for the current year. The Business Plan Memo is based on a detailed bottom up planning 12 processes across the organization. For example, on April 2015, the Hydro One Board's 13 November 2014 approved values for 2015 will be filed.
This Board Memo will cover:

- Distribution Work Program Details on OM&A and Capital expenditures; 18
- Distribution In Service Additions >$1M; 19
- Forecasted Outcome Measures with revised targets as required; and 20
- Forecasted Distribution Business Measures in the Hydro One Corporate Scorecard.

And 5.7:

Hydro One believes the comprehensive set of reports cited below will give the Board a 11 complete and accurate account of the successful implementation of the Hydro One Distribution System Plan:

- Hydro One Board Distribution Plan Approval Memo – See response to undertaking J4.8;
- Hydro One Outcome Measures Scorecard – See response to TCJ1.16; 17
- The OEB Scorecard for Hydro One – See response to J4.5; 18
- An annual Productivity / Cost Efficiencies accomplishment file; and 19

- Annual RRR Filing Reports:
  - 2.1.4 – Report on Service Quality Requirements and System Reliability Indicators;
  - 2.1.5 – Information related to performance based regulation for the preceding calendar year;
    - Labour;
    - Capital;
    - Supply and Delivery Information;
    - Demand and Revenue;
    - Utility Characteristics; and
    - Regulated return on Equity;
  - 2.1.7 – Annual Trial Balance; and
  - 2.1.13 – The uniform system of account balances mapped and reconciled to the audited financial statement.

We suggest the Annual Reporting regime should be simple, based on variance reports and provide an outlook for the forward period. The focus should be on delineating and discussing impacts on Customers and Rates and remedial actions. In addition the Draft Rate Order for the next Rate year would be filed with a summary of cost and revenue changes.

Energy Probe asked Hydro One for its *Stakeholder Engagement Plan* during the 5 year MYCOS Rate Plan. The response was that there was no documented Stakeholder Engagement Plan.

> DR. HIGGIN: Oh, yes. I assume the CAB [Customer Advisory Board] is an appointed body and basically is used for certain purposes, as said here.[66]
>
> No, I am talking about the gas utility approach, which is basically doing (sic) the plan: We're going to meet with our stakeholders. We will update them on what the actual performance has been, and deal with any issues and so on. That's the question. Is there such -- I can't find it in the evidence, and therefore I would assume there is not such a plan; am I correct?
>
> MR. WINTERS: You are correct, that there are no other customer engagement plans beyond what is outlined in this particular exhibit.[67]

[66] Exhibit A Tab 5 Schedule 1 page 6
[67] Tr. Vol. 1 Pages 176-177

Energy Probe expected to see in evidence a specific set of Stakeholder Engagement activities related to the implementation of the 5 year Custom Cost of Service Rate Plan. This would be similar to what the Gas Utilities have in place.

It is critical to ratepayers that there is a funded Stakeholder Engagement process during the 5-year plan.

Hydro One should provide ratepayer representatives the Annual Reports with an opportunity to comment on the Report (progress against scorecard targets revenue requirement and rate smoothing account etc.).
and the Draft Rate Order for the next rate year, within a 10 day period.

Board Staff would oversee annual review process and can recommend whether any further action should occur and delineate this. Cost Awards would be available to intervenors in EB-2013-0416 for a specific maximum number of hours.

This process could be supplemented by Stakeholder Meeting with take-aways similar to Enbridge Gas Distribution and Union Gas.

Regulatory Accounts

Hydro One is seeking disposition of 17 accounts with a forecast balance of $21.3 million at December 31, 2014.[68] With the setting of new Distribution rates from 2015 to 2019, Hydro One is requesting that the $21.3 million balance be recovered in a straight-line pattern over the 5 year (60-month) period.

