RÉPONSES D'HYDRO-QUÉBEC DISTRIBUTION
À LA DEMANDE DE RENSEIGNEMENTS N^{O} 5
DE LA RÉGIE

DEMANDE DE RENSEIGNEMENTS N^O 5 DE LA RÉGIE DE L'ÉNERGIE (LA RÉGIE) À HYDRO-QUÉBEC DANS SES ACTIVITÉS DE DISTRIBUTION (LE DISTRIBUTEUR) SUR LA DEMANDE RELATIVE AUX TARIFS D'ÉLECTRICITÉ DE L'ANNÉE TARIFAIRE 2018-2019

IMPLANTATION D'UN MÉCANISME DE RÉGLEMENTATION INCITATIVE (MRI)-PHASE 3

1. Références : (i) Pièce B-0013, p. 11 à 23;
(ii) Pièce B-0091, p. 19.

Préambule :

(i) Le Distributeur demande à la Régie de traiter à titre d'exclusions (Facteur Y) les éléments suivants :

- Coût de retraite;
- Charges liées aux interventions en efficacité énergétique;
- Dépenses de Transition énergétique Québec (anciennement BEIÉ);
- Dépenses de mauvaises créances;
- Stratégie pour la clientèle à faible revenu (MFR);
- Maîtrise de la végétation;
- Coûts des combustibles.

(ii) En réponse à une demande de renseignements d'OC, le Distributeur indique qu'il n'a pas effectué d'étude de balisage sur les facteurs Y.

Demande :

1.1 Veuillez déposer une étude de balisage et/ou un témoignage de votre expert sur le traitement des facteurs Y par les autres organismes de réglementation canadiens et/ou américains. Veuillez considérer chacun des éléments précités à la référence (i).

Réponse de Concentric :

I. Introduction

Treatment of certain allowable costs outside of formula-based ratemaking is common in performance based regulation ("PBR"). Y factors recover costs that are treated outside of the formula because they are deemed to be beyond management's control, unpredictable, or because they are known and recurring cost elements that do not conform to the trajectory of the inflation index.

Purchased power and fuel expenses are common examples of Y factors. HQD has proposed Y factors for all of the items listed in (i). These Y factors are in addition to those already approved by the Régie in D-2017-043. Y-factors are often referred to as "pass-throughs" because the utility will recover the full costs it incurs for the specified element. The recovery of these "pass-through" costs can take various forms but are all intended to match revenue with the actual costs incurred during a defined period. A common approach is to include a forecast amount in rates and then use a variance account to true-up to the actual expenses at the end of the year.

The fact that these cost elements are unpredictable implies that they will not be adequately accommodated by the indexation formula and will impact HQD's opportunity to earn its authorized return under the PBR mechanism; or that customers will overpay when these costs are less than the amount in rates.

Z factors typically represent one-time, or "exogenous" costs that are also beyond the utility's control, such as government mandates or severe storm costs. Z-factors are also a cost pass-through, with the amount of cost recovery established when it is able to be measured.

In implementing a PBR plan, <u>regulators must balance the need to maintain incentives for utilities to manage costs and find efficiencies, while providing utilities the opportunity to earn a fair rate of return. In designing PBR plans, regulators accept that some costs cannot be accommodated by the indexing formula</u>.[1]

As a result of the need to balance incentives for efficiencies while still allowing cost recovery for items outside of management's control or that do not conform, within reason, to the I-X trajectory, regulators establish criteria to help determine which costs meet the requirements of Y or Z factor treatment. These criteria are often general guidelines for establishing the appropriate type (and level) of cost recovery. Regulators may also identify specific categories of costs that are fully recoverable when there is no question that these cost categories are beyond the control of management.

Materiality thresholds are more common to Z factors than Y factors. Materiality thresholds reduce regulatory burden, and increase the utility's incentives to manage costs under a formula.

Concentric has examined the regulatory treatment of Y and Z factors in several jurisdictions in Canada and the United States, focusing on

[1] Elenchus Research Associates, Performance Based Regulation – A Review of Design Options as Background for the Review of PBR for Hydro Québec Distribution and Transmission Divisions, January 2015 at 2-3, 40-41.

jurisdictions where electric distribution utilities are under formula or index-based rate plans, including:

- **Alberta**
- **Ontario**
- **British Columbia**
- **Massachusetts**
- **Vermont**
- **Maine**

Jurisdictions that have established generic PBR frameworks for all or most of their regulated utilities, like Alberta and Ontario, provide the most systematic discussion of the treatment of Y and Z factors. However, not all PBR plans explicitly identify Y factors as "exceptions" because some costs are included in riders that were in existence prior to the PBR plan that remain in existence after the plan is implemented. We have noted the distinction between items discussed by the regulator as Y factors, and rate riders that can effectively be considered Y factors. Finally, Concentric has examined recent utility-specific examples in the United States, but has not considered each state's full history on these matters.[2]

