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**2025-2026 HANDLING COMMISSION REVIEW**

**WRITTEN STATEMENT**  
**OF THE ALBERTA BOTTLE DEPOT ASSOCIATION**

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January 28, 2026

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## PART 1 EXECUTIVE SUMMARY

1. The Alberta Bottle Depot Association (the "**ABDA**") submits this Written Statement, including evidence, with respect to issues regarding the determination of the Phase One Target Year Revenue Requirement ("**Revenue Requirement**") for the current 2025 Handling Commission Review ("**HCR**") process.
2. The ABDA's Written Statement focuses on ensuring that the Revenue Requirement:
  - (a) Adjusts depot manager wage rates in a reasonable manner;
  - (b) Retains certain building costs, which are not included in deemed rate determination;
  - (c) Properly applies Indices to escalate costs;
  - (d) Properly forecasts container volumes; and
  - (e) Determines an accurate Return Margin ("**RM**") for the Alberta depot system.
3. In the DCA's Phase I Report, Revision 01(Doc 58) (the "**Phase I Report**"), the DCA provides a recommendation for a Revenue Requirement. The ABDA recommends the implementation of the Revenue Requirement as proposed by the DCA, subject to certain modifications as set out in this Written Statement. A summary of ABDA's recommended modifications are provided in the table on page 5 of this Written Statement. The body of this Written Statement describes the rationale for the requested modifications.

4. In addition to the ABDA's submissions, the ABDA relies upon the evidence and recommendations provided by the independent expert, ScottMadden, who presents evidence on matters regarding RM. The evidence of this expert is referenced in this Written Statement, and the full expert report appended at Appendix 7.2.

<b>Summary of ABDA recommended changes to Phase I Revenue Requirement (RR)</b>		
<b>Recommendation</b>	<b>Base Change to RR</b>	<b>Estimated Aggregate Impact on RR</b>
<b>Labour</b>		
Where the wage rate of a manager who is a Related Employee is deemed to be unreasonably high, the wage rate should only be reduced to \$43.42, being the upper end of the inflation-adjusted Willis Tower Watson wage band of \$23.79 - \$43.42, and not the system average job class of \$27.16.	\$2,096,922	\$2,384,250
<b>Building Costs</b>		
The cost of Leasehold Improvement CCA for those buildings leased by depots should be retained as a reasonable and legitimate cost for which no equivalent has been provided for in the deemed building lease costs.	\$319,004	\$346,791
<b>Indices</b>		
Costs should be escalated to the Target Year using the average index rate for the depot fiscal year, as opposed to the index rate of only the depot fiscal year end.	N/A	\$1,149,733
<b>Volumes</b>		
The Volume Forecast method should be revised for 10 of the 23 container streams. Future Annual Update Reports, which BCMB policy dictates are to use the same methods and procedures as the most recent HCR, should incorporate at least 9 months of Actual container volumes in accordance with Step 29 of the current HCR process.	N/A	Removes 7,693,269 containers from Volume Forecast
<b>Return Margin</b>		
The Return Margin should be revised to 7.55% to reflect reasonable and supported adjustments to Concentric's analysis.	N/A	\$6,754,963
	<b>Total</b>	<b>\$2,415,926</b>
		<b>\$10,635,737</b>

## **PART 2 LABOUR – UNREASONABLE WAGE REDUCTIONS**

### **2.1 Background**

#### ***2.1.1 Overview***

5. Many depots have a significant portion of their labour needs met by owners or employees related to the owner (collectively referred to as “**Related Employees**” on the UCA). As Related Employees’ wages may not always represent a fair market rate, the DCA reviews and adjusts these wages to ensure they are reasonable for use in the Revenue Requirement.
6. ABDA acknowledges that it can be appropriate to review and adjust Related Employees’ wages; however, ABDA disputes the extent of the DCA’s adjustments in the Phase I Report. The DCA has adjusted these wages to rates that are too low.

#### ***2.1.2 The DCA’s Methodology***

7. In the 2025 HCR, the DCA has identified and deemed certain wages to be ‘unreasonable’, and then adjusted those wages.<sup>1</sup>
8. Specifically, the DCA identified certain Related Employee wages as being ‘unreasonable’, and then adjusted those ‘unreasonable’ wages from their actual wage rates to the “system average wage for [the employee’s] respective job class”. The DCA confirmed this approach in its response to ABDA-DCA-15 (Doc 61, pgs 60-62), whereby the DCA stated:<sup>2</sup>

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<sup>1</sup> 2026.01.07.DCA.Responses.to.DRP.IRs.Revision.01.DCA (Doc 61), pgs 60-62.

<sup>2</sup> 2026.01.07.DCA.Responses.to.DRP.IRs.Revision.01.DCA (Doc 61), at ABDA-DCA-15(c), pgs 60-62.

Related employees that had unreasonably high or low wages due to tax planning or profit sharing were adjusted to the system average wage for their respective job class...

9. The DCA adjusted the 'unreasonable' wages to the following wage rates for each job class:<sup>3</sup>
  - (a) LBH – \$18.63
  - (b) COL – \$20.67
  - (c) MGR – \$27.39
  - (d) OWN – \$27.16
  
10. The Phase I Report and the DCA's IR responses contain limited information about the 'unreasonable' wages or how the DCA identified and adjusted them. Moreover, the DCA has provided no justification as to why a Related Employee should have their wage adjusted to the job class average rather than to some other benchmark. The ABDA inquired about this topic in its IR requests, and the DCA declined to provide further information.<sup>4</sup>

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<sup>3</sup> 2026.01.07.DCA.Responses.to.DRP.IRs.Revision.01.DCA (Doc 61), at ABDA-DCA-15(c), pgs 60-62.

<sup>4</sup> In the ABDA's view, the DCA's response was incomplete. The ABDA issued information requests relating to this issue in ABDA-DCA-15 (Doc 61, pgs 60-62). The DCA's responses to ABDA-DCA-15 improperly focus on semantics rather than substance. The DCA confirmed in its responses that it reduces certain wages in each job class to a maximum amount. The ABDA referred to this maximum amount as a 'wage cap'. The DCA denied that there was a wage cap, and consequently failed to provide responses to the ABDA's questions pertaining to the wage cap / maximum amount.

### **2.1.3 The ABDA's Position**

11. The ABDA submits that the DCA improperly adjusted wages downwards to wage rates that are too low. The ABDA's position is based on the following factors which all demonstrate an improper adjustment:
  - (a) The DCA's adjustment causes large depots' wages to be less than they were over 6 years ago, in 2019;
  - (b) The DCA has changed its methodology in this HCR in a manner that is inconsistent with policy and contrary to the findings of the DCA's prior methodology;
  - (c) The DCA's adjustment can result in Related Employees being paid lower wages than unrelated employees working in equivalent roles at the same depot;
  - (d) The DCA's adjustment is inconsistent with not-for-profit depot wages; and
  - (e) The DCA's adjustment is inconsistent with wages paid to depot industry employees outside of depots.
12. Each of these factors is explained in further detail below.

## **2.2 The DCA's Adjustment is Improper**

### **2.2.1 Large Depot Wages Improperly Decrease**

13. The DCA's adjustment causes large depots' wages to be less than they were in 2019, which is contrary to expectations of increasing costs over that period.

14. In HCR 2019, the Phase I Report recorded the following As Adjusted overhead labour data:<sup>5</sup>

**TABLE 28 – AS ADJUSTED OVERHEAD LABOUR**

<b>Depot Category</b>	<b>Total Hours</b>	<b>Total Dollars</b>
Small	91,161	\$ 1,790,653
Medium	132,606	\$ 3,822,309
Large	208,044	\$ 7,174,225
<b>Total</b>	<b>431,812</b>	<b>\$ 12,787,187</b>

15. From this data, the following HCR 2019 average wage rates can be calculated:

Small: \$19.64/hr

Medium: \$28.82/hr

Large: \$34.48/hr

16. Comparing the 2019 average wage rates to the 2025 average wage rates (Phase I Report, Doc 60, at Schedule 4) shows As Adjusted overhead hourly wages increased for both Small and Medium depots, but declined for Large depots even before accounting for inflation:

<b>Phase I Schedule 4 Amounts</b>			
<b>Average As Adjusted OH Wage</b>	<b>HCR2019</b>	<b>HCR2025</b>	<b>Difference</b>
Small	\$19.64	\$25.81	\$6.17
Medium	\$28.82	\$31.24	\$2.42
Large	\$34.48	\$32.49	<b>(\$1.99)</b>

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<sup>5</sup> HCR2019 Phase I Report Revised (Doc 111, page 44).

17. The lack of growth in large depot manager wages (before accounting for inflation) is counterintuitive, and a strong indication that wage rates are being excessively reduced.

### ***2.2.2 The DCA's Methodology is Inconsistent with Policy***

18. In comparison to 2019, the DCA has used a different methodology in 2025. The DCA's new methodology is inconsistent with the Depot Manager Cost Determination Policy.
19. The Depot Manager Cost Determination Policy, at paragraph 3, directs that external data sources be used as part of adjusting overhead labour costs:

The DCA is required to analyze the As-Reported Data contained in UCAs to identify potential over-reporting and under-reporting of costs for the Depot Managers, and to appropriately adjust such As-Reported Data, as required, *using external data sources*, assumptions on cost drivers and the application of the DCA's professional judgment. (emphasis added)<sup>6</sup>

20. In the 2019 HCR process, the DCA utilized an external data source, in accordance with the Depot Manager Cost Determination Policy. The external source was a report by Willis Tower Watson ("**WTW**")<sup>7</sup>. There is no reference to such a report, or use of any other external data source, in the Phase I Report for the 2025 HCR.

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<sup>6</sup> 2018.11.07.Depot.Manager.Cost.Determination.Policy.BOARD.APPROVED, Page 2.

### ***2.2.3 The DCA's Methodology Causes Wage Inconsistencies Within Depots***

21. The DCA's approach results in wage inconsistencies between Related Employees and unrelated employees within depots.
22. Managers who are Related Employees and who have wage rates thought by the DCA to be unreasonably high should expect to earn, at a minimum, the same rate that is paid to unrelated managers at the same depot. However, the DCA's wage adjustment has the effect of some Related Employees being deemed to earn a wage lower than that of unrelated employees. This is an unreasonable outcome.
23. For example, consider a single depot that is large enough to require two managers: one is an owner earning \$50.00 per hour who indicated their wages were in part due to tax planning or profit sharing, the second manager is an unrelated employee earning \$35.00 per hour. Applying the DCA's methodology, the owner's wages would be reduced to \$27.16 per hour while the wages of their unrelated manager would be unaltered, remaining at \$35.00 per hour. This would result in an unrelated manager earning almost \$8 per hour more than a related manager. Given that unrelated staff operate with less independence than owners and often with a more limited scope of responsibilities, it is unreasonable to have a related manager adjusted to earn less than an unrelated one.
24. Notably, in HCR 2019, the DCA's methodology accounted for this issue:<sup>8</sup>

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<sup>8</sup> HCR 2019 Phase I Report Revised (Doc 111, page 28)

In one instance, a depot had three part time managers. The managers were paid either \$32, \$44, or \$61 per hour. We reduced both of the higher paid managers' wages to \$32 per hour. This adjustment was based on a manager that worked at the depot as well as analysis of third-party manager wages for depots of similar size.

25. It is unclear why the DCA did not repeat this methodology in this 2025 HCR process.

#### ***2.2.4 The DCA's Adjustment is Inconsistent with Not-For-Profit Wages***

26. The DCA's approach is inconsistent with wages at not-for-profit depots.
27. According to the DCA, reductions in "unreasonably" high wages are only applied to managers related to a depot "owner":<sup>9</sup>

Wages decreases were implemented in cases when the Depot indicated that the wage was a result of profit sharing or tax planning rather than being set as a fair market rate. These cases involved managers related to the Depot owner only.

28. The concept of a depot "owner" can only apply to depots that are for-profit because not-for-profit ("**NFP**") entities do not have owners/shareholders and no part of their income can be distributed for the personal benefit of owners/shareholders. It is for this reason that NFP entities are exempt from tax.<sup>10</sup> No part of the manager wages reported by these NFP depots can be the result of profit sharing or tax planning.

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<sup>9</sup> Phase I Report, page 22 (Doc 58)

<sup>10</sup> <https://www.canada.ca/en/revenue-agency/services/charities-giving/charities/policies-guidance/summary-policy-n03-non-profit-organization.html>

29. Fourteen (14) of the depots in the Alberta depot system are NFP depots.<sup>11</sup>
30. Table 30 of the Phase I Report (below) shows that the average overhead labour rate was higher at not-for-profit depots (\$36.54/hr) than at for-profit depots (\$30.32/hr).

Table 30 – As Adjusted Overhead Labour Statistics and Profit by For-Profit and Not-For-Profit

Depot Category	Number of Depots Reporting	As Adjusted Profit Before Tax	Manager Labour Hours	Manager Labour Cost	FY Volume	Manager Labour Cost (¢/container)	Manager Labour Rate (\$/Hour)
<b>All Unprofitable Depots</b>							
For-Profit	87	\$ (4,555,340)	152,681	\$ 4,455,998	415,171,095	1.07	\$ 29.18
Not-For-Profit	11	\$ (753,628)	28,405	\$ 1,013,200	102,814,279	0.99	\$ 35.67
<i>Subtotal</i>	<i>98</i>	<i>\$ (5,308,968)</i>	<i>181,087</i>	<i>\$ 5,469,198</i>	<i>517,985,374</i>	<i>1.06</i>	<i>\$ 30.20</i>
<b>All Profitable Depots</b>							
For-Profit	108	\$ 16,553,544	373,944	\$ 11,509,902	1,532,126,134	0.75	\$ 30.78
Not-For-Profit	3	\$ 502,547	8,880	\$ 349,221	60,209,206	0.58	\$ 39.33
<i>Subtotal</i>	<i>111</i>	<i>\$ 17,056,091</i>	<i>382,824</i>	<i>\$ 11,859,123</i>	<i>1,592,335,340</i>	<i>0.74</i>	<i>\$ 30.98</i>
<b>All Depots</b>							
For-Profit	195	\$ 11,998,204	526,625	\$ 15,965,900	1,947,297,230	0.82	\$ 30.32
Not-For-Profit	14	\$ (251,081)	37,285	\$ 1,362,421	163,023,485	0.84	\$ 36.54
<b>Total</b>	<b>209</b>	<b>\$ 11,747,122</b>	<b>563,910</b>	<b>\$ 17,328,321</b>	<b>2,110,320,715</b>	<b>0.82</b>	<b>\$ 30.73</b>

31. Since wages reported by NFP depots are for unrelated employees and can in no way reflect tax planning or profit sharing, not-for-profit manager labour rates are a reasonable indicator of market-based wages paid to unrelated employees in manager roles.
32. Accordingly, the DCA's adjustment of manager wages to rates below those earned by NFP managers is unreasonable.