[68] Exhibit F1/Tab1/Schedule 1, Table 1

The remaining accounts have a balance of $47.2 .[69]

At Exhibit F1/Tab1/Schedule 2, Hydro One requested approval to continue the Tax Rate Changes Account and the Pension Cost Differential Account. New accounts requested are the Bill Impact Mitigation Variance Account (to facilitate the bill mitigation proposals in this application) and the Rate Smoothing Deferral Accounts

The Following Accounts will be discontinued:

- Smart Meter – Minimum Functionality;
- Smart Meter – Exceeding Minimum Functionality;
- Distribution Generation – Other Costs – HONI - Variance Account;
- Distribution Generation - Express Feeders – HONI - Variance Account;
- Smart Grid Variance Account;
- Distribution System Code (DSC) Exemption Deferral Account;
- Deferred Revenue Project Costs Variance Account (2009); and
- Generator Joint Use Revenue Variance Account.
- Special Purpose Charge Variance Account (1595-Recovery of Regulatory Balances Account – Sub Account);
- Microfit Connection Charge Variance Account (1508 - Other Regulatory Assets Sub Account); and
- OEB Cost Differential Account.

Board Staff has reviewed Hydro One's proposal and supports the discontinuation of these accounts[70] **and we rely on Board Staff in this matter.**

Smart Meter Variance Account

Hydro One is seeking recovery of $445.1 million in smart meter capital costs and $59.4 million in OM&A costs for the period 2009 to 2014.[71] **Board staff submits that Hydro One's total (2006 – 2014) claimed costs for smart meters of $568 per meter are not in line with the costs of other distributors. While accepting that Hydro One's costs may be higher than other distributors:**

[69] Exhibit F1/Tab1/Schedule 1/p.3. Table 2
[70] Board Staff Submissio Page 83 and 84
[71] Tr. Vol 3, pp. 6-7

Board Staff submits that the recovery of the significantly higher costs sought in this application has not been justified. Board staff urges the Board to deny recovery of the full cost sought. It is somewhat arbitrary to propose a figure for the Board's consideration, but staff suggests that a 20% premium above the highest previously approved per meter cost ($403) could be a reasonable amount to allow per meter. That would result in a per meter cost for Hydro One of $484. This is a reduction of about $85 per meter, amounting to a total of $103 million. However, this is not directly translated as such into the rate base and revenue requirement. Instead, it would result in reductions in two ways:

- A reduction in the allowed historical costs would reduce the amounts and the net deferred revenue requirement to be recoverable from or refundable to customers. Hydro One has used its own model for tracking this, and in its Argument-In-Chief noted that it is also correcting an accounting error. Board staff is thus unable to estimate the impact, but submits that the deferred revenue requirement (i.e., the historical revenue requirement less the smart meter funding adder revenues (which Hydro One is still collecting to December 31, 2014) and applicable simple interest would change from a debit to be collected from customers to a credit to be refunded to customers; and

- A reduction in the approved per meter costs, and hence on the capital costs, would reduce the January 1, 2015 opening NBV of smart meters.[72]

Energy Probe supports Board Staff's proposal based on the fact that HO smart meter unit costs were the highest in the province and provides another demonstration that Hydro One unit costs for procurement and installation are out of line.

Exception to the Distribution System Code EB-2014-0247

Hydro One's Exemption Request

The applicant (has)requested an exception from section 7.5.2 of the Distribution System Code. The Board assigned a separate case number for that license exemption request, and assigned case number EB-2014-0247. And the Board granted interim relief from this provision pending the outcome of this hearing.

[72] Board Staff Submission Page 88

The Distribution System Code outlines certain obligations regarding missed and rescheduled appointments with customers in section 7.5.1.
Section 7.5.2 of the code requires that distributors meet that obligation 100 percent of the time, and that's the concern the company has.
It requires that if the appointments are to be missed, a distributor must attempt to inform the customer beforehand. And regardless of whether that occurred, an attempt needs to be made to reschedule the appointment within one business day.
As noted, the code further requires that those customers' notification attempts be done 100 percent of the time.
100 percent is an extremely high target. I appreciate, as was pointed out, that all that is required is that an attempt be made, but the company finds it impossible to even make the attempt 100 percent of the time.

Hydro One hasn't met this requirement for several years, and for that reason it requested an exemption that it be required on a permanent basis to meet the requirement 90 percent of the time. Now, I am quite sure that the company could willingly accept a higher percentage, but 100 percent is impossible for it to meet.[73]

Energy Probe has examined Hydro One's evidence in support of this Exemption Request. First, the evidence suggests that non-compliance is not a problem across all of Hydro One's Regions and in fact in most of Hydro One Regions the requirement can be met. Second, it is clear that Hydro One is not the only utility with service areas that are remote and lowering the standard will send the wrong message to the industry and trigger additional Exemption Requests.