II. Alberta

<u>Criteria: Y Factor</u>

In Alberta, the AUC established criteria for Y and Z factor treatment in D-2012-237, and upheld this treatment in D-20414-D01-216.[3] For costs to be eligible for Y factor treatment, all of the following criteria must be met:[4]

1. **The costs must be attributable to events outside management's control.**
2. **The costs must be material. They must have a significant influence on the operation of the distribution utility; otherwise the costs should be expensed or recognized as income, in the normal course of business.**
3. **The costs should not have a significant influence on the inflation factor in the PBR formulas.[5]**

[2] For example, the Massachusetts Department of Public Utilities approved a PBR plan for Berkshire Gas Company in 2002 (DTE 01-56), whose pass-through costs are not part of this discussion. Concentric has examined recent, electric distribution utility examples.

[3] Alberta Utilities Commission, Decision 2012-237, September 12, 2012; Alberta Utilities Commission, Errata to Decision 20414-D01-2016, February 6, 2017.

[4] Alberta Utilities Commission, Decision 2012-237, September 12, 2012, at 134-135.

4. **The costs must be prudently incurred.**
5. **All costs must be of a recurring nature, and there must be the potential for a high level of variability in the annual financial impacts.**

<u>Criteria: Z Factor</u>

The AUC established the following criteria for evaluating whether the impact of an exogenous event qualifies for Z factor treatment:

1. **The impact must be attributable to some event outside management's control.**
2. **The impact of the event must be material. It must have a significant influence on the operation of the distribution utility; otherwise the impact should be expensed or recognized as income, in the normal course of business.**
3. **The impact of the event should not have a significant influence on the inflation factor in the PBR formula.**
4. **All costs claimed as an exogenous adjustment must be prudently incurred.**
5. **The impact of the event was unforeseen.**

<u>Allowable Costs: Y Factor</u>

The AUC determined that the following types of costs would satisfy the Y factor criteria enumerated above:[6]

1. **AESO pass-through items;**[7]
2. **Transmission pass-through**[8] **for gas utilities;**
3. **Accounts that are a result of Commission directions (e.g., AUC assessment fees, intervener hearing costs, Utilities Consumer Advocate assessment fees, AUC tariff billing and load settlement initiatives, Commission-directed Rural Electrification Associations (REA) acquisitions, effects of regulatory decisions);**
4. **Income tax impacts other than tax rate changes;**
5. **Municipal fees;**

---

5 The AUC later discussed, for example, if changes in financing rates would eventually be reflected in the I factor. D-2012-237 at 152-153.
6 Alberta Utilities Commission, Decision 2012-237, September 12, 2012, at 137-148.
7 The AESO is a not-for-profit organization that plans and operates the transmission system in Alberta. AESO pass-through items include farm transmission costs for Fortis Alberta. The AUC uses the term "flow-through." D-2012-237 at 144.
8 The AUC uses the term "flow-through."

6. Load balancing deferral accounts;

7. Weather deferral account (ATCO Gas only); and

8. Production abandonment costs.

<u>Allowable Costs: Z Factor</u>

The AUC further determined the following types of costs that could be tested under the Z factor criteria enumerated above, but noted that it would not be obligated to approve Z factor treatment in future proceedings for any of the items discussed. The AUC identified the types of items that had been proposed as Y factors by the companies, but which should be tested as Z factors because of their unforeseen and infrequent nature through Z applications.[9]

The following accounts fall into this category:

1. Self-insurance/reserve for injuries and damages;

2. Depreciation rate changes;

3. International Financial Reporting Standards (IFRS)/accounting changes;

4. Acquisitions;

5. Pension plans;

6. Insurance proceeds.

<u>Costs that do not meet the AUC criterion</u>[10]

Accounts that do not meet the outside-of-management-control criterion:

1. Variable pay;

2. Vegetation management;

3. Head office allocation changes;

4. Automated Meter Reading ("AMR") implementation.[11]

The AUC determined that certain costs would not qualify for Y factor treatment because the Commission determined these are included in the I factor. The inflation factor criterion is meant to filter out costs whose changes are the result of inflationary pressures, and are therefore already

9 Alberta Utilities Commission, Decision 2012-237, September 12, 2012, at 148.
10 Alberta Utilities Commission, Decision 2012-237, September 12, 2012, at 151-154.
11 The AUC concluded that an AMR should be undertaken only if it will achieve efficiencies that will outweigh the costs, and that the decision to implement a project of this nature is not outside of management's control. D-2012-237 at 152.

captured in the approved I factor. Therefore, the approved I factor reflects changes in certain costs over time. Costs that were excluded: [12]

1. **Changes in the cost of capital;**
2. **Income tax rates.**

The AUC also determined that eligibility for certain capital-related items should be assessed by way of a capital tracker application.