<sup>11</sup> ABDA understands that 5 of these depots are Large and 8 are Medium sized.

### ***2.2.5 The DCA's Adjustment is Inconsistent with Other Industry Employees***

33. The DCA's adjustment is inconsistent with wages paid to depot industry employees outside of depots, and in particular employees of ABCRC.
34. The ABDA observes that ABCRC and UFCW 401 negotiated<sup>12</sup> 2024 wage rates of \$35.47 per hour for experienced labourers working as a lead hand.<sup>13</sup> This rate is before considering other benefits (e.g., RRSP contributions, health care plans, personal leave, etc.) and WCB.
35. ABCRC staff operate with less independence than a depot owner and their job responsibilities align more closely with depot direct labour than manager labour for the purposes of UCA classifications. Despite this, the DCA's adjustment has a depot owner's wage adjusted down to \$27.16, over \$8 less than they could expect to receive as a lead hand at ABCRC.
36. The ABDA submits that it is unreasonable for the wage rates of managers who are Related Employees to have their earnings adjusted below that paid to a labourer working in the same industry.

### **2.3 Wage Reduction Should Be Based On a Wage Band**

37. In the 2019 HCR, the DCA used WTW's report to assess the reasonableness of wage rates. The DCA opined that the WTW data was indicative of a wage band

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<sup>12</sup> ABCRC\_and\_UFCW\_401\_Negotiations\_Offer\_of\_Settlement\_01Jan2024lc

<sup>13</sup> The ABCRC/UFCW 401 agreement indicates: Base wage \$27.78 + \$2.75 (Lead premium with 10-15 years of experience) + \$2.44 (8% Vacation Allowance) + \$1.96 (CPP) + \$0.54 (EI) = \$35.47/hour.

of \$17.50 to \$36.13 per hour for depot managers,<sup>14</sup> while also opining that depot managers at larger depots may perform work at higher pay/skill levels.<sup>15</sup> Notably, the average wage rate for large depots in the 2019 HCR was \$34.48,<sup>16</sup> which is at the high end of the wage band and suggests that rates above this amount were also considered reasonable since it was an average value.

38. If the WTW wages rates previously deemed reasonable (\$17.50 to \$36.13 per hour) are adjusted for inflation, the reasonable wage band for overhead labour for all depots would be \$23.79 - \$43.42 per hour.<sup>17</sup>
39. The ABDA submits that:
  - (a) For instances where the DCA determines that the wage rate of a manager who is a Related Employee is unreasonably high, the wage rate should only be reduced to \$43.42, being the upper end of the inflation-adjusted WTW wage band of \$23.79 - \$43.42.
  - (b) This revised approach to adjusting high wage rates should be applied to the current HCR 2025, to all future Annual Update Reports (AURs) and HCRs, and include use of updated WTW reports to support development of comparable wage ranges.

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<sup>14</sup> HCR2019 Phase I Report (2019 Doc 111), pg 55. The DCA also references a wage band of \$19.80 to \$28.43, but that band appears to have been focused on small/medium depots, as the average wage rate for large depots in 2019 exceeded that band.

<sup>15</sup> HCR2019 Phase I Report (2019 Doc 111), pg 52.

<sup>16</sup> See paragraphs 14 and 15 of this Written Statement.

<sup>17</sup> 2025.10.03.Indices.Report.Provincial.CPI.Forecast.July.2025.CBOC (Doc 30). Adjustment factor calculated as  $1.690333 [2024.02] / 1.406667 [2018.02] = 1.201659$  \* HCR2019 wage range (which is from 2018).

40. It is not possible for the ABDA to precisely calculate the impact on the Revenue Requirement resulting from this proposed change because the details of overhead labour calculations are not available. However, ABDA reasonably estimates the As Adjusted Overhead wage costs should be increased by \$2,096,922 as follows:

$$49 \text{ depots}^{18} \times 2632 \text{ hours/depot}^{19} \times (\$43.43 - \$27.16)^{20} = \$2,096,922.$$

41. The ABDA estimates that the aggregate effect of adding \$2,096,922 to As Adjusted Overhead Labour would increase the final Target Year Revenue Requirement by \$2,384,250.

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<sup>18</sup> Number of depots where overhead wages were adjusted downwards (Doc 58, page 22). Includes 41 large depots and 8 medium depots.

<sup>19</sup> Assumes that 50% of average manager hours worked at these depots are by Related Employees who had their wages revised (Doc 58, Schedule 4).

<sup>20</sup> Upper wage of WTW wage band (\$43.42) minus the System Average Wage assigned to the Related Employees who are Owners (\$27.16) = \$16.26.

### **PART 3 BUILDING COSTS - TENANT-FUNDED LEASEHOLD CCA**

#### **3.1 Tenant-Funded Leasehold Improvement CCA Must Be Restored to the Revenue Requirement**

42. The ABDA submits that the cost of Leasehold Improvement Capital Cost Allowance (“**CCA**”) for those buildings leased by depots and reported on Line 510 of Table 5-a of the UCA must be retained as a building cost. These costs are a reasonable and legitimate tenant-funded cost for which no equivalent has been provided for in the deemed building lease costs recommended by the DCA’s Real Estate Expert.
43. Depots operating as tenants in their buildings have reported \$319,004 in Leasehold Improvement CCA. The ABDA estimates that the aggregate impact of restoring this as-reported cost to the Study System would be to increase the Revenue Requirement by \$346,791.

#### **3.2 Tenant-Funded Leasehold Improvement CCA is Improperly Excluded from the Deemed Lease Rate**

44. In accordance with the BCMB’s Depot Building Deemed Lease Rate Policy, building costs reported by depots are replaced with market-based costs based on rates recommended by the DCA’s Real Estate Expert, CBRE.<sup>21</sup> However, tenant-funded Leasehold Improvement CCA is not included in the deemed costs.
45. CBRE stated in their response to ABDA-DCA-20 (Doc 61 at pg 76) that, while an allowance for capital expenditures in the form of leasehold improvements

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<sup>21</sup> See e.g. Depot Building Deemed Lease Rate Policy, s. 11, 14. See e.g. Doc 61, pgs 73-76, at ABDA-DCA-20(b).

funded by the building owner (landlord) are included in their recommended lease rates, tenant-funded improvements are excluded:

...implicit within our concluded triple-net lease rates is a typical allowance for leasehold improvements, which are a landlord funded amount for build-outs at the beginning of a lease term to bring the building to a typical standard and/or to attract tenants. Anything over and above this typical standard would be the responsibility of the tenants.

...

Tenant funded improvements would be excluded from our analysis.

46. Accordingly, the DCA's Real Estate Expert has confirmed that its recommended market-based lease rates exclude an allowance for tenant-funded improvements.

### **3.3 Tenant-Funded Leasehold Improvement CCA Data is Available**

47. In ABDA-DCA-20, the ABDA raised concerns about the exclusion of Leasehold Improvement CCA from deemed lease rates, and accordingly from the Revenue Requirement. In response, CBRE and the DCA suggested that there was a lack of data available to identify tenant-funded Leasehold Improvements CCA (Doc 61, pg 76):

CBRE notes:

As we do not have direct communication with the parties who provided the information, it is unclear whether the leasehold improvements CCA as reported relate to tenant-funded or landlord-funded improvements.

While the DCA states that it:

...confirms this is not specified by depots on their UCAs as that has not been a UCA requirement.

And the DCA concludes:

Based on the UCA data provided by depots and CBRE's comments, the DCA has determined it is not appropriate to adjust the Revenue Requirement to account for CCA.

48. The ABDA respectfully disagrees with the DCA on this issue. The UCAs currently distinguish between tenant and landlord data, such that the tenant-funded Leasehold Improvement CCA costs are determinable.
49. Depots must report on their UCAs whether they are a tenant or owner/landlord, thereby identifying whether Leasehold CCA costs are tenant-funded or landlord-funded improvements.
50. On Table 5-a Building Costs of the UCA, each depot must report whether the building in which they are operating is "Leased" (they are a tenant in the building) or "Owned" (they own the building).
51. This reporting requirement is clarified by the UCA Instruction Manual (Doc 28) at page 16, which requires different information for Leased buildings than for Owned buildings:

### 5.6.1 Table 5-a – Building Costs

If the depot building is owned by an entity other than the corporate entity that files the tax return, and the depot leases the building space from a third-party entity, fill in the unshaded boxes of column a on Table 5-a.

If the depot building is owned by the same corporate entity that files the tax return, fill in the unshaded boxes of column b on Table 5-a.

52. Depots that are operating as tenants cannot include external costs that they did not incur, such as costs funded by their landlord, on their financial statements or CRA tax returns.<sup>22</sup> UCA data is intended to be consistent with financial statements and tax returns, which are required to be provided to the DCA for verification purposes.
  
53. Since Table 5-a of the UCA distinguishes between depots that are tenants and depots that are owners/landlords, and since CCAs cannot include costs incurred by any entity other than the depot itself, costs recorded in column “a” (tenants only) of Line 510 (Leasehold CCA) on Table 5-a represent tenant-funded Leasehold CCA costs. These tenant-funded CCA costs are distinct and separate from landlord-funded CCA costs which are instead reported in column “b” (owners only) on Line 512 (Building CCA) of this same table.<sup>23</sup>

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<sup>22</sup> Capital costs are a taxpayer’s own cost/expense for acquiring or constructing the property. See e.g. <https://www.canada.ca/en/revenue-agency/services/tax/businesses/topics/sole-proprietorships-partnerships/report-business-income-expenses/claiming-capital-cost-allowance/calculate-deduction-capital-cost-allowance.html>, at s. ‘Capital cost’.

<sup>23</sup> The distinction between whether a depot is a tenant or landlord holds even if a depot entity is leasing its building from an associated entity (i.e., linked by common control) because the tenant reports its own tenant-funded CCA costs to the CRA while the affiliated entity (their landlord) reports its landlord-funded CCA costs on its own, separate tax return.

54. The tables provided by the DCA in response to ABDA-DCA-20(a) reinforce and quantify the distinction between tenant-funded and landlord-funded CCA costs:
- (a) Depots that “Lease” their buildings (tenants) reported \$319,004 in Leasehold Improvements CCA (Doc 61, pg 74).
  - (b) Depots that “Own” their buildings (landlords) reported \$0 in Leasehold Improvements CCA and \$533,381 in Building CCA (Doc 61, pg 75).
55. In summary, the tenant-funded Leasehold Improvement CCA costs are specified in the UCA data at column a of Table 5-a.

### **3.4 CBRE improperly conflates “exclusion” with “variability”**

56. In response to ABDA-DCA-20, CBRE appears to have considered ‘variance’ as accounting for the ‘exclusion’ of tenant-funded improvements. The ABDA submits that this is improper.
57. Specifically, CBRE stated as follows:
- ... with a lack of full information as to the source or party that paid for the improvements, any variances in this regard would likely be captured within the accuracy standard of +/- 5-10% in metro markets and +/- 15-20% in urban and rural markets.
58. As shown in the previous section, the UCA does provide information as to who paid for the improvements, which addresses CBRE’s concern about lack of information.

59. Moreover, it is an error in reasoning to suggest that costs excluded from an analysis (e.g., tenant-funded leasehold improvements) are subsequently accounted for within the range of variability (e.g., accuracy standard) of that same analysis:

(a) The range of variability (or sensitivity) of an analysis refers to the expected fluctuations in “included” variables. “Excluded” costs, by definition, are omitted from the calculation and do not influence the base estimate or its variance.

(i) “Exclusion” means that costs are intentionally left out of the calculation entirely.

(ii) “Variability” refers to the range of potential outcomes for the costs actually included in the analysis.

“Exclusion” deals with the scope of the analysis, “variability” deals with its uncertainty.

60. Rationalizing that excluded costs are covered by variability leads to forecast bias. It conflates uncertainty about known factors with the impact of completely ignored factors, undermining the rigor and validity of the results.

61. A proposition that the range of variability in CBRE’s estimate of lease rates can account for the exclusion of tenant-funded Leasehold Improvement CCA costs from the Revenue Requirement is without merit and should be disregarded.

### 3.5 Conclusion

62. Tenant-funded Leasehold Improvement CCA is a valid depot cost that has been excluded from deemed lease rates, and as a result also excluded from the Revenue Requirement.
63. The ABDA submits that tenant-funded Leasehold Improvement CCA needs to be accounted for in the Revenue Requirement. This can be achieved by restoring \$319,004 in tenant-funded Leasehold Improvements CCA for inclusion in the determination of Study System Building Costs. The necessary data for doing so is available in the UCAs, which provide a clear distinction between, and quantification of, tenant-funded vs. landlord-funded CCA costs.
64. The ABDA estimates that the aggregate effect of adding \$319,004 to the Building Study System would increase the final Target Year Revenue Requirement by \$346,791.<sup>24</sup>

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<sup>24</sup> Approximately  $\$319,004 \times 105.3\%$  (Total System)  $\times 102.10\%$  (Target Year)  $/ (1-5.93\%)$  (Return Margin). This figure is approximate because the Phase I schedules do not provide access to allocating as-reported tenant-funded Leasehold Improvement CCA costs into distinct depot volume clusters. The ABDA's calculation was applied to the largest volume clusters (not to the total system).

## **PART 4 INDICES – ESCALATION TO TARGET YEAR**

65. The ABDA submits that the Total System costs should be escalated to the **“Target Year”** (the 12-month period ending on the date that new handling commissions are intended to take effect) using the average index rate for the depot fiscal year, as opposed to the index rate of only the depot fiscal year end.
66. This change is necessary because the current approach to escalating depot costs ignores the underlying reality that the UCA costs reported by depots are incurred across a twelve-month period with costs and indices that are not constant (generally rising over time).
67. Escalating costs by using only the index rate at the end of the fiscal year is thus misaligned with cost changes that occurred over the course of the whole year. This misalignment embeds a structural and material error into the calculation of Target Year costs, which is mitigated by using a more appropriate rate – being the average index rate across the whole fiscal year.