Energy Probe does not support the Hydro One exception, but agrees with Board Staff that a generic review may be appropriate. We note, for example, the Toronto Hydro Electric System has not met the requirement in 3 recent years.[74]

Energy Probe suggests an option for the Board's consideration to avoid potentially providing more exemptions.

---

[73] Tr. Vol. 8 HO AIC page 19

[74] EB-2014-0116 Exhibit 2A Tab 10 Schedule 1 Page 2 Table 1

Not meeting the 100% missed appointment rescheduled appontments "standard" in any 1 year out 5 could be a general exception applicable to all utilities, pending a generic review.

Energy Probe also submits that the Board – if it went ahead with an exemption – could consider an exemption for some of Hydro One's more rural rate classes, but maintain the target for the UR and R1 classes.

Overall, Energy Probe believes that an exemption should not be granted.

Phase II- Cost Allocation and Rate Design

General Submissions

In general Energy Probe is supportive of an alignment of the costs to serve customers in various classes and the revenue collected from those classes based on consumption and/or demand.

An examination of the record in EB-2012-0136 (Settlement etc.) indicates rate class representatives supported such review of Cost allocation and rate design by HONI Dx.

Energy Probe submissions on Cost Allocation and Rate Design are directionally in agreement with Hydro One proposals. However, we cannot support the proposed *pace* of implementation of these CA and RD changes, given an overlying average Revenue Requirement Increase of 6.3 % (smoothed) per year and in particular the increase of 11.5% in 2015 (unsmoothed).

If the average Revenue Requirement increase was half that proposed, Hydro One's proposed implementation schedule may be reasonable.

We have attempted to reflect an approach of pacing the implementation of CA and RA changes in our submissions on the various Hydro One proposals. The 2015 proposed rate schedules reflecting the rates 1 shown in Table 1 are provided in Exhibit G2, Tab 2, Schedule 1. The currently approved rate schedules are provided in Exhibit G2, Tab 3, Schedule 1. Rate schedules for subsequent years of the Custom COS period will be produced as part of the annual process for setting rates, taking into account any changes as a result of the annual adjustments discussed in Exhibit A, Tab 4, Schedule 2.

Table 1

Distribution Rates over the 5-year Custom COS Period

Rate Class*	2015			2016			2017			2018			2019		
	Service Charge ($/month)	Volumetric Charge ($/kWh)	Volumetric Charge ($/kW)	Service Charge ($/month)	Volumetric Charge ($/kWh)	Volumetric Charge ($/kW)	Service Charge ($/month)	Volumetric Charge ($/kWh)	Volumetric Charge ($/kW)	Service Charge ($/month)	Volumetric Charge ($/kWh)	Volumetric Charge ($/kW)	Service Charge ($/month)	Volumetric Charge ($/kWh)	Volumetric Charge ($/kW)
UR	20.29	0.0179		20.84	0.0184		20.51	0.0183		19.93	0.018		19.57	0.0178	
R1	27.92	0.0315		29.20	0.0330		28.95	0.0329		28.26	0.0325		27.89	0.0323	
R2	68.49	0.0445		73.75	0.0485		76.45	0.0510		78.99	0.0537		81.74	0.0564	
Seasonal	26.78	0.0938		28.63	0.1015		29.72	0.1071		30.57	0.1125		31.55	0.1181	
GSe	28.96	0.0548		30.71	0.0588		31.42	0.0610		31.87	0.0632		32.47	0.0653	
UGe	22.48	0.0246		23.88	0.0263		25.32	0.0282		26.66	0.0302		27.82	0.0318	
GSd	82.14		14.5768	88.72		15.9486	95.25		17.3885	101.62		18.9467	106.94		20.2535
UGd	84.40		8.3437	91.46		9.1105	98.68		9.9305	105.72		10.8088	111.74		11.5478
St Lgt	4.01	0.0912		4.37	0.0992		4.63	0.1052		4.83	0.1104		5.03	0.1153	
Sen Lgt	2.42	0.1197		2.83	0.1380		3.19	0.1531		3.53	0.1681		3.83	0.1804	
USL	39.14	0.0309		39.13	0.0309		39.00	0.0308		38.00	0.0301		37.47	0.0297	
DGen	166.48		3.3127	207.03		4.8322	239.01		6.2910	267.75		7.6545	285.98		8.7721

* Refer to Table 5 for ST rates.