Finally, the AUC determined that to the extent there are existing rider mechanisms in place "that are working well for addressing changes to the approved flow-through[13] **items, and those processes do not correspond to the timing of the annual PBR rate adjustment proceedings, these applications should continue to be dealt with as they are today."**[14] **Examples of these rider mechanisms include SAS (system access service) riders, load balancing deferral accounts and a weather deferral account for ATCO Gas.**[15]

The mechanics of recovery of Y factor cost were also discussed in some detail by the AUC. Generally, unless a Y factor is recovered via a separate rate rider, it will be tracked and settled as a Y factor adjustment in each company's annual PBR rate adjustment filings. The adjustment filing would provide an estimate to be used in rate for the upcoming year, as well as the true-up to actual Y factor costs for the previous year.[16]

Materiality Threshold

The AUC also established materiality thresholds for Z factor costs. In the 2017 generic proceeding, the AUC upheld that the Z factor materiality threshold would be equal to the dollar value of a 40 basis point change in ROE on an after-tax basis calculated on the distribution utility's equity used to determine the final approved notional revenue requirement on which going-in rates were established (2017). This dollar amount threshold is to be escalated by I-X annually.[17] **The AUC applied the same materiality thresholds to Y factors.**[18]

III. Ontario

The Ontario Energy Board ("OEB") established its 4th Generation Incentive Ratemaking framework ("4th Generation IR") in its October 2012 Report of

[12] Alberta Utilities Commission, Decision 2012-237, September 12, 2012, at 152-154.
[13] The AUC uses the term "flow-through." In this instance, we understand this term to mean the same thing as "pass-through."
[14] Alberta Utilities Commission, Decision 2012-237, September 12, 2012, at 155.
[15] Alberta Utilities Commission, Decision 2012-237, September 12, 2012, at 154-155.
[16] Alberta Utilities Commission, Decision 2012-237, September 12, 2012, at 155.
[17] Alberta Utilities Commission, Decision 2012-237, September 12, 2012, at 112; D-20414-D01-2016 at 91.
[18] Alberta Utilities Commission, Decision 2012-237, September 12, 2012, at 135.

the Board.[19] The 4th Generation IR upholds the Y and Z framework established by the OEB in its 3rd Generation IR framework.

<u>Y Factor</u>

The OEB notes that the price cap mechanism will be applied to the base distribution rates « net of existing rate adders and rate rebalancing adjustments as determined necessary by the Board. » [20] The price cap adjustment will not be applied to:

1. **Existing Rate riders;**
2. **Retail transmission service rates;**
3. **Wholesale market service rate;**
4. **Rural rate protection charge;**
5. **Standard supply service – administrative charge;**
6. **Specific service charges;**
7. **Allowances (transformation and primary metering allowances and any other allowances the Board may determine);**
8. **Retail service charges;**
9. **Loss factors.**

<u>Criteria: Z Factor</u>

1. **Amounts should be directly related to the Z-factor event. The amount must be clearly outside of the base upon which rates were derived.**
2. **The amount must have been prudently incurred.**
3. **The amounts must exceed the Board-defined materiality threshold and have a significant influence on the operation of the distributor.[21]**

<u>Materiality: Z Factor</u>

The OEB established the following materiality thresholds for Z factor treatment:[22]

1. **$50,000 for a distributor with a distribution revenue requirement less than or equal to $10 million;**

[19] Ontario Energy Board, Report of the Board: Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach, October 18, 2012.
[20] Ontario Energy Board, Report of the Board: 3rd Generation Incentive Regulation for Ontario's Electricity Distributors, July 14, 2008, at I.
[21] Ontario Energy Board, Report of the Board: 3rd Generation Incentive Regulation for Ontario's Electricity Distributors, July 14, 2008, at V.
[22] Ontario Energy Board, Report of the Board: 3rd Generation Incentive Regulation for Ontario's Electricity Distributors, July 14, 2008, at V.

2. 0.5% of distribution revenue requirement for a distributor with a revenue requirement greater than $10 million and less than or equal to $200 million; and

3. $1 million for a distributor with a distribution revenue requirement of more than $200 million in revenue requirement.