### **4.1 Background**

68. As part of the DCA’s process in calculating the Revenue Requirement, the DCA escalates the depots’ costs from their 2024 fiscal year periods to the Target Year.<sup>25</sup> In doing so, the DCA applies indices rates which are based on the Consumer Price Index (**“CPI”**).<sup>26</sup> The intended result of the application of the

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<sup>25</sup> See e.g. Phase I Report, pgs 67-68 (Doc 58).

<sup>26</sup> See Phase I Report, pg 28 (Doc 58). See Doc 30, 2025.10.03.Indices.Report.CPI.Forecast.July.2025.CBOC (the **“CBOC Report”**).

indices rates is that depots' costs will be escalated into the future uniformly with CPI.<sup>27</sup>

69. The DCA's procedure for escalating costs is as follows:

- (a) The DCA begins with the cost data reported by depots on their UCAs. The UCA data for each depot reflects the total costs a depot incurred across its whole fiscal year.
- (b) UCA costs for each depot are assessed, adjusted and aggregated by the DCA in accordance with BCMB policy. The result is a **"Total System Cost"**, which approximates the cost of the total depot system in fiscal 2024.
- (c) The DCA obtains an expert report, namely the CBOC Report (Doc 30), which forecasts CPI rates into the future.
- (d) The Total System Costs are then escalated to the Target Year, by multiplying the Total System Costs by the change in CPI over the applicable period.<sup>28</sup> The intended result is to escalate the costs in accordance with the change to CPI.
  - (i) The formulas for this step are embedded in Schedule 11c.<sup>29</sup>

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<sup>27</sup> Handling Commission Bylaw, s. 2.1.5, 13.6.4.

<sup>28</sup> Note: This step is not performed on a total system basis. Rather, it is performed individually for each of the 20 depot clusters. See Phase I Report, Schedule 11c.

<sup>29</sup> In particular, the formulas are shown in column KT. For example, column KT7 contains the formula for volume cluster 1. For further clarification on the formulas, see Appendix 7.1 to this Written Statement, at s. 1.1.

70. The ABDA submits that the DCA is underestimating the change in CPI, and as a result the DCA is underrepresenting the depots' costs.

#### 4.2 The Issue with the DCA's Approach

71. The flaw with the DCA's approach can be demonstrated by examining the Indices Expert Rates shown in Table 59 (Doc 58, page 66). Table 59 lists certain indices rates from the CBOC Report which are relevant to this HCR process:

Table 59 – Indices Expert Rates

Forecast Summary	2024				2025				2026			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Wage Index	1.67	1.69	1.70	1.70	1.71	1.72	1.73	1.73	1.73	1.75	1.76	1.75
Building Index	1.67	1.69	1.70	1.70	1.71	1.72	1.73	1.73	1.73	1.75	1.76	1.75
Gasoline Index	1.67	1.69	1.70	1.70	1.71	1.72	1.73	1.73	1.73	1.75	1.76	1.75
Vehicle Index	1.67	1.69	1.70	1.70	1.71	1.72	1.73	1.73	1.73	1.75	1.76	1.75
Equipment Index	1.67	1.69	1.70	1.70	1.71	1.72	1.73	1.73	1.73	1.75	1.76	1.75
General Overhead Index	1.67	1.69	1.70	1.70	1.71	1.72	1.73	1.73	1.73	1.75	1.76	1.75

72. For 2024 it is observed that the CPI indices rates change from 1.67 in Q1, to 1.69 in Q2, then to 1.70 in each of Q3 and Q4.

73. The DCA's approach is to escalate only using the final quarter of the fiscal year end (e.g. Q4) and ignore the other three quarters (e.g. Q1, Q2 and Q3)..<sup>30</sup>

74. However, the DCA's approach is flawed: If one wants to escalate the total costs for the whole 2024 year forward to Q2 2026 (which has a 1.75 index rate), it

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<sup>30</sup> Note: The specific quarter used by the DCA varies by volume cluster because the clusters have different fiscal year-ends, as shown in the Phase I Report at Schedule 11(a), column (i). Nevertheless, regardless of the specific quarters used by the DCA, the DCA still always escalates based on the final quarter of the fiscal year and ignores the prior three quarters of the fiscal year. For clusters 2, 6-16 and 18-20, the DCA escalates based on a 2024 Q3 fiscal year end, and ignores 2024 Q2, 2024 Q1 and 2023 Q4. For clusters 1, 3-5 and 17, the DCA escalates based on a 2024 Q4 fiscal year end, and ignores 2024 Q3, Q2 and Q1. For illustrative purposes in this Written Statement, the ABDA will refer to the DCA using a 2024 Q4 fiscal year end.

would be a mistake to escalate the total costs based only on the Q4 index rate (of 1.70). The Q4 index rate alone does not account for CPI changes over the course of the year (over the period of time the costs were incurred).

(a) For example, any costs incurred in 2024 Q1 were incurred at an index rate of 1.67, and would need to account for a 0.08 rate change to escalate to the 2026 Q2 index rate of 1.75. So, it is inaccurate to escalate costs incurred in 2024 Q1 based on the higher 2024 Q4 index rate of 1.70, which only accounts for a 0.05 rate change when escalating to the 2026 Q2 index rate of 1.75.

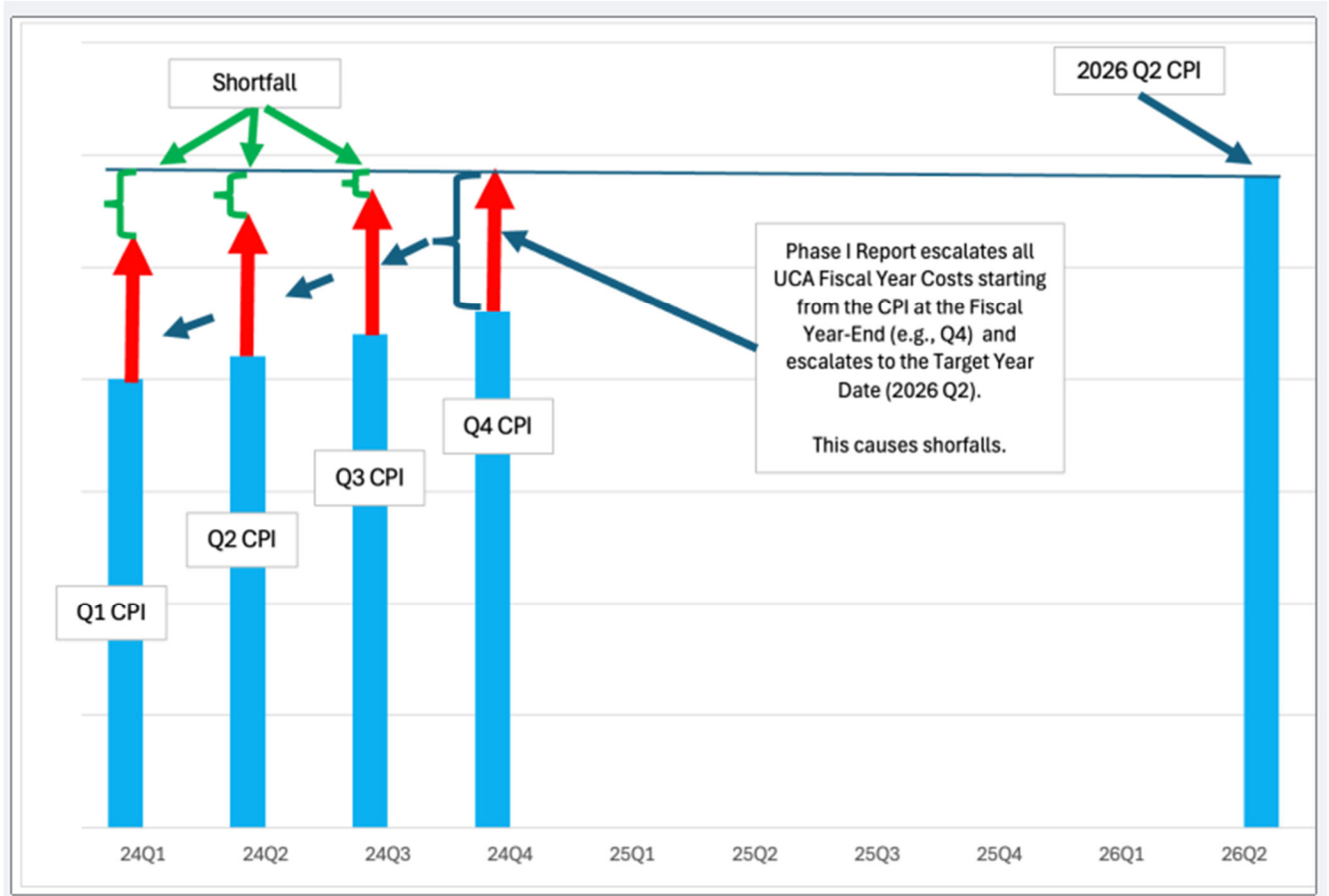
75. The ABDA is not advocating for the DCA to escalate costs on a quarterly basis, (and the DCA does not have quarterly cost data to do so). However, the ABDA submits that this issue can be more properly addressed by escalating based on the average index rate over the fiscal year (the "**Average Rate**"). In comparison to escalating from the fiscal year end (e.g. Q4), the Average Rate more accurately represents the index rates that were applicable to the costs incurred over the course of the year.

#### **4.3 Consequence of Using the DCA's Approach**

76. The consequence of the DCA using the Q4 index rate to escalate costs incurred over the course of the whole year is that the costs are underrepresented – resulting in a shortfall.

77. The following figure shows how the DCA currently escalates depot costs in the Phase I Report from 2024 to Q2 2026 (red arrows show the escalation),

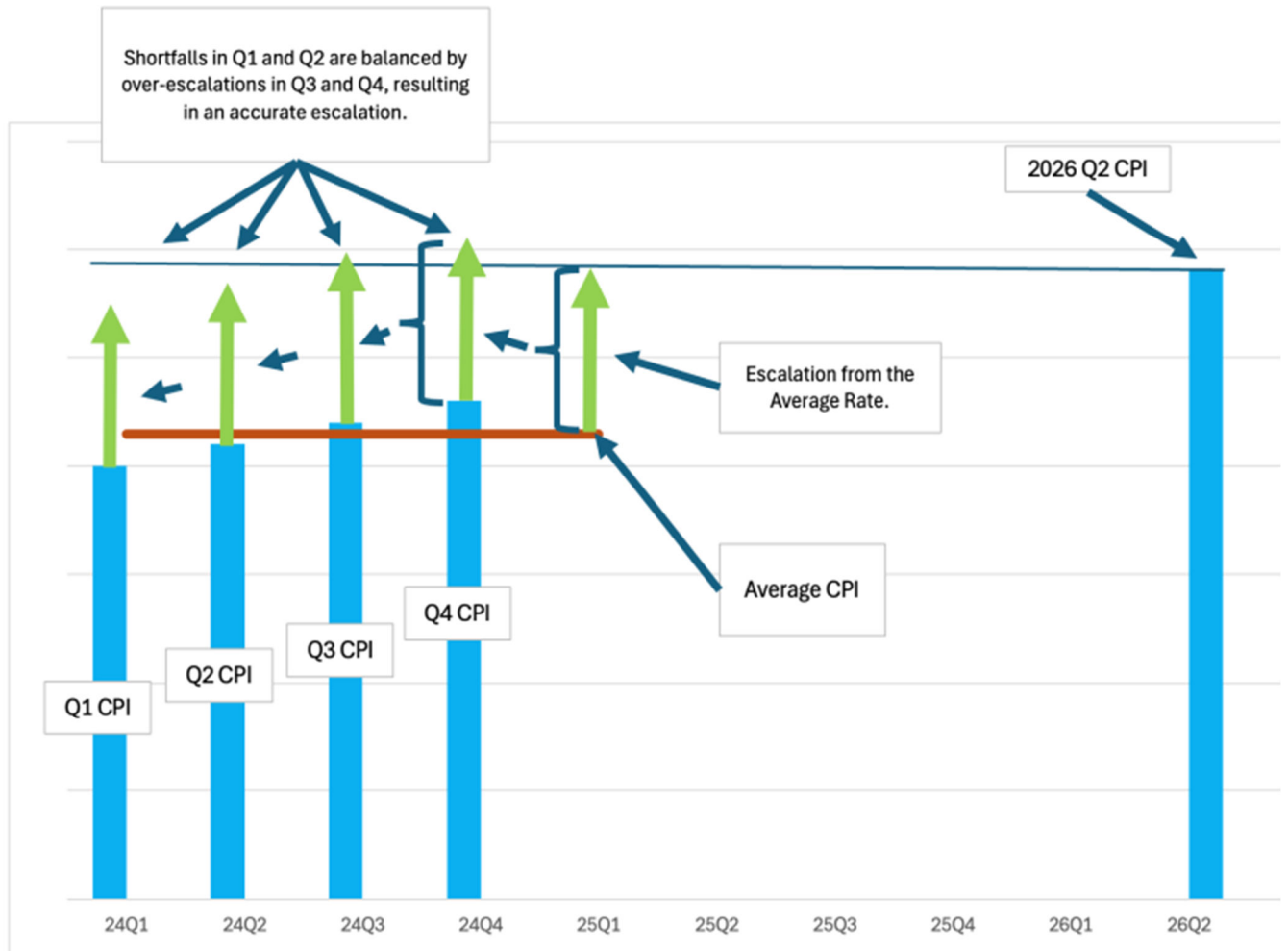
resulting in a shortfall (green parenthesis) associated with the changing CPI over the course of the 2024:<sup>31</sup>



78. The next figure shows the benefit of using the Average Rate. The shortfall is mitigated by escalating from the Average Rate (green arrow) for the fiscal year:<sup>32</sup>

<sup>31</sup> This figure is provided solely to clarify the issue raised by the ABDA. This figure is not to scale and not intended to represent actual CPI indices rates from 2024 or 2026. The actual CPI indices rates for 2024 and 2026 are set out in paragraph 71 above, and also referenced in paragraphs 72 and 74 above.

<sup>32</sup> See footnote 31.



#### 4.4 Revising the Phase I Report to Reflect the Average Rate

79. The ABDA submits that the method used in the Phase I Report, to escalate costs to the Target Year using the index rate from only the last quarter of the fiscal year, makes the error of escalating in a manner that is misaligned with the indices rates for costs incurred in other quarters of the fiscal year. Applying the Average Rate, which accounts for the changes in indices rates over the course of the year, provides a more reasonable result.
80. Implementing the Average Rate can be done with a simple modification to the current Phase 1 spreadsheets: In Schedule 11c, replace the index rate of the

last fiscal quarters with the Average Rate (e.g. the index rate for Q4 2024 would be replaced with the Average Rate for 2024, etc.).