Customer Classification and Cost Allocation

Hydro One Position

In fact, the rate impacts on individual customers and customer classes arising out of the customer classification and cost allocation modifications ***are, in many ways, greater than those resulting from the proposed increase in revenue requirement.*** So this is an important part of this case, as you could see from the attention it attracted during the course of the hearing.

First, let's remember that Hydro One is neutral in questions of customer classification and rate design. It simply wishes to align cost recovery with cost causality.[75]

New Unscattered Load Class (USL)

Per the direction of the Board in its report "Review of Electricity Distribution Cost Allocation Policy issued March 31, 2011", Hydro One has created a separate USL rate class.[76]

USL customers were previously treated as General Service energy ("GSe") customers, with a reduced monthly fixed charge to reflect that USL customers do not have any metering related costs.

The number of USL customers and forecast kWh represents only a small portion of the GSe customers and load, and as such, the separation of this class has resulted in a negligible impact to the allocation of GSe costs. The creation of a separate USL rate class will have a small impact on other rate classes given that the USL class' R/C ratio, as discussed in Exhibit G1, Tab 3, Schedule 1, is above the Board approved range and Hydro One proposes to bring the R/C ratios for all its rate classes to a range of 98% to 102%.

Rate Reclassification[77]

Hydro One notes:

The review of Ontario Hydro's rate classification was undertaken in direct response to the Board decision approving the settlement agreement arising from the IRM application, EB-2012-0136. In compliance with that settlement agreement, Hydro One has examined its customer classification utilizing its new geographic information system -- yes, GIS -- to identify clusters of customers in order to verify that the density zone criteria for Hydro One's density-based rate class are being satisfied.

In fulfilling its obligation and based on its analysis using the new GIS tool, Hydro One proposes reclassification of about 11 percent of its customers

[75] Tr. Vol. 8 HO AIC page 21
[76] Exhibit G1Tab 2 Schedule 1 Page 4
[77] G1Tab 2Schedule 1 Page 3

for future ratemaking purposes. Most of these customers will move to a higher density rate class with lower existing rates.

This is important. If accepted by the Board, this proposal will result in a reduction in revenue of about $40 million per year at current rates. This amount must then be recovered in future from all rate classes and thus does result in rate impacts across all customer classes.[78]

The key information is presented at Exhibit G1Tab 2 Schedule1Page3 Table 1

Table 1. Summary of Rate Class Review Results

	# of Customers	% of Total
Total	1,222,548	100.0%
No Change	1,087,980	89.0%
Total Changing	134,568	11.0%
Lower Rates	***112,019***	***9.2%***
R1 to UR	40,023	3.3%
R2 to UR	1,815	0.1%
R2 to R1	63,670	5.2%
GSe to UGe	5,733	0.5%
GSd to UGd	778	0.1%
Higher Rates	*22,549*	*1.8%*
UR to R1	5,704	0.5%
UR to R2	439	<0.1%
R1 to R2	16,028	1.3%
UGe to GSe	311	<0.1%
UGd to GSd	67	<0.1%

Seasonal Rate Class[79]

The Review of the Seasonal Rate class has resulted in controversy.

Hydro's proposal is responding to the directive it was obligated to follow pursuant to the IRM settlement agreement, EB-2012-0136, and this has proved to be a very difficult issue, this seasonal rate class shift.
Hydro One consulted broadly with its stakeholders, and I will have more to say about that, about the consultation effort overall, before I end today, in a moment. As a result of that effort, it makes its present proposal to you, which it believes reflected the then predominant stakeholder view.

Now, things may have changed, and I am anxious to hear the arguments of intervenors about that.

[78] Tr. Vol. 8 HO AIC page 23
[79] G1Tab 2 Schedule 1Page5

The proposal is to move a number of present seasonal customers to the medium-density residential class, R1, and the low-density residential class, R2. Present seasonal customers would only be moved to the new rate class if their actual consumption patterns are similar to a typical residential customer.

The proposed criteria are that a customer must consume at least 9,600 kilowatts per year and at least 600 kilowatts monthly for at least ten months of the year. That's a lot of consumption.

Under the present arrangement the proposal would see customers who are moved to the new R2 rate class receiving rural and remote rate protection as members of the class, and this is a controversial issue.

If the Hydro One proposal is accepted by the Ontario Energy Board, Hydro One would have to modify its own definition of a seasonal residential customer to include a consumption-based criterion, and that would be within the Board's jurisdiction.