A. Toronto Hydro

Toronto Hydro ("TH") is currently in the middle of a 5-year PBR plan established in EB-2014-0116.[23]

<u>Y Factor</u>

TH has several rate adjustment mechanisms and variance and deferral accounts, including:[24]

1. **Variance account for externally driven capital;**
2. **Variance account for other post-employment benefits ("OPEB") cash vs. accrual accounting differences;**
3. **Variance account for derecognition:[25]**
   - **Records costs associated with the derecognition of assets as a result of accounting treatment under International Financial Reporting Standards ("IFRS").**
4. **Variance account for renewable enabling investments provincial rate protection recovery**
   - **Tracks the difference between the revenue requirement required to support the portion of investments that are eligible for provincial rate protection, and the actual provincial rate protection amounts collected from Independent Electricity System Operator ("IESO").**
5. **Deferral account for the mandatory transition to monthly billing:**
   - **The transition to monthly billings was mandated by the OEB.**
6. **Variance account for gains on sale of properties related to the Company's Operating Centers Consolidation Program:**

---

[23] Ontario Energy Board, EB-2014-0116, December 29, 2015.
[24] Ontario Energy Board, EB-2014-0116, December 29, 2015, at 49-55.
[25] Derecognition relates to the disposition of assets that are not individually identifiable. Toronto Hydro does not expect any proceeds from the disposition of these assets. Losses resulting from the disposition of assets with a carrying amount are recorded as depreciation expense. *See* TH Responses to OEB Staff Interrogatories, at 2.

- **Tracks the difference between the forecast sale price which is already being credited to rate payers through a rate rider and the actual proceeds of sale.**

7. **Variance account for 2015 opening rate base to capture prudence-based Incremental Capital Module disallowances.**
8. **Variance account for Capital Related Revenue Requirement (CRRRVA):**
    - **TH's price cap plan takes the form (I-X+ Capital). This variance account is asymmetric to the benefit of customers and tracks the revenue requirement associated with approved in-service capital additions and actuals, if they were less than approved.**

Additionally, rate riders are generally accepted by the OEB as elements to be treated outside of the formula, as they reveal an intent to allow TH to recover only the costs that are actually incurred or recovery of revenues that are intended by the revenue methodology through a variance account. The OEB has stated that the price cap mechanism will not apply to rate riders. TH's current rate riders include:[26]

1. **Rate rider for smart metering entity charge;**
2. **Rate rider for recovery of stranded meter assets;**
3. **Rate rider for post-employment benefit – tax savings;**
4. **Rate rider for application of operations center consolidation plan sharing;**
5. **Rate rider for recovery of the gain on the sale of named properties;**
6. **Rate rider for recovery of Hydro One capital contributions variance;**
7. **Rate rider for application of IFRS 2014 derecognition;**
8. **Rate riders for foregone revenue;**
9. **Rate rider for disposition of deferral/variance account;**
10. **Rate rider for disposition of LRAM variance account;**
11. **Rate rider for disposition of capacity based recovery of Class B variance sub-account;**
12. **Rate rider for disposition of Class B Post 2011 Global Adjustment Variance Account;**
13. **Retail Transmission rates;**

[26] Toronto Hydro-Electric System Limited, Tariff of Rates and Charges, EB-2016-0254. Residential Rates and Charges.

14. **Wholesale market service rate;**
15. **Standard supply service – administration charge;**
16. **Rural or remote electricity rate protection charge;**
17. **Ontario electricity support program charge (OESP);[27]**
18. **Harmonized sales tax;**
19. **8% provincial rebate;**
20. **Unmetered water heater charges.**

Z Factor

In the OEB's 2015 decision, the Board noted that it will not provide the additional guidance requested by Toronto Hydro with respect to certain Z factor criteria it had proposed. The OEB had already established generic criteria for Z factor applications and the company was encouraged to make Z factor applications as needed, under the OEB's guidelines as noted above.

B. Horizon Utilities

The OEB's Custom IR decision for Horizon Utilities approved a partial settlement proposal between intervenors and the company[28] with the following adjustment mechanisms:[29]

1. **Energy and Global Adjustment rates for RPP and non-RPP customers (per the semi-annual Regulated Price Plan ("RPP");**
2. **Price Reports issued by the Ontario Energy Board, "OEB");**
3. **Uniform Transmission Rates (per the IESO, and Hydro One Networks Inc.);**
4. **IESO Rates (Wholesale Market Service ("WMS");**
5. **Rural or Remote Electricity Rate Protection ("RRRP"),**
6. **Smart Meter Entity ("SME"); and**
7. **Low Voltage Charges (per Hydro One Networks Inc.).**

Z Factor

The settlement proposal also included "reopeners" that would justify reopening the 2015-2019 Custom IR proceeding. These reopeners serve a comparable role to Z factors.

[27] Low income support.
[28] Horizon Utilities Corporation, EB-2014-0002, Decision and Order, December 11, 2014.
[29] EB-2014-0002. Horizon Utilities Settlement Proposal, September 22, 2014, at 15.