81. The ABDA calculates that the impact of using the Average Rate increases the overall Revenue Requirement by \$1,149,733.

## **PART 5 VOLUMES – FORECASTING**

### **5.1 Accurate Container Volume Forecasts are Important**

82. Estimating the volume of containers in each of the 23 container streams, referred to, in aggregate, as the “Volume Forecast”, is a fundamental input to determining the Target Year Revenue Requirement. The Volume Forecast for the 2025 HCR is intended to represent container volumes for each of the twelve months preceding the May 1, 2026, Target Date (i.e., from May 2025 to April 2026).
83. Ideally, Handling Commissions would be calculated using the actual volume of containers returned through the Depot system (“Actuals”) for each of the 12 months from May 2025 to April 2026. Unfortunately, this is not possible due to the timeframe required to set new Handling Commissions (HCs) and the time lag associated with collecting data on returns for each month. While the DCA can rely upon some months of Actuals in preparing the Volume Forecast, the quantity of containers in other months must be forecast.
84. Inaccuracies in the Volume Forecast, whether predicting quantities that are too high or too low compared to what subsequently occurs, can have a large material impact on the final HCs set by the BCMB and on whether the depot system will actually earn its intended Revenue Requirement. While a forecast, by definition, is not expected to perfectly predict reality, all parties should have confidence that the method(s) used to prepare a forecast will generate a reasonably accurate representation of subsequent actual volumes.
85. The Volume Forecast also impacts the relative amount paid by each manufacturer for their containers. A Volume Forecast can appear accurate in

aggregate but have material inaccuracies at the individual container streams level. For this reason, the forecast methodology should be evaluated by container stream to minimize cross-subsidization between manufacturers.

86. With the October 30, 2025, issuance of the first version of the Phase I Report, the Volume Forecast was based upon 3 months of actual volumes (May – July 2025) and 9 months of predicted volumes (August 2025 – April 2026). The DCA updated the Volume Forecast to include August actuals (4 months of Actuals) with the issuance of Revision 1 of the Phase I and II Reports in January 2026.
87. Step 29 of the HCR Process Schedule (Doc 03), slated to occur March 13, 2026, explicitly requires the Volume Forecast to be updated with the Actuals data available at that time. This final update generally means the Revenue Requirement emerging from the HCR process is based on a Volume Forecast with at least 9 months of actuals (May – January) and only 3 months of predicted volumes (February – April). This reduces the potential for predictive error and significantly improves confidence in the final Volume Forecast.
88. Nevertheless, in addition to incorporating as many months of Actuals as possible, the methodology used to forecast volumes must be as accurate as possible.

## **5.2 DCA Errors in Testing Forecasting Methods**

89. As discussed in Chapter 7 of the Phase I Report, it is important to evaluate forecast methods by testing how accurately these methods predict volumes. This evaluation can be performed by using historical data, and testing how the

forecasted results compare to actual container return volumes for the same period(s).

90. The forecast method that most accurately predicts actual volumes for a given container stream should be the method applied to that stream when preparing the Volume Forecast for the Revenue Requirement.
91. Two forecasting methods were used by the DCA:
  - (a) "Return Volume" relies on historical return volumes with data for some container streams going back to 2002; and
  - (b) "Return Rate" relies on a combination of container sales and returns. As sales data only goes back to 2014, this analysis uses a shorter period of historical data.<sup>33</sup>
92. As discussed on page 57 of the Phase I Report, the DCA used its testing results to apply the "Return Volume" method to 19 of 23 container streams and the "Return Rate" to the other 4.
93. In their response to ABDA-DCA-26, the DCA advised that the data used to test the Return Volume method was constrained to the period of January 2014 - April 2025. Container data prior to 2014 was not included when testing this method.
94. However, as shown in the October 2025 Volume Forecast Update (Doc 34), when the Return Volume method was applied to the 19 container streams, the

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<sup>33</sup> 34.2025.10.15.Volume.Forecast.Update.DCA

underlying data was not constrained to 2014, but instead used data going back as far as 2002. Not limiting the Return Volume dataset to 2014 when preparing the Volume Forecast means that this methodology was changed between the testing and subsequent application phases. In other words, the Return Volume method was not tested using the same parameters as were used when applied.

### **5.3 Revisions to Reduce Errors in Volume Forecast Methods**

95. The DCA provided the forecast methodology testing spreadsheet (Doc 53) In response to ABDA's IR no. ABDA-DCA-26. Using this spreadsheet, the ABDA expanded upon the DCA's forecast testing work by analyzing three methods. Two of the methods are the same as conducted by the DCA: "Return Volumes from 2014" and "Return Rate". The ABDA tested a third method: "Return Volumes from 2002".
96. Based on this updated testing analysis, the ABDA submits that, to provide a more accurate overall Volume Forecast, the methods applied to 10 of the container streams should be changed, as shown in the following table (recommended changes highlighted in green).<sup>34</sup>

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<sup>34</sup> Note only container streams for which full data was made available for testing were evaluated. Specialty Beer (Molson Coors MGD, Moosehead, Sleemans, Steam Whistle), Sleeve-in-a-box, and Specialty Containers were excluded from testing.

Container Stream	Recommend methodology		
	DCA Applied	ABDA Analysis	Change?
Aluminum	Return Volumes from 2002	Return Volumes from 2002	no
Bag in Box Over 1 L	Return Volumes from 2002	Return Volumes from 2014	yes
Bi-metal 0-1 L	Return Volumes from 2002	Return Volumes from 2002	no
Bi-metal Over 1 L	Return Volumes from 2002	Return Volumes from 2002	no
Drink Pouches 0-1 L	Return Rate	Return Rate	no
Gable 0-1 L	Return Volumes from 2002	Return Volumes from 2014	yes
Gable Over 1 L	Return Volumes from 2002	Return Volumes from 2014	yes
Glass 0-1 L	Return Volumes from 2002	Return Volumes from 2002	no
Glass Over 1 L	Return Volumes from 2002	Return Volumes from 2002	no
HDPE	Return Volumes from 2002	Return Rate	yes
Industry Standard Bottle	Return Rate	Return Volumes from 2014	yes
Liquor and Wine Ceramics	Return Volumes from 2002	Return Volumes from 2014	yes
Other Pl. 0-1 L	Return Volumes from 2002	Return Volumes from 2014	yes
Other Pl. Over 1 L	Return Volumes from 2002	Return Volumes from 2014	yes
PET 0 - 1 L	Return Volumes from 2002	Return Volumes from 2002	no
PET Over 1 L	Return Volumes from 2002	Return Volumes from 2002	no
Plastic One-Way Keg Over 1 L	Return Rate	Return Rate	no
Tetra 0-1 L	Return Rate	Return Volumes from 2002	yes
Tetra Over 1 L	Return Volumes from 2002	Return Volumes from 2014	yes
Sleeve-in-a-Box 0-1 L			N/A
Specialty Containers MGD, Moosehead, Sleemans, Steam Whistle			N/A

97. These recommended methodologies provide the most accurate results. Forecasting accuracy was assessed using the same error measures described by the DCA on pages 56-57 of the Phase I Report. The Mean Absolute Percent Error (MAPE) results are shown in the following table:<sup>35</sup>

<sup>35</sup> The “% Improvement” column shows the difference in MAPE results between the methodology selected by the DCA and the methodology recommended by the ABDA with the 10 container streams recommended for change highlighted in yellow.

Container Stream	Percentage error			% Improvement
	Returns Volumes from 2014	Return Volumes from 2002	Return Rate	
Aluminum	2.4%	1.7%	1.9%	
Bag in Box Over 1 L	6.4%	10.7%	19.4%	4.2%
Bi-metal 0-1 L	22.4%	14.6%	57.6%	
Bi-metal Over 1 L	3.6%	3.3%	118.4%	
Drink Pouches 0-1 L	8.4%	24.6%	7.4%	
Gable 0-1 L	2.2%	8.8%	6.9%	6.6%
Gable Over 1 L	0.8%	4.0%	2.8%	3.2%
Glass 0-1 L	7.9%	6.1%	7.9%	
Glass Over 1 L	1.9%	1.4%	2.9%	
HDPE	7.0%	12.4%	5.7%	6.7%
Industry Standard Bottle	20.7%	21.4%	24.2%	2.8%
Liquor and Wine Ceramics	88.6%	236.7%	131.9%	148.1%
Other Pl. 0-1 L	5.7%	17.1%	13.8%	11.4%
Other Pl. Over 1 L	5.2%	5.9%	135.7%	0.7%
PET 0 - 1 L	4.2%	1.1%	7.0%	
PET Over 1 L	6.5%	0.8%	3.6%	
Plastic One-Way Keg Over 1 L	71.1%	111.9%	56.7%	
Tetra 0-1 L	4.5%	2.9%	7.1%	4.2%
Tetra Over 1 L	20.6%	20.7%	71.2%	0.0%
Sleeve-in-a-Box 0-1 L Specialty Containers MGD, Moosehead, Sleemans, Steam Whistle				

98. Comparison of the DCA and ABDA forecasts with Actuals for the historical periods of May 2022 – April 2023, May 2023 – April 2024 and May 2024 – April 2025 show that the ABDA forecast methodology is more accurate (0.6% error) relative to the DCA forecast (1.1% error), as shown in the following table:

4 months Actuals, 8 months Forecast	DCA	ABDA
Error in container volumes	23,821,254	13,073,643
Variance from Actuals	1.1%	0.6%

99. While 0.6% is a significant improvement over 1.1%, even this lower error rate has a material financial impact on depots. This impact is experienced in two ways:

- (a) **Lower HCs on collected containers:** a volume forecast that is too high causes the HCs to be set at a too low rate (as  $\text{HCs} = \text{Revenue Requirement} / \text{Volume}$ ); and
- (b) **Uncollected containers = lost HCs:** the depot system won't receive the revenues from containers forecasted but not actually returned to depots by consumers.

100. The following table shows that both 1.1% and 0.6% volume forecast errors in the current HCR2025 Revenue Requirement would have a large, negative financial impact on depots' anticipated earnings. If the volume forecast is too high by 1.1%, depots would not be able to earn \$2.4 million of their Revenue Requirement; if the forecast is too high by 0.6%, depots would not be able to earn \$0.9 million.

<b>4 months Actuals, 8 months Forecast</b>	<b>DCA</b>	<b>ABDA</b>
<b>Error in container volumes</b>	23,821,254	12,790,524
<b>Variance from Actuals</b>	1.1%	0.6%
<b>Uncollected containers (lost HCs)</b>	1,608,753	675,884
<b>Lower HCs on collected containers</b>	802,006	233,115
<b>Lost Earnings to Depots</b>	<b>2,410,759</b>	<b>909,000</b>

101. These results underscore the Volume Forecast's critical role in setting reasonable HCs that can realistically be expected to be earned by depots. It

also shows that the ABDA's proposed revision to the Volume Forecast methodology will significantly reduce the forecast error rate.

#### 5.4 Benefit of Incorporating more Actuals in the Volume Forecast

102. The following table shows that updating the Volume Forecast with 9 months of Actuals, instead of just 4 months, makes a very large contribution in further reducing the forecast error rates:

9 months Actuals, 3 months Forecast	DCA	ABDA
Error in container volumes	6,388,415	6,696,680
Variance from Actuals	0.3%	0.3%
Uncollected containers (lost HCs)	403,893	421,206
Lower HCs on collected containers	144,145	159,100
Lost Earnings to Depots	<b>548,038</b>	<b>580,306</b>

103. The DCA and ABDA Forecast error rates are cut from 1.1% and 0.6% to 0.3%. There is still a negative financial impact on depot ability to earn their Revenue Requirement (\$0.5 to \$0.6 million shortfall) with either forecasting methodology; however, increasing the number of months of Actuals from 4 to 9 results in a significant reduction of depot losses.

104. **In conclusion, the ABDA submits that:** The Revenue Requirement and HCs in the current HCR must be determined using the revised Volume Forecast as shown in column (d) of the following table and the associated changes to forecast methods shown in column (g)<sup>36</sup> – subject to updating with more Actuals, including Step 29 of the HCR process.

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<sup>36</sup> The ABDA estimates that this change would reduce the Target Year Volume Forecast by 7,693,269 containers.

Forecast Group	Container Stream	Target Year Volume - original	Target Year Volume - ABDA methodology	Change vs original forecast	Change %	Forecast Method
a	b	c	d	e	f	g
1	Aluminum 0 - 1 Litre	1,138,960,915	1,138,960,915			Returns from 2002
2	Bag in Box Over 1 Litre	931,677	938,909	7,232	0.8%	Returns from 2014
3	Bi-Metal 0 - 1 Litre	2,711,384	2,711,384			Returns from 2002
4	Bi-Metal Over 1 Litre	312,002	312,002			Returns from 2002
5	Drink Pouch 0 - 1 Litre	4,156,997	4,156,997			Returns as %
6	Gable Top 0 - 1 Litre	40,519,470	36,789,242	(3,730,228 )	-9.2%	Returns from 2014
7	Gable Top Over 1 Litre	24,837,102	24,208,927	(628,175 )	-2.5%	Returns from 2014
8	Glass 0 - 1 Litre	115,720,807	115,720,807			Returns from 2002
9	Glass Over 1 Litre	4,578,906	4,578,906			Returns from 2002
10	HDPE Plastics Natural Over 1 Litre	54,953,580	53,563,234	(1,390,346 )	-2.5%	Returns as %
11	Industry Standard Bottle	25,517,958	25,393,829	(124,129 )	-0.5%	Returns from 2014
12	Liquor and Wine Ceramics	532	932	400	75.2%	Returns from 2014
13	Molson Coors MGD Refillable 355ml	2,571,276	2,571,276	0		
14	Moosehead	402,215	402,215	0		
15	Other Plastics 0 - 1 Litre	99,007,257	101,535,153	2,527,896	2.6%	Returns from 2014
16	Other Plastics Over 1 Litre	11,250,637	10,187,116	(1,063,521 )	-9.5%	Returns from 2014
17	PET 0 - 1 Litre	538,832,407	538,832,407	0		Returns from 2002
18	PET Over 1 Litre	53,949,511	53,949,511	0		Returns from 2002
19	Plastic One-Way Keg Over 1 Litre	1,110	1,110	0		Returns as %
20	Sleemans Refillable	516,792	516,792	0		
21	Sleeve-in-a-Box 0 - 1 Litre	-	-	0		
22	Specialty Containers	-	-	0		
23	Steam Whistle Refillable	51,103	51,103	0		
24	Tetra Brik 0 - 1 Litre	99,748,347	96,545,988	(3,202,359 )	-3.2%	Returns from 2002
25	Tetra Brik Over 1 Litre	616,862	526,823	(90,039 )	-14.6%	Returns from 2014
	<b>Total</b>	<b>2,220,148,847</b>	<b>2,212,455,578</b>	<b>(7,693,269 )</b>	<b>-0.3%</b>	

105. Notably, BCMB policy dictates that the DCA must prepare Annual Update Reports (AURs) using the same methods and procedures, without variation, as were applied in the most recent HCR, unless otherwise directed by the BCMB. This means that the forecast method used in the current HCR sets the standard for subsequent AURs.