Now, I acknowledge to you this is tricky, and I believe it can be done, but it is difficult to combine the regulation requirement and the rate class definition. This rural and remote rate protection is a problem. I think it can be dealt with, but it's problem.[80]

The Hydro One proposal has 3 main elements [Exhibit G1, Tab 2, Schedule 1, Page 6]

- **Hydro One proposes to treat as year-round residential customers those Seasonal customers that**
  - **i) consume at least 9,600 kWh annually and**
  - **ii) consume at least 600 kWh monthly for a minimum of 10 months of the year.**

- **Moving approximately 11,000 Hydro One Seasonal customers, or 7%, of the total number of Seasonal customers to the medium density residential (R1) and low density residential (R2) rate classes**

- **Customers who are moved to the new R2 rate class would receive Rural and Remote Rate Protection (RRRP) as members of the class,**

The new definition of Seasonal rate class included in the proposed rate schedules provided at Exhibit G2, Tab 2, Schedule 1 has been revised to reflect the proposed change.

[80] Tr. Vol. 8 HO AIC pages 24-25

Hydro One has also incorporated the change into the customer load forecast for the 2015-2019 Custom COS period.

The net impact of the proposed Seasonal customer change is a drop of about $7M in Hydro One annual revenue at current rates. This is recovered from the residential classes.

Energy Probe generally supports the Hydro One Proposal based on similarity of consumption of the seasonal customers. However, we suggest that any customers moving to R2 must qualify themselves for RRRP based on proof of residency as required in Regulation. The Board should reject the Hydro One proxy and redefined residency requirement at Exhibit G2, Tab 2, Schedule 1, page 2.

Revenue-To-Cost Ratios[81]

The approach in this application to moving the R/C ratios as determined by the CAM is to ensure that all rate classes with R/C ratios outside the upper limit of the Board range are brought within the Board approved ranges in 2015. In subsequent years, the class with the highest R/C ratio will be phased-in over the remaining years of the Custom COS period to achieve the end state target of 1.02. All other classes with ratios above the phased-in target will be brought to the same value. The decrease in revenue from rate classes whose R/C ratios are dropping will be made up by increasing the R/C ratios for those classes with ratios below 1, as required. The rate classes with ratios below 1 will be brought closer to 1, starting with the classes whose R/C ratios are the lowest, except in the case of the Sentinel Light and DGen classes whose R/C ratios are such that the increase in the R/C ratio has been phased-in over five years. For any given year, the decrease in the revenue to be collected from rate classes whose R/C ratio are above 1 is

[81] G1Tab 2 Schedule 1Page15

offset by an equal increase in revenue to be collected from those rate classes whose R/C ratio is below 1. Exhibit G1Tab 3 Schedule 1Page 16

Hydro One thinks this proposal is appropriate:

> Hydro One proposes to adjust class revenue recoveries as determined by the cost allocation model to ensure that all classes with revenue-cost ratios outside the upper limit of the Board's range are brought within the approved range in 2015. Thereafter it proposes to move to a tighter revenue-to-cost ratio of .98 to 1.02 percent, phased in over the five-year rate period. Hydro One believes it is appropriate to make the adjustment because of improvements to its cost allocation methodology, as explained in the evidence and as you can see from Exhibit G1, Tab 3, schedule 1, and further detailed at Exhibit 1, tab 7.04, schedule 9, SEC 60.[82]

Table 6

Revenue-to-Cost Ratios

Rate Class	2015		2016		2017		2018		2019		Board Range
	CAM	Rate Design	CAM	Rate Design	CAM	Rate Design	CAM	Rate Design	CAM	Rate Design	
UR	130	115	118	113	115	110	111	106	107	102	85 – 115%
R1	123	115	116	113	114	110	111	106	106	102	85 – 115%
R2	94	94	94	95	95	96	97	98	98	99	85 – 115%
Seasonal	90	94	94	95	95	96	97	98	98	99	85 – 115%
GSe	103	103	103	103	101	101	101	101	100	100	80 – 120%
UGe	71	94	95	95	93	96	95	98	97	99	80 – 120%

Exhibit G1Tab 3Schedule 1Page 16

Based on questioning by Energy Probe in the Hearing, Hydro One agreed that it *could* adopt a broader target range of 95-105% over the 2015-2019 period.[83]

[82] Tr. Vol. 8 HO AIC page 28

[83] Tr. Vol. 7 Page 7; Exhibit F1Tab 1Schedule 2Page 3

With regard to 2015, Energy Probe suggests implementation remains a major problem due to the size of adjustments for certain classes. The rebalancing of revenues results in significant increases in revenues collected from some classes (e.g. DGen and UGe classes) in 2015 and significant rate impacts.