1. Changes to income tax rates and laws;

2. Changes to environmental laws;

3. Changes to technical requirements beyond the control of the utility;

4. Items that qualified as a Z factor; accounting framework changes,

5. Changes to the permitted market rates to be charged for wireless pole attachments.[30]

A general materiality threshold of $500,000 was established. Horizon is permitted to update rates annually between 2015-2019.[31]

IV. British Columbia

A. FortisBC Inc.

The British Columbia Utilities Commission ("BCUC") approved 5-year formula-based rate plans for FortisBC Inc. ("FBC") and FortisBC Energy ("FEI") in 2014. As part of these plans, the Commission determined it necessary to include Y and Z factor items as part of the Companies' PBR plan in order to protect both the ratepayers and the shareholders.

<u>Y Factor</u>

Pass-through items, or Y factor costs, will be forecast each year and thus not included in the PBR formula. Some of these items will also have a deferral account, and any variance between forecast and actual costs will be added to the deferral account and amortized into rates outside of the formula. However, the BCUC stated that not all pass-through costs warrant a deferral account, but that these costs should be trued-up each year. Pass-through items for FBC[32] include:

1. Power purchases;

2. Interest Expense;

3. Return on Equity;

4. Taxes;

5. Pension and OPEB;

6. Electricity Sales Revenue;

7. Insurance (premiums only);

30 EB-2016-0077, Horizon Utilities Corporation, Annual Filing Decision, January 12, 2017, at 3.
31 EB-2014-0002. Horizon Utilities Settlement Proposal, September 22, 2014, at 14.
32 Y factor items for FEI are similar to those approved for FBC, with the exception of non-sales revenues and power purchases.

8. **Depreciation and Amortization; and**
9. **Rate Base other than Plant in Service (i.e. working capital, deferred charges).[33]**

Several of these items could be considered under management's control. The BCUC commented:

> ***The Panel is concerned by the Companies' broad-sweeping approach to its treatment of flow-through items and believes that it is likely that certain components within the broader expense/revenue categories could be classified as partially controllable and therefore added back into the PBR formula. However, the Panel acknowledges that whether or not certain of the proposed costs/revenues are controllable, partially controllable, or non-controllable, it may not be appropriate to inflate these costs using the proposed I-X formula, and there is no evidence on the record which provides alternative formulaic methods to apply to these costs/revenues.[34]***

<u>Z Factor</u>

The BCUC established the following criteria for evaluating whether the impact of an event qualifies for exogenous factor treatment:[35]

1. **The costs/savings must be attributable entirely to events outside the control of a prudently operated utility;**
2. **The costs/savings must be directly related to the exogenous event and clearly outside the base upon which the rates were originally derived;**
3. **The impact of the event was unforeseen;**
4. **The costs must be prudently incurred; and**
5. **The costs/savings related to each exogenous event must exceed the Commission-defined materiality threshold.**

As a part of meeting the criteria established by the Commission, the BCUC established a Z factor materiality threshold of 0.5 percent of FBC and FEI's 2013 Base O&M.[36] The materiality threshold applies to exogenous savings as well as exogenous costs, and exogenous events are not to be aggregated. The recovery mechanisms for these exogenous amounts are to

[33] British Columbia Utilities Commission, FortisBC Inc. Multi-Year Performance Based Ratemaking Plan 2014-2018, Decision September 15, 2014 at 97-98.
[34] British Columbia Utilities Commission, FortisBC Inc. Multi-Year Performance Based Ratemaking Plan 2014-2018, Decision September 15, 2014, at 103.
[35] British Columbia Utilities Commission, FortisBC Inc. Multi-Year Performance Based Ratemaking Plan 2014-2018, Decision September 15, 2014, at 94.
[36] British Columbia Utilities Commission, FortisBC Inc. Multi-Year Performance Based Ratemaking Plan 2014-2018, Decision September 15, 2014, at 95.

be determined on a case-by-case basis, and could include, among other things, "flow-throughs[37], deferral accounts, or true-ups."[38]

V. Massachusetts

A. Eversource

The Massachusetts Department of Public Utilities ("DPU") recently approved a performance based rate plan for Eversource in its decision in DPU 17-05.[39]

Y Factor

Adjustment mechanisms currently in place for the company include:[40]

1. **Transmission service;**
2. **Transition costs;**
3. **Energy Efficiency;**
4. **Renewable energy charges;**
5. **Pensions;**
6. **Low Income Customer Programs;**
7. **Smart Grid Investments.**

Additionally, the Department determined that Eversource's Vegetation Management Resiliency Tree Work ("RTW") Pilot program costs be recovered through an annual reconcilable factor (outside of base rates). This reconciling factor is to recover actual costs incremental to those recovered in base rates that are directly associated with the pilot program.[41] Generally, vegetation management expenses are to be annualized and included in base rates.[42]

---

37 The BCUC uses the term "flow-through." In this instance, we understand this to mean that costs would be forecast each year and thus not included in the formula.