106. However, the Step 29 process for updating the Volume Forecast with more Actuals is not currently being applied for the AURs. AURs are prepared by the DCA and issued each November with proposed HCs to come into effect the

following May – 6 months later. For AURs, the underlying Volume Forecast has been based on 4 months of actuals and 8 months of predicted volumes.

107. With this in mind, the ABDA draws attention to the need for the AUR methods to adhere to the policy requirement of mirroring the HCR methods. In this regard, (a) it is essential that the AUR processes incorporate at least 9 months of Actuals when applying a Volume Forecast for the final determination of HCs, and (b) the ABDA submits that its revised forecast methodology must be carried forwards as the basis for preparing volume forecasts for future AURs.

## PART 6 RETURN MARGIN

### 6.1 A Higher Return Margin is Appropriate

108. Regarding the matter of Return Margin (RM), the ABDA submits that a pre-tax RM of 7.55% should be applied.
109. The ABDA's position relies on the evidence of Mr. Dylan D'Ascendis and Mr. Ryan Kucan, both with ScottMadden, in their report titled *Responses to Concentric Energy Advisors' June 2, 2025 Report on The Appropriate Return Margin for the Bottle Depots* (the "**ScottMadden Evidence**").<sup>37</sup>
110. Mr. D'Ascendis and Mr. Kucan (together, "**ScottMadden**") have reviewed the report of the DCA's RM Expert, Concentric Energy Advisors (Concentric)<sup>38</sup> and other relevant material in the HCR Record.
111. In the ScottMadden Evidence, ScottMadden explains that ScottMadden has three major concerns regarding Concentric's return margin analysis which combine to significantly understate the recommended return margin for depots. After making important adjustments to Concentric's calculations, ScottMadden concludes that a fair range for RM is 7.21 – 7.55% instead of the 5.93% proposed by Concentric.

### 6.2 Additional Consideration – Inadequate Realized Return

112. In the context of the ABDA recommending an increase to the RM, it is noteworthy that the Alberta depot system has consistently realized a return

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<sup>37</sup> Appendix 7.3.

<sup>38</sup> 2025.06.02.Return.Margin.Expert.Final.Report.Concentric (Doc 14).

margin that is well below its authorized return. This is confirmed by Concentric's response to ABDA-DCA-4 (Doc 61, page 36):

In 2024, the Alberta depot system reported a total pre-tax earned return margin of 2.42%. From 2018 through 2024 inclusive, the average pre-tax earned revenue margin was 3.30%...

<b>Year</b>	<b>Pre-Tax Earned Return Margin</b>
2018	3.22%
2019	2.49%
2020	5.08%
2021	2.87%
2022	0.91%
2023	6.08%
2024	2.42%
<b>2018-2024 Average</b>	<b>3.30%</b>

113. The average pre-tax earned return margin of 3.30% over the past seven years is below the recommended authorized pre-tax return margin of 5.93% in Concentric's report.
114. The shortfall in return margin of 263 basis points ( $5.93\% - 3.30\% = 2.63\%$ ) has a huge impact on the viability of the depot system. For the current HCR2025 Revenue Requirement, such a shortfall would equate to unrealized earnings of \$10,484,413.
115. There are likely multiple factors presenting barriers to the depot system's inability to earn its authorized pre-tax return margin, including issues raised by ABDA in its Written Statement (i.e., unreasonably large cuts to Manager wages, inappropriate application of the Indices, inappropriate treatment of leasehold capital cost allowances). These issues raised by the ABDA account

for \$3,880,774.<sup>39</sup> The failure to account for these issues in the Revenue Requirement contribute directly to the establishment of handling commissions that are too low.

116. However, even if all of these issues raised by the ABDA are properly accounted for in the HCR 2025 Revenue Requirement, the depot system would still underearn the return margin proposed by Concentric by at least \$6,603,639.<sup>40</sup> This is equivalent to a RM shortfall of 164 basis points (1.64%).
117. Prior history demonstrates that the depot system will continue to experience earnings shortfalls. While further work should be undertaken by the BCMB to understand and address other factors influencing the inability of the depot system to earn its authorized return margin, the facts as presented by Concentric underscore the need for a significant increase in the authorized return margin as a key component to establishing higher overall HCs that better enable the depot system to achieve expected earnings.

### **6.3 Conclusion**

118. Based on ScottMadden's conclusions, ABDA recommends using an RM of 7.55%.
119. The base increase to the Phase I Report (Doc 58) Revenue Requirement in applying a RM of 7.55% is \$6,754,963.

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<sup>39</sup> \$2,384,250 (Labour) + \$346,791 (Building Costs) + \$1,149,733.00 (Indices) = \$3,880,774.

<sup>40</sup> \$10,484,413 - \$3,880,774 = \$6,603,639.

## PART 7 APPENDICES

### 7.1 Indices Formulas

120. This Appendix 7.1 provides additional context and clarification in respect of the indices issue raised in Part 4 of the ABDA's Written Statement. In particular, this Appendix explains the underlying mathematical formulas embedded in the Phase I Report's schedules, relating to indices.

#### ***7.1.1 Escalating Total System costs to the Target Year***

121. As noted in the ABDA's Written Statement at paragraph 69(d), Total System Costs are escalated to the Target Year by multiplying the Total System Costs by the change in CPI over the applicable period.<sup>41</sup> The intended result is to escalate the costs in accordance with the change to CPI.

122. The formulas for this escalation are embedded in Schedule 11c to the Phase I Report. The formulas are applied to all cost categories (Direct Labour, Contract Labour, Overhead Labour, etc.) and to all 20 depot clusters.

123. An example of the escalation formula is shown in the following excerpt from Schedule 11c. The excerpt displays the calculation of Target Year costs (cell KT7) for Direct Labour (as per the header in row 3) in volume cluster 1 (as per cell KP7):

---

<sup>41</sup> Note: This step is not performed on a total system basis. Rather, it is performed individually for each of the 20 depot clusters, as discussed further below.

		KN	KO	KP	KQ	KR	KS	KT
1								
2								
3								
4								
5								
6								
7								

		Direct Labour				
		Study System Volume Cluster	Depot Ratio	Volume Ratio	FY 2024 Index (2002 = 100.0)	Target Year
		No. (a)	(b)	(c)	(d)	(e)
1						1.75
2	1		0.94	1.02	1.70	\$ 424,986

124. Cell KT7 (Target Year costs) contains the formula =IP6 \* KT\$6 / KS7 \* KR7 where:

- (a) Cell **IP6** references Total System Costs (for Direct Labour for volume cluster 1) (approximately \$403,382)<sup>42</sup>
- (b) Cell **KT6** references the CPI rate for the quarter *to* which the DCA is escalating costs (the “**Ending CPI**”), being the quarter representing the Target Year (which in this case is the CPI for Q2 2026, with an approximate value of 1.75)
- (c) Cell **KS7** references the CPI rate for the quarter *from* which the DCA is escalating costs (the “**Starting CPI**”), being the final quarter of the fiscal year for this volume cluster 1 (which in this case is the CPI for Q4 2024, with an approximate value of 1.70)

125. The ratio of the Ending CPI to Starting CPI [KT6 / KS7 or 1.75 / 1.70], represents the change in CPI from the Starting CPI to the Ending CPI. This ratio is used to

<sup>42</sup> Note: Cell IP6 is not shown in the above excerpt. It is located in Schedule 10c.

escalate the Total System Costs from Q4 2024 to the Target Year of Q2 2026.<sup>43,44</sup>

126. The CPI values used to populate Schedule 11c are provided by the DCA's Indices Expert (CBOC) in Doc 30. The CPI values presented by CBOC for Q4 2023 to Q2 2026 are as follows:

Qtr	CPI	
2023.04	1.655	Actuals
2024.01	1.667	
2024.02	1.690	
2024.03	1.699	
2024.04	1.700	
2025.01	1.712	
2025.02	1.715	
2025.03	1.731	Forecast
2025.04	1.726	
2026.01	1.732	
2026.02	1.754	

**7.1.2 Selecting the Proper Starting CPI**

127. The Phase I Report at pages 65-66, proposes to use a Starting CPI based on the fiscal **year end** dates of depots for each volume cluster (referred to in the Phase I Report as the "**FY Quarter**"). The FY Quarter for each volume cluster is equivalent to the average fiscal year-end dates of all depots in the cluster. The FY Quarter for each volume cluster is presented in column (i) of Schedule 11a:

---

<sup>43</sup> The remaining variable in this formula, KR7 (1.02), is the Volume Ratio. The Volume Ratio is used to scale each Cluster by a ratio of changes in container volumes from the Total System to the Target Year. The Volume Ratio is not relevant to the indices issue raised by the ABDA in its Written Statement.

<sup>44</sup> The sum of  $\$403,382 * 1.754 / 1.700 * 1.02 = \$424,986$  (with rounding).

The fiscal year quarter (FY Quarter) is calculated as an average of the fiscal year end for each depot in a cluster. Schedule 11a shows the ratios and quarter for each volume cluster in the system.

Schedule 11a: Calculation of Target Year Ratios

No.	Volume Cluster (a)	Total System Depots (b)	Target Year Depots (c)	Total System Volume (d)	Target Year Volume (e)	Depot Ratio (f)	Volume Ratio (g)	Total System Ratio (h)	FY Quarter (i)
1	1	18	17	13,321,074	13,254,875	0.94	1.00	0.99	Q4
2	2	11	11	15,979,886	15,900,474	1.00	1.00	1.03	Q3
3	3	9	9	16,165,436	16,085,101	1.00	1.00	1.03	Q4
4	4	10	10	22,105,149	21,995,297	1.00	1.00	1.03	Q4
5	5	9	9	23,778,995	23,660,825	1.00	1.00	1.03	Q4
6	6	10	10	29,584,144	29,437,125	1.00	1.00	1.03	Q3
7	7	11	11	37,538,418	37,351,870	1.00	1.00	1.03	Q3
8	8	9	9	36,153,609	35,973,943	1.00	1.00	1.03	Q3
9	9	14	14	69,610,411	69,264,480	1.00	1.00	1.03	Q3
10	10	10	10	62,307,146	61,997,509	1.00	1.00	1.03	Q3
11	11	12	12	91,002,665	90,550,425	1.00	1.00	1.03	Q3
12	12	10	10	88,595,852	88,155,572	1.00	1.00	1.03	Q3
13	13	9	9	89,456,511	89,011,954	1.00	1.00	1.03	Q3
14	14	13	13	164,625,203	163,807,093	1.00	1.00	1.03	Q3
15	15	9	9	133,820,862	133,155,835	1.00	1.00	1.03	Q3
16	16	10	10	163,479,498	162,667,082	1.00	1.00	1.03	Q3
17	17	11	11	203,326,997	202,316,558	1.00	1.00	1.03	Q4
18	18	11	11	242,270,694	241,066,723	1.00	1.00	1.03	Q3
19	19	12	12	303,311,029	301,803,716	1.00	1.00	1.03	Q3
20	20	13	13	440,462,212	438,273,323	1.00	1.00	1.03	Q3
21	<b>Total</b>	<b>221</b>	<b>220</b>	<b>2,246,895,791</b>	<b>2,235,729,779</b>	<b>1.00</b>	<b>1.00</b>	<b>1.03</b>	<b>Q3</b>

128. As explained in the ABDA's Written Statement at Part 4, the use of the fiscal **year-end** for the Starting CPI is erroneous and underrepresents the costs incurred over the course of the whole fiscal year, resulting in a shortfall.
129. To resolve this shortfall, the ABDA's Written Statement recommends using the average index rate over the fiscal year (referred to as the **Average Rate**) as the **Starting CPI** (instead of using the fiscal year-end as the Starting CPI). The **Average Rate** values are as follows:

- (a) For volume clusters with an FY Quarter of Q4 (Clusters 1, 3-5 and 17), the Average Rate is approximately 1.69. In the ABDA's Written Statement, the ABDA explains that this Average Rate should replace the Q4 2024 CPI rate of approximately 1.70 when escalating costs.

Qtr	CPI
2024.01	1.67
2024.02	1.69
2024.03	1.70
2024.04	1.70
Avg. CPI:	1.69

- (b) For Volume Clusters with FY Quarter 3 (Clusters 2, 6-16 and 18-20), the Average Rate is approximately 1.68. In the ABDA's Written Statement, the ABDA's position supports using this Average Rate as a replacement for the Q3 2024 CPI rate of approximately 1.70 when escalating costs.

Qtr	CPI
2023.04	1.65
2024.01	1.67
2024.02	1.69
2024.03	1.70
Avg. CPI:	1.68

## **7.2 Evidence of ScottMadden**

Responses to  
Concentric Energy Advisors'  
June 2, 2025 Report  
on  
The Appropriate Return Margin for the Bottle Depots

ScottMadden, Inc.  
January 28, 2026



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## I. INTRODUCTION AND PURPOSE

ScottMadden, Inc. was retained by the Alberta Bottle Depot Association (“ABDA”), a “Designated Registered Participant” in this proceeding, to evaluate the pre-tax return margin proposed by Concentric Energy Advisors (“Concentric”) on behalf of the Data Collection Agent (“DCA”) to be applied to bottle depots’ (“Depot”) revenue.

The general return margin methodology has existed since 2006 and allows Depots an opportunity to earn a fair return to maintain a viable Depot network across the Province. Traditional rate base / rate of return regulation as applied to regulated utilities is not appropriate for the Depots, as depots are generally not capital intensive. While the Depots’ rates are not set on rate base / rate of return, the return margin set for the Depots follows the Fair Return Standards established by the *Northwestern* and *TransCanada* cases in Canada, and the *Hope* and *Bluefield* cases in the U.S.