Hydro One has proposed a Rate Mitigation Variance Account that will reduce increases for the UGe and DGen Classes[84]. However this is only for 2015. A more reasonable approach is to pace the change and phase in these larger increases in R/C ratios over a number of years to reduce the initial high rate increases.

Increase in Fixed Charge[85]

Hydro One Position

This is the issue of the fixed versus volumetric charges. Hydro One is proposing to reset the fixed charge for most rate classes in 2015 to the minimum system values calculated on sheet 02 in the Board's cost allocation model.[86]

Table 3

Current and Proposed Fixed and Volumetric Revenue Split

	Current (2014 rates)		Proposed (2015 rates)	
Rate Class	Fixed	Volumetric	Fixed	Volumetric
UR	39%	61%	59%	41%
R1	39%	61%	48%	52%
R2	56%	44%	56%	44%
Seasonal	48%	52%	52%	48%
GSe	31%	69%	21%	79%
UGe	18%	82%	24%	76%
GSd	4%	96%	5%	95%
UGd	3%	97%	7%	93%
St Lgt	1%	99%	2%	98%
Sen Lgt	20%	80%	25%	75%
USL	68%	32%	78%	22%
DGen	27%	73%	75%	25%
ST	20%	80%	18%	82%

[84] Exhibit G1Tab 7 Schedule 1 Page 5
[85] G1Tab4 Schedule 1 Table 3
[86] Tr. Vol. 8 HO AIC page 29

Table 4

Current and 2015 Proposed Monthly Fixed Charges

Rate Class	Current (2014) Monthly Fixed Charge ($/month)*	Proposed 2015 Monthly Fixed Charge ($/month)*	CAM Scenario1: Customer Unit Cost per Month - Avoided Cost	CAM Scenario2: Customer Unit Cost per Month - Directly Related	CAM Scenario3: Customer Unit Cost per Month - Min System with PLCC Adjustment
UR	12.72	20.29	7.94	10.07	20.29
R1	20.15	27.92	7.71	9.88	27.92
R2	29.11	37.99	8.51	11.01	50.59
Seasonal	19.71	26.78	7.56	9.42	51.54
GSe	35.92	28.96	16.65	20.94	28.96
UGe	10.2	22.48	19.73	24.35	22.48
GSd	52.27	82.14	58.73	75.59	82.14
UGd	28.71	84.4	66.40	83.03	84.40
St Lgt	1.47	4.01	3.00	4.01	23.39
Sen Lgt	1.5	2.42	1.78	2.42	18.10
USL	29.69	39.14	7.07	9.33	39.14
DGen	38.13	166.48	89.45	147.99	166.48
ST	294.97	453.27	324.30	431.43	618.24

* Fixed Charge shown for R2 class is net of RRRP Credit.

G1, Tab 4, Schedule 1, Table 3 shows the current and proposed 2015 fixed and volumetric revenue shares. For 2016 to 2019 Hydro One will maintain the fixed and volumetric percentage splits established in 2015 in order to provide stability in the revenue mix over the period. Hydro One plans to reset the fixed/volumetric split at the start of the next COS period. Table 4 shows the resulting 2015 change for each class.

It is noted that the Board is considering revenue decoupling and moving to a single monthly charge for distribution service. If this is implemented, then Hydro One would have to meet the transitional provisions of the Board.

Line Losses

In EB-2009-0096 Hydro One was directed to track the dollar value of variances between the Board approved line losses recovered in rates, and actual line losses, commencing January 1, 2010.

Hydro One commissioned Navigant Consulting Ltd. ("Navigant") Exhibit G1-8-1 Attachment 1.

The study determined

- Actual losses on Hydro One's distribution system over the three year period from 2010 to 2012 tracked well with the Board approved losses, although there were variances from year to year.

- Based on engineering analysis, the allocation of losses to individual customer classes, and hence the total loss factors for specific customer classes should be amended to more accurately reflect the losses that occur, as a result of delivering electricity to customers in each customer class.