38 British Columbia Utilities Commission, FortisBC Inc. Multi-Year Performance Based Ratemaking Plan 2014-2018, Decision September 15, 2014, at 97.

39 Massachusetts Department of Public Utilities, Order Establishing Eversource's Revenue Requirement, November 30, 2017.

40 Eversource Electric Tariff & Rates. https://www.eversource.com/content/ema-c/about/about-us/doing-business-with-us/builders-contractors/interconnections/massachusetts-net-metering/eastern-massachusetts-tariffs-rules. Accessed December 12, 2017.

41 Massachusetts Department of Public Utilities, DPU 17-05, Order Establishing Eversource's Revenue Requirement, November 30, 2017 at 584.

42 Massachusetts Department of Public Utilities, DPU 17-05, Order Establishing Eversource's Revenue Requirement, November 30, 2017 at 591.

Z Factor

While the DPU did not explicitly discuss Y factor treatment, it did establish criteria for Z factor treatment. These criteria are defined as positive or negative cost changes actually beyond the Company's control and not reflected in the I factor (GDP-PI). These include, but are not limited to, incremental costs resulting from:

1. **Changes in tax laws that uniquely affect the relevant industry;**
2. **Accounting changes unique to the relevant industry; and**
3. **Regulatory, judicial, or legislative changes uniquely affecting the industry.**[43]

The company currently has two adjustment mechanisms that could be considered Z factor treatment:[44]

1. **NSTAR electric storm performance;**
2. **Storm cost recovery.**

The DPU determined a materiality threshold of $5M for Z factors based on test year revenues of $3.25B, to be escalated at GDP-PI for each subsequent plan year.[45]

VI. Vermont

A. Central Vermont Public Service Corp.

Vermont also has experience with performance based ratemaking for its electric and gas utilities. In 2008 the Vermont Public Service Board established a PBR plan for Central Vermont Public Service Corp. This plan was extended in 2011 to 2013. [46]

Y Factor

Authorization of the Alternative Rate Plan ("ARP") included a Power Cost Adjustment Mechanism. The PCA allowed rates to be adjusted quarterly after a threshold accumulation and included an incentive component. Power supply costs related to fixed production and transmission costs (*i.e.*,

[43] Massachusetts Department of Public Utilities, Order Establishing Eversource's Revenue Requirement, November 30, 2017 at 396.

[44] Eversource Electric Tariff & Rates. https://www.eversource.com/content/ema-c/about/about-us/doing-business-with-us/builders-contractors/interconnections/massachusetts-net-metering/eastern-massachusetts-tariffs-rules. Accessed December 12, 2017.

[45] Massachusetts Department of Public Utilities, Order Establishing Eversource's Revenue Requirement, November 30, 2017 at 398.

[46] Vermont Public Service Board, Order, Docket No. 7336, September 30, 2008. Vermont Public Service Board, Order, Docket No. 7627, March 3, 2011.

capacity payments, fixed production costs, production depreciation, and transmission-by-others expense) are passed through to ratepayers. Over/under-collections of power supply costs were to be deferred and included in the next rate change.

Z Factor

The earnings sharing mechanism contains a deadband of $600,000 per year for exogenous events. If exogenous factors accumulate to more than $600,000, then the amount above $600,000 is incorporated in the earnings sharing mechanism adjustment. Examples include:

1. **Changes in Generally Accepted Accounting Principles;**
2. **Changes in tax laws;**
3. **Changes in Federal Energy Regulatory Commission rules or Independent System Operator-New England rules;**
4. **Load loss;**
5. **Extended or permanent loss or de-rate of major purchased power sources;**
6. **Major unplanned investment costs or O&M expenses due to storms.**

B. Green Mountain Power[47]

Similarly, an ARP for Green Mountain Power ("GMP") was established in 2007 and extended with modifications through 2013. A modified ARP was established again in 2014[48] as part of a settlement agreement, which included an inflation-based adjustment to Base O&M costs and several adjustment mechanisms.

Y Factor

The ARP included a Power Cost Adjustment ("PCA"). The PCA allowed rates to be adjusted quarterly after a threshold accumulation and included an incentive component. Power supply costs related to capacity, transmission and ancillary service charges are passed through to ratepayers completely. The Power Adjustor amount reflects the difference between actual power costs and power costs included in rates during the "measurement quarter."[49] Over/under-collections of power supply costs were to be deferred and included in the next rate change.