Those standards have informed the rate of return decision making of regulatory commissions throughout Canada and the United States for nearly 100 years. In 1929, the Supreme Court of Canada reinforced the standards of fair rate of return that have been established by the *Northwestern* and *TransCanada* cases in Canada, and the *Hope* and *Bluefield* cases in the U.S. when it stated:

The duty of the Board was to fix fair and reasonable rates; rates which, under the circumstances, would be fair to the consumer on the one hand, and which, on the other hand, would secure to the company a fair return for the capital invested. By a fair return is meant that the company will be allowed as large a return on the capital invested in its enterprise (which will be net to the company) as it would receive if it were investing the same amount in other securities possessing an attractiveness, stability and certainty equal to that of the company’s enterprise. In fixing this net return the Board should take into consideration the rate of interest which the company is obliged to pay upon its bonds as a result of having to sell them at a time when the rate of interest payable thereon

exceeded that payable on bonds issued at the time of the hearing. To properly fix a fair return the Board must necessarily be informed of the rate of return which money would yield in other fields of investment.<sup>1</sup>

In 2004, the Federal Court of Appeal (Canada) in 2004 FCA 149 reaffirmed the fair rate of return standards when it stated:

[6] The cost of capital to a utility is equivalent to the aggregate return on investment investors require in order to keep their capital invested in the utility and to invest new capital in the utility. That return will be made in the form of interest on debt and dividends and capital appreciation on equity. Usually, that return is expressed as the rate of return investors require on their debt or equity investments.

[12] Even though cost of capital may be more difficult to estimate than some other costs, it is a real cost that the utility must be able to recover through its revenues. If the Board does not permit the utility to recover its cost of capital, the utility will be unable to raise new capital or engage in refinancing as it will be unable to offer investors the same rate of return as other investment of similar risk. As well, existing shareholders will insist that retained earnings not be reinvested in the utility.

[13] In the long run, unless a regulated enterprise is allowed to earn its cost of capital, both debt and equity, it will be unable to expand its operations or even maintain existing ones. Eventually, it will go out of business. This will harm not only its shareholders, but also the customers it will no longer be able to service. The impact on customers and ultimately consumers will be even more significant where there is insufficient competition in the market to provide adequate service.<sup>2</sup>

The fair return standard has been interpreted numerous times by both the Alberta Utilities Commission (“AUC”)<sup>3</sup> and by the National Energy Board (“NEB”).

The AUC specifically stated:

The requirements of comparable investments, financial integrity, and capital attraction remain fundamental to setting a fair return.

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<sup>1</sup> Northwestern (1929) S.C.R. 186, at 192-193.

<sup>2</sup> TransCanada, 2004 FCA 149 [6] [12] [13].

<sup>3</sup> See, for example, Alberta Utilities Commission, 2018 Generic Cost of Capital, Decision 22570-D01-2018, dated August 2, 2018, pp. 38 at 8.

The Commission and its predecessors have employed these principles in setting rates of return, and other regulators apply these principles. All three components must be satisfied to arrive at a fair return.<sup>4</sup>

The NEB specifically noted:

The Board is of the view that the fair return standard can be articulated by having reference to three particular requirements. Specifically, a fair or reasonable return on capital should:

- be comparable to the return available from the application of the invested capital to other enterprises of like risk (the comparable investment standard);
- enable the financial integrity of the regulated enterprise to be maintained (the financial integrity standard); and
- permit incremental capital to be attracted to the enterprise on reasonable terms and conditions (the capital attraction standard).

The findings of comparable investments, capital attraction, and financial integrity are consistent with long-standing precedent in the United States. As noted by the U.S. Supreme Court's decision in *Bluefield*:

A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises of speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too

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<sup>4</sup> Decision 27084-D02-2023, Determination of the Cost-of-Capital Parameters in 2024 and Beyond, at para. 21 (October 9, 2023)(footnotes omitted)

low by changes affecting opportunities for investment, the money market and business conditions generally.<sup>5</sup>

The U.S. Supreme Court affirmed the fair rate of return standards in *Hope*, when it stated:

The rate-making process under the Act, i.e., the fixing of ‘just and reasonable’ rates, involves a balancing of the investor and the consumer interests. Thus we stated in the *Natural Gas Pipeline Co.* case that ‘regulation does not insure that the business shall produce net revenues.’ 315 U.S. at page 590, 62 S.Ct. at page 745. But such considerations aside, the investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. Cf. *Chicago & Grand Trunk R. Co. v. Wellman*, 143 U.S. 339, 345, 346 12 S.Ct. 400,402. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.<sup>6</sup>

In summary, Canadian and U.S. courts have found a return that is adequate to attract capital at reasonable terms enables the regulated entity to provide service while maintaining its financial integrity. As discussed above, and in keeping with established regulatory standards, that return should be commensurate with the returns expected elsewhere for investments of commensurate risk. The decision regarding the Depots’ return margin in this proceeding, therefore, should provide the Depots with the opportunity to earn a return that is: (1) adequate to attract capital at reasonable cost and terms; (2) sufficient to ensure their financial integrity; and (3) commensurate with returns on investments in enterprises having corresponding risks.

The remainder of this Report will summarize and evaluate Concentric’s recommended return margin for the Depots in view of the Fair Return Standards above.

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<sup>5</sup> *Bluefield*, 262 U.S. 679 (1923), at 692-693.

<sup>6</sup> *Hope*, 320 U.S. 591 (1944), at 603.

## II. SUMMARY OF CONCENTRIC REPORT AND RECOMMENDATIONS

Concentric recommends a pre-tax return margin of 5.93%<sup>7</sup> by averaging earned return margins for the U.S. companies in industries deemed comparable to the Depots for the years 2022-2024, and earned pre-tax return margins for retail and wholesale industries in Canada in 2022 and 2023, as shown in Tables 1, 2, and 3, below.

**Table 1: Summary of Concentric Recommended Return Margin  
U.S. Industry Analysis<sup>8</sup>**

<b>U.S. Industry Return Margin Point Estimates</b>	<b>Average of Six Industries</b>	<b>Average of All 189 Companies Regardless of Industry</b>
Simple Average	7.97%	6.31%
Weighted Average (Assets)	6.16%	4.54%
U.S. Average	6.25%	

**Table 2: Summary of Concentric Return Margin  
Canadian Industry Analysis<sup>9</sup>**

<b>CA Industry Return Margin Point Estimates</b>	<b>2022</b>	<b>2023</b>
Retail Trade	6.42%	5.97%
Wholesale Trade	5.48%	4.62%
Canadian Average	5.62%	

**Table 3: Concentric Recommended Return Margin<sup>10</sup>**

	<b>U.S. Industry</b>	<b>CA Industry</b>	<b>Concentric Recommendation</b>
Pre-tax Return Margin Estimate	6.25%	5.62%	5.93%

<sup>7</sup> The Appropriate Return Margin for the Bottle Depots, June 2, 2025, Concentric Energy Advisors, at 8. (“Concentric Report”)

<sup>8</sup> ABDA-RM-4, Attachment 1 Corrected U.S. Return Margin Analysis. (“Concentric U.S. Workpapers”)

<sup>9</sup> Concentric Report, at 7.

<sup>10</sup> Concentric U.S. Workpapers

**A. U.S. Industry Analysis**

To select comparable U.S. industries to the Depots, Concentric started with all U.S. industries as covered by *Value Line Investment Survey* (“*Value Line*”) and then selected the 10 industries with the highest aggregate turnover ratio for 2024, defined as 2024 net operating revenues divided by 2024 total assets. From there, Concentric conducted a manual screening of the 10 industries to determine whether they were materially different than the Depot business model. Concentric’s manual screening resulted in the elimination of five additional industries. Finally, the restaurant industry was added, consistent with prior reports. The U.S. industries used by Concentric in its U.S. analysis are shown in Table 4, below.

**Table 4: U.S. Industries Considered by Concentric in their Return Margin Analysis<sup>11</sup>**

<i>Value Line</i> Industry	2024 Aggregate Industry Turnover Ratio	Number of Companies
Retail Store	2.84	29
Retail/Wholesale Food	2.22	24
Retail Building Supply	1.58	13
Retail Softlines	1.42	32
Retail Hardlines	1.15	42
Restaurants	0.69	49

Concentric notes that the 2017 turnover ratio of the Depots was 2.31 and that only one of *Value Line*’s 88 industry groups exceeded that value (Retail Store, as shown above).<sup>12</sup>

To calculate the indicated U.S. industry return margin, Concentric used publicly available operating data from Yahoo! Finance (“Yahoo”) and Standard & Poor’s Capital IQ (“S&P”). For each year, from 2022 to 2024, Concentric calculated each company’s pre-tax return margin by dividing the year’s pre-tax net income by the year’s sales. Concentric then made the following adjustments:

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<sup>11</sup> Concentric Report, at 4.

<sup>12</sup> Concentric Report, at 5.

- (1) Excluded any data using negative net income;
- (2) Excluded any company that had a turnover ratio less than 2.0 and more than 9.0;  
and
- (3) Included any market data for companies that had slightly lower than 2.0 turnover ratios in one year, but had higher turnover ratios in the other two years.<sup>13</sup>

Concentric then aggregated the data in the following manner:

- Calculated an average measure for each year and data source by (i) simple average and (ii) weighted average, weighted by assets;
- Calculated (i) the average of all six industry averages, consistent with prior reports, and (ii) the average of all 189 companies,<sup>14</sup> regardless of industry;
- Averaged the results from the three years, 2022 to 2024;
- Averaged the results from the two sources, Yahoo and S&P.<sup>15</sup>

Concentric U.S. industry analysis results in a return margin of 6.25%. It is important to note that Concentric’s averaging of “all 189 companies, regardless of industry,” was introduced for the first time in this report, and results in an average return margin of 6.31% that is significantly less than the 7.97% return margin resulting from the average of six industries.

## **B. Canadian Industry Analysis**

Concentric then calculated return margins for retail and wholesale trade industries in Canada using data from Statistics Canada (“STATCAN”). Concentric notes that STATCAN does not have data consistent with the data provided by Yahoo and S&P (net income needs to be approximated by subtracting revenues by the sum of cost of goods and operating expenses), nor

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<sup>13</sup> Concentric Report, at 5.

<sup>14</sup> ScottMadden notes that while Concentric explicitly states that the average of all 189 companies is considered, in actuality only the average of all companies that pass Concentric’s three adjustments, described above, are used. As discussed in detail below, the all-company average is taken of a group of 33, 37, and 33 companies for 2024, 2023, and 2022, respectively.

<sup>15</sup> Concentric Report, at 4-5.

does STATCAN have individual company data. Because STATCAN also does not provide data to calculate aggregate turnover ratios, Concentric does not have an initial screening criteria from which to eliminate non-comparable industries, nor does Concentric attempt a manual screening of the Canadian retail and wholesale industries to determine the comparability of those industries to the bottling Depot business model.

Concentric then uses the aggregate return margin for the retail and wholesale trade industries for 2022 and 2023 and averages them to arrive at an indicated return margin of 5.62%.

**C. Concentric Recommendation**

As discussed above, Concentric averages its indicated U.S. industry return margin of 6.25% with the Canadian return margin of 5.62% to arrive at their recommended return margin of 5.93% for the Depots. While Concentric does note that the Depots have higher risk than the U.S. industry groups due to their smaller size,<sup>16</sup> they do not adjust their recommended return margin due to that fact.<sup>17</sup>

**D. Concentric Testing of Assumptions**

In its report, Concentric stress-tested the outlier turnover ratios of 2.00 and 9.00 by researching bottling and recycling organizations in other jurisdictions, finding three examples which had turnover ratios from approximately 1.50 to approximately 3.75.<sup>18</sup> Given these comparable operations, Concentric put forth an alternative set of turnover ratio outlier thresholds from 1.50 to 4.00.<sup>19</sup> Using those hypothetical outlier thresholds, Concentric's indicated U.S. return margin would increase to 6.69% and ultimate recommendation would increase to 6.15%.<sup>20</sup> Concentric ultimately does not endorse its alternative outlier turnover ratio thresholds in the

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<sup>16</sup> Concentric Report, at 10.

<sup>17</sup> Concentric Report, at 14.

<sup>18</sup> Concentric Report, at 21-22.

<sup>19</sup> Concentric Report, at 22.

<sup>20</sup> Concentric Report, at 22.

absence of updated balance sheet data, but does suggest that the Beverage Container Management Board (“BCMB”) collect Depot balance sheets to determine where turnover ratios should be set in future proceedings.<sup>21</sup>

### **III. EVALUATION OF CONCENTRIC RETURN MARGIN ANALYSIS**

ScottMadden has three major concerns with Concentric’s return analysis, all of which serve to lower the indicated return margin for the Depots: (1) its use of the turnover ratio thresholds of 2.0 and 9.0 to exclude market data of comparable U.S. companies; (2) its use of generalized and unadjusted data from STATCAN to calculate an indicated return margin; and (3) its failure to reflect the Depots’ increased risk as compared to the U.S. and Canadian industry groups based on its smaller relative size.

#### **A. Concentric’s Use of Turnover Ratio Thresholds of 2.0 and 9.0**

In the compilation of return margins for the comparable U.S. industries, Concentric eliminates results for companies that have turnover ratios below 2.0 and over 9.0, which is consistent with past reports.<sup>22</sup> The effect of the turnover ratio exclusions are significant. As shown on Table 5, below, market data for over 80% of the 189 companies that were considered comparable risk to the Depots were not included in any part of Concentric’s analysis.

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<sup>21</sup> Concentric Report, at 23.

<sup>22</sup> Concentric Report, at 5

**Table 5: Percentage of Companies by Industry Eliminated by Turnover Ratio Thresholds<sup>23</sup>**

<i>Value Line</i> Industry	Total Companies	No. of Cos. Included in 2024 Analysis	% Excluded in 2024	No. of Cos. Included in 2023 Analysis	% Excluded in 2023	No. of Cos. Included in 2022 Analysis	% Excluded in 2022
Retail Store	29	5	82.76%	6	79.31%	7	75.86%
Retail/Wholesale Food	24	17	29.17%	16	33.33%	15	37.50%
Retail Building Supply	13	1	92.31%	2	84.62%	3	76.92%
Retail Softlines	32	2	93.75%	3	90.63%	2	93.75%
Retail Hardlines	42	5	88.10%	7	83.33%	8	80.95%
Restaurants	49	3	93.88%	3	93.88%	2	95.92%
Total	189	33	82.54%	37	80.42%	37	80.42%

As shown above, the companies considered by Concentric in its U.S. return margin analysis is a small fraction of the total population considered to be comparable to the Depot industry and is dominated by the Retail/Wholesale Food industry and similar companies from the Retail Stores industry such as Walmart, Inc. (“Walmart”) and Costco Wholesale Corporation (“Costco”). Weighted by assets, the sum of the Retail/Wholesale Food industry, Walmart, and Costco represents 85.36%, 69.53%, and 63.73% of the weighted average return margin for the years 2024, 2023, and 2022, respectively. Given that the Retail/Wholesale Food industry, Walmart, and Costco are traditionally low return margin companies, as shown on Table 6, below, Concentric’s return margin calculation for U.S. industries comparable with the Depots are severely understated.