- Going forward, Hydro One should implement an approach that utilizes the capabilities of its Customer Information System (CIS) and is consistent with industry practice to track and report actual losses on an annual basis.

As a result of the study, Hydro One has proposed new loss factors for its customer rate classes. The new loss factors and the current loss factors are provided at Exhibit G1/Tab 8/Schedule 1/page 3. Table 1.

Summary and Recommendations

Summary

Hydro One's 2015-2019 MYCOS Rate Plan does not meet the Business Plan Value Proposition proposed by Hydro One in its Presentation to the Ontario Energy Board on May 12, 2014.

The Plan must be modified in several areas to provide improved customer satisfaction based on reasonable bill increases at present levels of quality of service.

This will require Hydro One to adopt the Incentives found in RRFE IRM plans

to attain higher levels of Efficiency, Productivity and Effectiveness

In the alternative, direct Productivity offsets are required than the voluntary savings set out in the current Plan, as well as moving at a slower pace regarding Capital Rate Base additions.

Hydro One's Cost Allocation and Rate Design proposals should also be paced to reduce impacts on certain Rate Classes.

Recommendations

Framework for MYCOS Plan

- *Accept subject to requiring Incentive(s) -see productivity requirements*

Productivity and Savings

- *Reject Plan with current proposed voluntary "productivity" Savings*
- *Require*
  - *Mandatory Stretch factor (Board Staff) or*
  - *Compensation "Productivity offset" (Energy Probe pages 34-35- and see OM&A below)*

Revenue Requirement

- *Accept forecast Revenue Requirement & and Rate Smoothing Mechanism subject to*
  - *Earnings Sharing Mechanism*

OM&A

- *Accept OM&A subject to mandatory "productivity offset"*
  - *Freeze on Headcount and Reduction in Total Compensation costs by 5% (1%/year) over the 5 year period*

Rate Base

- *Amortize deferred Smart Meter (as adjusted), Smart Grid and Distributed Generation Assets over the 5-year MYCOS Plan to mitigate rate increases. (incorporate into the Hydro One Rate Smoothing Proposal).*
- *Accept Capital Asset Expenditure Plan subject to*
  - *Unit Cost reductions(20%) for Pole replacement (same Achievement levels)*
  - *Unit Cost reductions (10%) for Station Refurbishment (same Achievement levels)*

- *In-Service Asset Variance Account (similar to TX EB-2014-0140 Hydro One Transmission Settlement Proposal)*

Load and Revenue Forecast

- *Accept Load Forecast except:*
  - *Hydro One to provide price elasticity study during 2015 and adjust the 2016-2019 demand forecast as needed.*
  - *Require Hydro One to provide Final OPA CDM Target(s) and Prorate the 1200 MW target evenly over the six year period (2015-2020)*

Performance Metrics and Scorecard

- *Accept Modified Plan Scorecard (J4.9) together with OEB Scorecard (with multi-year Forecast) to assess Plan performance.*

Annual and Other Adjustments

- *Deny Hydro One's proposed unforeseen event categories (Hydro One may apply for a Z-factor as necessary under the Board's existing policy);*
- *Accept proposed 0.5% RR materiality threshold for applications for Z-factors specifically/only for Hydro One; Hydro One to clarify in Reply Argument what costs/revenue changes qualify, singly and/or in aggregate.*

Stakeholder Engagement

- *Require Stakeholder Engagement process-opportunity to receive the Annual Reports and the Draft Rate Order for the next rate year with an opportunity to comment on these, within a 10 day period.*

Cost Allocation and Rate Design

- *Require Hydro One to change the pace of CA & RD Implementation*
  - *Phase in changes to UGe and DGen classes*
  - *Adjust all R/C ratios towards the range of 95% to 105%, rather than 98%/102%.*
- *Reject providing RRRP to new R2 customers without proof of eligibility under Regulation.*

COSTS

Energy Probe has participated in the proceeding efficiently in cooperation with other intervenors and accordingly requests that the Board order that it be reimbursed for 100% of its legitimately incurred costs.

Respectfully Submitted on behalf of Energy Probe Research Foundation

Roger Higgin PhD.; MBA; P. Eng. SPA Inc,

Brady Yauch MA Econ. Borealis Energy Research Association