47 State of Vermont Public Service Board, Order, Docket No. 7175, December 22, 2006 and Order, Docket No. 7585, April 16, 2010.
48 State of Vermont Public Service Board, Order, Docket No. 8190 and Docket No. 8191, August 25, 2014.
49 GMP Order, Docket 7585, March 9, 2010, at 7-8.

Z Factor

Exogenous costs consisted of material cost or revenue changes whose annual aggregate amount exceeded $1.2 million (adjusted annually for inflation) caused by the following:

1. **Changes in tax laws that impact the Company;**
2. **Changes in Generally Accepted Accounting Principles;**
3. **Any Federal Energy Regulatory Commission or New England Independent System Operator rule changes affecting the Company;**
4. **Other regulatory, judicial or legislative changes affecting the Company;**
5. **Loss of load not pertaining to weather;**
6. **Major unplanned maintenance costs or investments, such as those incurred due to storm-related maintenance and major repairs to Company-owned power plants.[50]**

VII. Maine

A. Central Maine Power

A five-year ARP for Central Maine Power ("CMP") was established in 2008 through a stipulation agreement and included provisions for exogenous cost treatment as well as other adjustments.[51] The parties and the Commission did not expressly define which costs they would consider Y vs. Z factors.

Vegetation Management

Vegetation management was given special consideration by the parties as part of a "Reliability Improvement Program", whereby CMP could include vegetation management costs in the price index, but then defer and recover "the difference between the actual amount of maintenance trim expenses and the… [amount] that is included in CMP's revenue requirement following the award of the RFP as a one-time adjustment."[52] The Stipulation Agreement also established provisions to help CMP transition to a five year cycle trim program, and implemented a "Trees in Contact" program whereby a certain level of spending would be passed back to rate payers.[53]

---

[50] GMP Order, Docket No. 8190/8191, August 25, 2014, at 9.

[51] Maine Public Utilities Commission, Order Approving Stipulation for CMP. Docket No. 2007-215/2008-111, July 1, 2008; Central Maine Power, ARP 2008 Stipulation. June 6, 2008.

[52] CMP Stipulation Agreement, at 6-7.

[53] CMP Stipulation Agreement, at 5-9.

Capital Gains and Losses

Capital gains and losses from the sale of property during the term of the ARP were to be netted against the mandated cost items described below. Individual events greater than $150,000 were to be aggregated before netting against Mandated Costs only to the extent that that the sum of these events was greater than $150,000.

Customer Cost Allocation Adjustment

CMP's was allowed an adjustment to core distribution rates that were subject to I-X due to changes in the transmission allocation factor utilized in the Company's annual FERC approved formula rate.[54]

Repair Allowance

CMP could also recover as a reduction to federal and state income tax expense all income tax benefits related to the deductibility of the "repair tax allowance".[55]

Storm Costs

CMP could defer, with carrying costs, the incremental costs of restoring service to customers who experience outages from "Extraordinary Storm Events" (greater than $1.5 million in costs, 20% of customers without power during single day, etc.).

Mandated Costs

Additionally, two types of "mandated costs" were recognized for recovery under the ARP:

1. **Non-recurring force majeure events, and**
2. **Ongoing costs resulting from federal or state legislative, regulatory, or tax changes.**

Environmental Cost Reserve

Finally, CMP was able to establish a reserve account for costs associated with the clean up of manufactured gas plant sites and PCB contaminated facilities. In the event that the balance exceeded $1.0 million, CMP was permitted to request inclusion of the balance as part of its annual adjustment.

[54] CMP Stipulation Agreement, at 14.
[55] CMP Stipulation Agreement, at 19.

Materiality Threshold

The materiality threshold set by the Maine Department of Public Utilities for individual items was at least $150K, with annual mandated costs over $3 million recovered as pass-through items to the I-X formula.[56]

VIII. Conclusions

There is significant precedent in Canada and the US for Y and Z factor treatment of certain costs. The criteria used to evaluate whether these costs warrant full recovery embody similar themes and goals. Likewise, materiality thresholds, more common for Z factors than for Y factors, help the utility and the regulator minimize the regulatory burden because they avoid the need for regulatory action for relatively minor events.

Ultimately, the treatment of Y and Z factor costs is dependent on each utility's PBR framework, which limits the value of comparing cost categories across different plan structures. The X factor, the treatment of capital additions, the term of the plan, earnings sharing provisions, etc. differ across jurisdictions and across plans. Furthermore, some utilities have other adjustment mechanisms that separately account for actual costs of elements that are unforeseen or out of management's control, taking the place of Y or Z factor treatment. In addition, several of the utilities examined do not have the same costs or circumstances as HQD, such as fuel or purchased power costs, or costs of unforeseen events in autonomous networks. Each of these circumstances interact in the overall plan and each may have an impact on which, and at what level, costs are allowed to be passed through to rate payers.