<sup>23</sup> Concentric U.S. Workpapers

**Table 6: Simple and Weighted Average Return Margins of U.S. Industries Comparable with the Depots, Walmart, and Costco for the years 2022-2024 (no Exclusions)<sup>24</sup>**

<i>Value Line Industry</i>	2024		2023		2022	
	Simple Avg	Weighted Avg.	Simple Avg	Weighted Avg.	Simple Avg	Weighted Avg.
Retail Store	7.73%	5.49%	8.58%	5.13%	8.20%	5.23%
Retail/Wholesale Food	<b>2.75%</b>	<b>3.36%</b>	<b>2.77%</b>	<b>3.45%</b>	<b>2.69%</b>	<b>3.49%</b>
Retail Building Supply	10.48%	11.96%	10.89%	12.12%	11.39%	12.35%
Retail Softlines	8.40%	9.14%	8.44%	8.18%	8.89%	8.78%
Retail Hardlines	9.87%	7.70%	10.12%	8.30%	11.70%	14.29%
Restaurants	9.46%	21.42%	9.83%	21.49%	11.25%	18.91%
Total	8.16%	8.40%	8.56%	8.35%	9.18%	8.72%
Walmart, Inc.	<b>3.62%</b>		<b>3.08%</b>		<b>3.02%</b>	
Costco Wholesale Corp	<b>3.83%</b>		<b>3.50%</b>		<b>3.45%</b>	

The justification for Concentric’s elimination of the vast majority of comparable company data is the assumption that the 2.0 and 9.0 turnover ratio outlier threshold values are acceptable by default.<sup>25</sup> They do not recommend changing those assumed thresholds absent updated data.<sup>26</sup> Despite their recommendation, Concentric does conduct a stress test of the 2.0 and 9.0 turnover ratio thresholds by conducting research on other bottling and recycling organizations in other jurisdictions. That test indicated an alternative turnover ratio threshold of 1.5 and 4.0.<sup>27</sup>

In ScottMadden’s review of the April 26, 2023 Return Margin Methodology Policy published by the BCMB, there was no specific mention of a requirement to use turnover ratio outlier thresholds of 2.0 and 9.0 by default or at all. In fact, the Return Margin Methodology Policy explicitly states in Section 4.2 that the calculation of the pre-tax return margin is at the sole discretion of the expert based on their expertise.<sup>28</sup> Based on current data, including the average turnover ratios of the comparable U.S. industries, the individual values and distribution of turnover

<sup>24</sup> Concentric U.S. Workpapers.

<sup>25</sup> Concentric Report, at 21.

<sup>26</sup> Concentric Report, at 23.

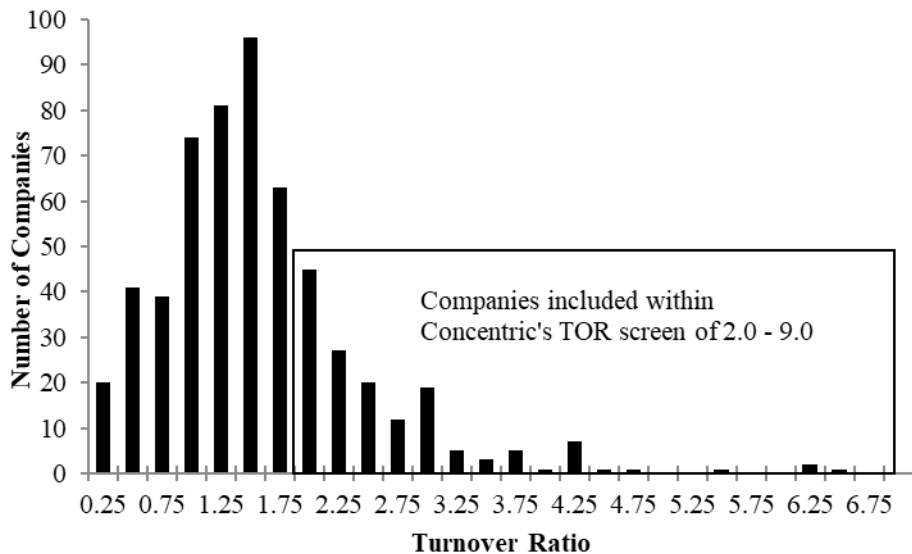
<sup>27</sup> Concentric Report, at 21-22.

<sup>28</sup> Beverage Container Management Board, Return Margin Methodology Policy, April 26, 2023.

ratios of companies within those industries, and Concentric’s own stress test, Concentric should have established new turnover ratio outlier thresholds for their calculation of the appropriate return margin for the Depots.

As shown on Table 4, above, the average turnover ratios of the U.S. industries deemed comparable to the Depots range from 0.69 to 2.84, averaging 1.65. This range and average are consistent with the Depots’ 2017 turnover ratio of 2.31 and partial 2024 turnover ratio of 1.53.<sup>29</sup> In addition to industry average data, a histogram of individual companies’ turnover ratios from 2022 to 2024 shows a range of turnover ratios from 0.00 to 6.49 with 95% of turnover ratios between 0.50 and 3.50.

**Chart 1: Histogram of Turnover Ratios of Comparable U.S. Companies, 2022-2024<sup>30</sup>**



Given the distribution of the turnover ratios for companies selected by Concentric, the 2017 and 2024 turnover ratios of the Depots, and Concentric’s own stress test, a reasonable turnover

<sup>29</sup> ScottMadden was provided aggregate 2024 total assets (\$222,910,621) and revenues (\$340,740,029) from 186 of the total system’s 221 depots (84% of total depots which account for 92% of the system’s total FY 2024 volume) in DCA Revised Responses to IR ABDA-DCA-1 and ABDA-DCA-3. TOR = Revenues / Total Assets, thus  $\$340,740,029 / \$222,910,621 = 1.53$ .

<sup>30</sup> Concentric U.S. Workpapers.

ratio outlier threshold is from 0.50 to 3.50. The effect of changing the screening criterion in Concentric’s U.S. workpapers is shown in Table 7, below.

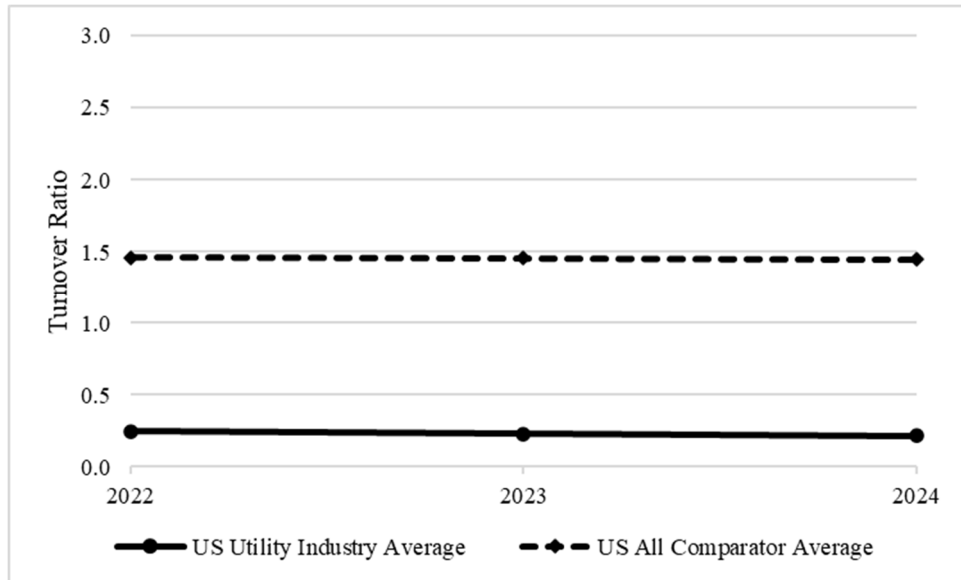
**Table 7: Modifications to U.S. Turnover Ratio Thresholds**

U.S. Industry Return Margin Point Estimates	Concentric: 2.0 – 9.0		Updated: 0.50 – 3.50		Change <sup>31</sup>	
	Average of Six Industries	Average of All 189 Companies Regardless of Industry	Average of Six Industries	Average of All 189 Companies Regardless of Industry	Average of Six Industries	Average of All 189 Companies Regardless of Industry
Simple Average	7.97%	6.31%	8.00%	7.98%	0.03%	1.67%
Weighted Average (Assets)	6.16%	4.54%	8.06%	6.86%	1.90%	2.32%
U.S. Average	6.25%		7.73%		1.48%	

While the proposed decline in the reasonable turnover ratio outlier threshold is significant, it reflects the range of TORs for companies in those industries comparable to Depots and is still above the turnover ratios of other regulated industries (e.g., public utilities), which, as noted by Concentric generally ranges between 0.15 and 0.25.<sup>32</sup> The relative positions of the average turnover ratios of U.S. utilities and the U.S. comparable companies to Depots still support the BCMB’s determination that traditional rate of return regulation is not the best method to establish an appropriate return for the Depots as shown on Chart 2, below:

<sup>31</sup> Updated values less Concentric as-filed values  
<sup>32</sup> Concentric Report, at 9.

**Chart 2: Average Turnover Ratios for U.S. Utility Companies and all U.S. Comparable Companies, 2022-2024<sup>33</sup>**



**B. Inadequacy of Canadian Data**

As discussed previously, Concentric used aggregate industry data provided by STATCAN to estimate the Canadian return margin.<sup>34</sup> As shown in their Figure 4, Concentric averages 2022 and 2023 return margin data from the Retail Trade and Wholesale Trade industries. Unlike the U.S. return margin estimate, 2024 data was unavailable from STATCAN.

Another inconsistency stemming from the use of aggregate Canadian industry data pertains to the inability to filter out negative pre-tax income values. As noted by Concentric, “Investors do not expect negative income to continue in perpetuity.”<sup>35</sup> As the aggregated STATCAN data includes both positive and negative income, and cannot be further filtered, the end result is a Canadian return margin estimate that is not fully comparable to the U.S. return margin estimate. One step to improve comparability between the U.S. return margin estimate and Canadian return

<sup>33</sup> Concentric U.S. Workpapers, S&P Capital IQ.  
<sup>34</sup> Concentric Report, at 6.  
<sup>35</sup> Concentric Report, at 5.

margin estimate would be to consider the use of STATCAN paid data with unprofitable companies removed, as discussed in IR ABDA-DCA-2 and provided as Appendices A and B to that IR.

Additionally, Concentric does not attempt to manually screen the broad Retail Trade and Wholesale Trade datasets from STATCAN by industry, resulting in the inclusion of several non-comparable industries. For example, while Concentric excludes Retail Automotive from their U.S. return margin estimate due to lack of comparability, no such adjustment is made for the STATCAN Retail Trade data. In fact, the entire Motor Vehicle and Parts Dealer industry comprises 27.24% of the total 2023 Retail Trade Industry Operating Revenues, making it the largest single sub-industry.<sup>36</sup> It is unclear why Concentric deems this industry incomparable to the Depots when estimating their U.S. return margin, but includes the Canadian industry data as a valid comparator.

Similarly, when looking to the Wholesale Trade aggregate dataset, the single largest industry is Petroleum, Petroleum Products, and other Hydrocarbons Merchant Wholesalers (“Petroleum Industry”) comprising 26.42% and 31.13%, respectively, of 2023 and 2022 total Operating Revenues for the Wholesale Trade dataset. This industry is “primarily engaged in wholesaling crude oil, liquefied petroleum gases, heating oil and other refined petroleum products and hydrocarbons”.<sup>37</sup> It is unclear why Concentric considers this industry as similar to the Depots, when unlike most other Wholesale Trade industries, this industry is engaged in selling a global commodity, exposing the industry to fluctuating input prices that can have substantial impacts on their revenues and margins. It is also worth noting that in addition to being the largest industry within the Wholesale Trade group, they also have the smallest return margin of 0.13% in 2023.

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<sup>36</sup> After removing Motor Vehicle and Parts Dealers from the analysis, the single-largest Retail industry becomes Food and beverage retailers.

<sup>37</sup> Statistics Canada. *NAICS 2022 Version 1.0 – 412110: Petroleum, petroleum products, and other hydrocarbons merchant wholesalers*.  
<https://www23.statcan.gc.ca/imdb/p3VD.pl?Function=getVD&TVD=1369825&CVD=1370970&CPV=412110&CST=27012022&CLV=5&MLV=5>

Their large weighting within the Wholesale Trade industry causes the low return margin to have an outsized effect. The impact of removing the Motor Vehicle and Parts Dealers industry and Petroleum industry from Concentric’s Canadian return margin analysis is shown in Table 8, below.

**Table 8: Modifications to Canadian return margin analysis**

CA Industry Return Margin Point Estimates	Concentric as-filed		Motor Vehicle and Parts Dealers and Petroleum Industry removed		Change <sup>38</sup>	
	2022	2023	2022	2023	2022	2023
Retail Trade	6.42%	5.97%	7.03%	6.69%	0.61%	0.72%
Wholesale Trade	5.48%	4.60%	6.84%	6.21%	1.36%	1.61%
Canadian Average	5.62%		6.69%		1.07%	

**C. Failure to Reflect the Depots’ Higher Relative Risk due to their Smaller Size**

After determining its indicated return margin for the Depots, Concentric states that the Depots have higher risk than many firms in the U.S. industry groups due to the smaller relative size of the Depots.<sup>39</sup> In their discussion, they cite Kroll’s (formerly Duff & Phelps) size study which quantifies risk premiums given relative differences in size. Ultimately, Concentric did not attempt to quantify the increased risk of the Depots relative to the comparable industries and stated that it was appropriate to develop a range of results and then select a reasonable return based on an assessment of relative risk.<sup>40</sup> Despite Concentric explicitly stating that the Depots’ smaller size caused it to be riskier than the companies they used to develop their indicated return margin, they

<sup>38</sup> Updated values less Concentric as-filed values

<sup>39</sup> Concentric Report, at 10.

<sup>40</sup> Concentric Report, at 14.

used the simple average of their indicated return margins from U.S. and Canadian market data, essentially giving no premium for the Depots' higher risk.