A summary of findings specific to each item listed by the Régie in (i) is presented in Table 1.

[56] Maine Public Utilities Commission, Order Approving Stipulation for CMP. Docket No. 2007-215/2008-111, July 1, 2008, at 13.

TABLE 1: Y FACTORS

	Pensions	EE/BEIE	Bad Debt	Low Income Customer Programs	Vegetation Management	Power Purchases/Fuel Costs
Alberta	Z (1)				No (2)	
Ontario	Partial (3)	Partial (4)		Yes (5)		
BC	Yes (6)					Yes (7)
MA	Yes (8)	Yes (9)		Yes (10)	Partial (11)	Yes (12)
VT						Yes (13)
ME					Partial (14)	
(1)	Can be tested as a Z factor. D-2012-237 at 150.					
(2)	AUC D-2012-237 at 151.					
(3)	EB-2014-0116 at 55.					
(4)	TH rate rider for disposition of LRAM variance account. TH Tariff					
(5)	Ontario Electricity Support Program Charge (OESP). TH Tariff					
(6)	FBC Decision September 15, 2014, at 97-98, 103.					
(7)	FBC Decision September 15, 2014, at 97-98, 103.					
(8)	Eversource's current rate adjustments include a pension adjustment factor. Eversource Tariff					
(9)	Eversource's current rate adjustments include an EE adjustment factor. Eversource Tariff					
(10)	Eversource's current rate adjustments include a residential assistance adjustment factor. Eversource Tariff					
(11)	MA DPU Order 17-05 at 584, 591.					
(12)	Eversource's current rate adjustments include a basic service adjustment factor. Eversource Tariff					
(13)	GMP Order Docket No. 8190/8191, at 9.					
(14)	CMP Stipulation Agreement at 5-9.					

A summary of findings specific to each item listed by the Régie in (i) at question 2.1 is presented in Table 2.

TABLE 2: Z FACTORS

	Unforeseen Events in Autonomous Networks	Major Outages	Changes to Regulatory Framework	Legislative Changes	Other Major Unforeseen Projects/ Major Connection Projects
Alberta			Yes [1]		
Ontario	Yes [2]		Yes [3]	Yes [4]	Yes [5]
BC					
MA		Yes [6]	Yes [7]	Yes [8]	
VT		Yes [9]	Yes [10]	Yes [11]	Yes [12]
ME		Yes [13]	Yes [14]	Yes [15]	Yes [16]
(1)	AUC D-2012-237 at 144.				
(2)	Rural or Remote Electricity Rate Protection (“RRRP”), TH Tariff				
(3)	EB-2016-077 at 3.				
(4)	EB-2016-077 at 3.				
(5)	OEB has allowed Z factors for technical requirements beyond the control of the utility. EB-2016-077 at 3.				
(6)	Eversource's current rate adjustments include a storm cost adjustment factor. Eversource Tariff				
(7)	MA DPU Order 17-05 at 584, 396.				
(8)	MA DPU Order 17-05 at 584, 396.				
(9)	Storm Costs. GMP Order Docket No. 8190/8191, at 9; or see CVPS Order Docket No. 7336 at 17.				
(10)	GMP Order Docket No. 8190/8191, at 9.				
(11)	GMP Order Docket No. 8190/8191, at 9.				
(12)	GMP Order Docket No. 8190/8191, at 9.				
(13)	Storm Costs. CMP Stipulation Agreement, at 10-11				
(14)	CMP Stipulation Agreement, at 12.				
(15)	CMP Stipulation Agreement, at 12.				
(16)	Force Majeure. CMP Stipulation Agreement, at 12.				

2. Références : (i) Pièce B-0013, p. 23 à 25;
(ii) Pièce B-0091, p. 19.

Préambule :

(i) Le Distributeur demande de traiter à titre d'exogènes (Facteur Z) les éléments suivants :

- Évènements imprévisibles en réseaux autonomes;
- Pannes majeures;
- Autres évènements imprévisibles, par exemple :

- changements touchant le cadre réglementaire;
- demandes découlant de décrets ou changements législatifs;
- contributions majeures à des projets de raccordement;
- projets majeurs (investissements, programmes) non prévus.

(ii) En réponse à une demande de renseignements d'OC, le Distributeur indique qu'il n'a pas effectué d'étude de balisage sur les facteurs Z.

Demande :

2.1 Veuillez déposer une étude de balisage et/ou un témoignage de votre expert sur le traitement des facteurs Z par les autres organismes de réglementation canadiens et/ou américains. Veuillez considérer chacun des éléments précités à la référence (i).

Réponse de Concentric:

See response to question 1.1.