To reflect the Depots' increased risk as compared to the companies and industries used to derive the indicated return margin, Concentric could have (1) moved to the top of the range of return margins produced by their analyses (i.e., 7.97% for U.S. industries and 6.42% for Canadian industries); or (2) quantified and applied a size adjustment using the Kroll Size Study.

In Appendix A, ScottMadden compared measures of relative size between the Depots and the six comparable U.S. industries and the Canadian retail and wholesale industries and derived indicated size premiums from those measures based on Kroll's Cost of Capital Navigator: U.S. Cost of Capital Module. Regarding relative size, Kroll states:

**The “size” of a company is one of the most important risk elements to consider when developing cost of equity estimates for use in valuing a business** simply because size has been shown to be a *predictor* of equity returns...

Traditionally, researchers have used market value of equity (market capitalization, or simply “market cap”) as a measure of size in conducting historical rate of return studies. However, as we discuss later in this chapter, market cap is not the only measure of size that can be used to predict return, nor is it necessarily the best measure of size to use.<sup>41</sup>

The 2024 size data available for the Depots and the U.S. comparable industries are as follows: (1) market value of equity; (2) book value of equity; (3) market value of invested capital; (4) total assets; and (5) total sales. Due to limits in STATCAN data, the only size measure available to compare the Depots and Canadian retail and wholesale industries is 2023 total sales. As shown on Appendix A, for almost all measures, the Depots are smaller than the U.S. and Canadian industry comparators with an average indicated risk premiums for each industry ranging from 1.18% to 3.60%. These risk premiums would be added on top of the average return values.

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<sup>41</sup> Kroll, Cost of Capital Navigator: U.S. Cost of Capital Module, Size as a Predictor of Returns, at 1.

In view of these indicated size premiums, movement to the top of the reasonable range of indicated return margins is reasonable and conservative.

**IV. RECOMMENDATIONS**

To correct for the three primary issues in Concentric’s return margin analysis that serve to understate the fair pre-tax return margin for the Depots, ScottMadden adjusted Concentric’s return margin analysis as follows: (1) setting a turnover ratio threshold of 0.50 to 3.50 to capture a greater number of U.S. companies that are more comparable to the partial 2024 Depot turnover ratio of 1.53; (2) removing industries from the STATCAN data set that are non-comparable to the Depots and have outsized weight in the analysis (specifically, the Motor vehicle and parts dealers and Petroleum industries); and (3) reflecting the Depot’s increased risk due to its smaller relative size by recommending a return margin towards the top end of the range of return margins produced from this analysis. These adjustments result in the return margin results presented in tables 9 through 11, below.

**Table 9: Summary of ScottMadden Recommended Return Margin U.S. Industry Analysis**

<b>U.S. Industry Return Margin Point Estimates</b>	<b>Average of Six Industries</b>	<b>Average of All 189 Companies Regardless of Industry</b>
Simple Average	8.00%	7.98%
Weighted Average (Assets)	8.06%	6.86%
U.S. Average	7.73%	

**Table 10: Summary of ScottMadden Recommended Return Margin Canadian Industry Analysis**

<b>CA Industry Return Margin Point Estimates</b>	<b>2022</b>	<b>2023</b>
Retail Trade	7.03%	6.69%
Wholesale Trade	6.84%	6.21%
Canadian Average	6.69%	

**Table 11: ScottMadden Recommended Return Margin**

	<b>Midpoint</b>	<b>Top of Range</b>	<b>ScottMadden Recommendation</b>
Pre-tax Return Margin Estimate	7.21% <sup>42</sup>	7.55% <sup>43</sup>	7.21% - 7.55%

Given the supported and reasonable adjustments to Concentric’s analysis, ScottMadden believes a fair range of pre-tax return margins applicable to the Depots to be from 7.21% to 7.55%. This range of return margins includes the vast majority of companies deemed to be comparable to the Depots and reflects their increased risks due to their small relative size.

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<sup>42</sup> The average of the U.S. average and the Canadian average, or  $(7.73\% + 6.69\%) / 2$

<sup>43</sup> The average of the highest U.S. estimate and the highest Canadian estimate, or  $(8.06\% + 7.03\%) / 2$

Alberta Bottle Depot Association  
Portfolio Ranks by Size and Risk Premiums over CAPM Results  
as Compiled by Kroll 2024 Valuation Handbook Guide to Cost of Capital

Portfolio Rank by Size	<b>B-1</b>			<b>B-4</b>			<b>B-5</b>			<b>B-7</b>		
	Market Val. of Equity (in \$Millions) (1)			Market Value of Invested Capital (in \$Millions)			Total Assets (in \$Millions)			Sales (in \$Millions)		
	Low End Breakpoint (\$M)	High End Breakpoint (\$M)	RP	Low End Breakpoint (\$M)	High End Breakpoint (\$M)	RP	Low End Breakpoint (\$M)	High End Breakpoint (\$M)	RP	Low End Breakpoint (\$M)	High End Breakpoint (\$M)	RP
1	310,447.83		-0.94%	363,317.25		-0.55%	149,361.59		0.34%	116,597.34		0.89%
2	79,906.65	310,447.83	0.33%	104,949.38	363,317.25	0.50%	61,553.58	149,361.59	1.00%	41,135.86	116,597.34	1.55%
3	52,367.20	79,906.65	0.69%	66,829.10	104,949.38	0.88%	40,008.69	61,553.58	1.30%	25,898.27	41,135.86	1.83%
4	38,396.77	52,367.20	0.95%	48,970.22	66,829.10	1.10%	29,346.82	40,008.69	1.51%	19,380.34	25,898.27	2.02%
5	28,555.83	38,396.77	1.15%	36,986.08	48,970.22	1.32%	22,220.41	29,346.82	1.68%	15,995.98	19,380.34	2.12%
6	21,526.12	28,555.83	1.40%	28,741.32	36,986.08	1.49%	17,157.76	22,220.41	1.86%	13,314.48	15,995.98	2.22%
7	17,648.69	21,526.12	1.57%	22,849.41	28,741.32	1.67%	14,364.66	17,157.76	2.00%	11,029.63	13,314.48	2.32%
8	14,531.52	17,648.69	1.70%	19,036.68	22,849.41	1.81%	12,596.02	14,364.66	2.07%	9,288.93	11,029.63	2.41%
9	11,663.37	14,531.52	1.87%	16,174.48	19,036.68	1.92%	10,814.78	12,596.02	2.16%	7,957.04	9,288.93	2.49%
10	9,693.02	11,663.37	2.03%	13,653.53	16,174.48	2.04%	9,068.66	10,814.78	2.26%	6,827.91	7,957.04	2.58%
11	8,297.04	9,693.02	2.15%	11,537.17	13,653.53	2.16%	7,705.51	9,068.66	2.38%	5,857.16	6,827.91	2.65%
12	7,244.28	8,297.04	2.26%	9,893.06	11,537.17	2.27%	6,785.40	7,705.51	2.46%	5,053.58	5,857.16	2.74%
13	6,312.71	7,244.28	2.36%	8,578.20	9,893.06	2.38%	5,912.23	6,785.40	2.54%	4,424.25	5,053.58	2.81%
14	5,341.02	6,312.71	2.47%	7,703.06	8,578.20	2.47%	4,999.16	5,912.23	2.63%	3,912.20	4,424.25	2.88%
15	4,611.37	5,341.02	2.61%	6,900.74	7,703.06	2.53%	4,151.74	4,999.16	2.75%	3,425.29	3,912.20	2.94%
16	4,059.75	4,611.37	2.69%	5,927.59	6,900.74	2.62%	3,554.61	4,151.74	2.86%	2,893.08	3,425.29	3.02%
17	3,482.53	4,059.75	2.81%	5,032.45	5,927.59	2.74%	3,095.26	3,554.61	2.94%	2,446.66	2,893.08	3.12%
18	3,044.66	3,482.53	2.92%	4,280.94	5,032.45	2.85%	2,688.35	3,095.26	3.03%	2,146.85	2,446.66	3.19%
19	2,623.27	3,044.66	3.01%	3,591.81	4,280.94	2.97%	2,328.26	2,688.35	3.12%	1,855.10	2,146.85	3.25%
20	2,069.70	2,623.27	3.16%	2,946.78	3,591.81	3.10%	1,924.48	2,328.26	3.21%	1,528.45	1,855.10	3.35%
21	1,527.26	2,069.70	3.37%	2,286.10	2,946.78	3.25%	1,506.03	1,924.48	3.36%	1,234.86	1,528.45	3.46%
22	1,092.67	1,527.26	3.62%	1,623.13	2,286.10	3.47%	1,126.63	1,506.03	3.52%	974.05	1,234.86	3.57%
23	757.39	1,092.67	3.89%	1,054.57	1,623.13	3.74%	779.84	1,126.63	3.72%	720.84	974.05	3.71%
24	407.87	757.39	4.18%	537.68	1,054.57	4.09%	421.46	779.84	3.99%	391.64	720.84	3.90%
25	-	407.87	5.01%	-	537.68	4.83%	-	421.46	4.61%	-	391.64	4.49%

	Market Value of Equity (in \$Millions)		Market Value of Invested Capital (in \$Millions)		Total Assets (in \$Millions)		Sales (in \$Millions)	
	B-1 Value	Portfolio Ranking	B-4 Value	Portfolio Ranking	B-5 Value	Portfolio Ranking	B-7 Value	Portfolio Ranking
	\$		\$		\$		\$	
Retail Hardlines	5,340	15	7,310	15	5,158	14	6,816	11
Retail Softlines	2,899	19	3,435	20	1,764	21	2,383	18
Retail Store	52,617	3	59,745	4	20,026	6	44,411	2
Retail Building Supply	58,882	3	67,457	3	14,772	7	25,985	3
Retail Wholesale Food	9,590	11	14,586	10	10,261	10	25,597	4
Restaurants	11,905	9	30,531	6	4,177	15	3,426	15
Canadian Retail Ind. Avg.	NA		NA		NA		622,326	1 (5)
Canadian Wholesale Ind. Avg.	NA		NA		NA		1,125,726	1 (5)
Bottle Depots (2)	482	24 (3)	568	24 (4)	163	25	249	25

	<b>Indicated Risk Premium</b>				<b>Average</b>	
Retail Hardlines	1.57%		1.56%	1.98%	1.83%	1.74%
Retail Softlines	1.17%		0.99%	1.25%	1.30%	1.18%
Retail Store	3.49%		2.98%	2.75%	2.94%	3.04%
Retail Building Supply	3.49%		3.21%	2.61%	1.83%	3.10%
Retail Wholesale Food	2.03%		2.05%	2.35%	2.47%	2.23%
Restaurants	2.31%		2.60%	1.86%	1.55%	2.08%
Canadian Retail Ind. Avg.					3.60%	3.60%
Canadian Wholesale Ind. Avg.					3.60%	3.60%

Notes:

- (1) Market Value of Invested Capital (MVIC) equals Market Value of Equity + Market Value of Debt. MVIC was calculated by adding the market value of total equity and fair value of debt for each Industry Group company. If fair value estimate is unavailable, book-value of debt and equity was substituted.
- (2) Data associated with Alberta Bottle Depot Association sourced from DCA Revisited Responses to IR ABDA-DCA-1 and ABDA-DCA-3, multiplied by the average USD/CAD Exchange rate.
- (3) Market value of common equity was calculated by multiplying the Depots' book value common equity by the U.S. Industry Group's average Price-to-book ratio.
- (4) MVIC incorporates the Depot's total liabilities amount as long-term debt was unavailable.
- (5) 2023 average operating revenues for the various industries multiplied by the average USD/CAD Exchange rate.

Sources of Information:

Kroll Risk Premium Report Size Study Size Premia as of December 31, 2024.  
SEC Form 10-K  
Company financial statements  
S&P Capital IQ

### **Summary**

Dylan is an experienced consultant and a Certified Rate of Return Analyst (CRRA) and Certified Valuation Analyst (CVA). Dylan joined ScottMadden in 2016 and is a leading expert witness with respect to cost of capital, capital structure, and valuation. He has served as a consultant for investor-owned and municipal utilities and authorities for 17 years. Dylan has testified as an expert witness on over 200 occasions regarding rate of return, cost of service, rate design, and valuation before more than 40 regulatory jurisdictions in the United States and Canada, an American Arbitration Association panel, and the Superior Court of Rhode Island. He also maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured. Dylan holds a B.A. in economic history from the University of Pennsylvania and an M.B.A. with concentrations in finance and international business from Rutgers University.

### **Areas of Specialization**

- Expert Witness Testimony
- Rates and Regulation
- Return on Equity
- Valuation
- Utility Regulations
- Rate Case Planning, Management, and Support
- Utility Benchmarking

### **Recent Articles and Speeches**

- "Decoupling, Risk Impacts, and the Cost of Capital." Co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. The Electricity Journal. March 2020
- "Decoupling Impact and Public Utility Conservation Investment." Co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. Energy Policy Journal. 130 (2019), 311-319
- "Establishing Alternative Proxy Groups." Presentation before the Society of Utility and Regulatory Financial Analysts: 51st Financial Forum. April 4, 2019. New Orleans, LA
- "Past Is Prologue: Future Test Year." Presentation before the National Association of Water Companies 2017 Southeast Water Infrastructure Summit. May 2, 2017. Savannah, GA
- "Comparative Evaluation of the Predictive Risk Premium Model™, the Discounted Cash Flow Model and the Capital Asset Pricing Model." Co-authored with Richard A. Michelfelder, Ph.D., Rutgers University, Pauline M. Ahern, and Frank J. Hanley. The Electricity Journal. May 2013
- "Decoupling: Impact on the Risk and Cost of Common Equity of Public Utility Stocks." Presentation before the Society of Utility and Regulatory Financial Analysts: 45th Financial Forum. April 17-18, 2013. Indianapolis, IN

### **Recent Assignments**

- Provided expert testimony on the cost of capital for ratemaking purposes before numerous state utility regulatory agencies
- Maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured
- Sponsored valuation testimony for a large municipal water company in front of an American Arbitration Association Board to justify the reasonability of their lease payments to the city
- Co-authored a valuation report on behalf of a large investor-owned utility in response to a new state regulation which allowed the appraised value of acquired assets into rate base

Sponsor	Date	Case/Applicant	Docket No.	Subject
<b>Regulatory Commission of Alaska</b>				
Goat Lake Hydro, Inc.	12/24	Goat Lake Hydro, Inc.	Docket No. TA7-521	Rate of Return
Alaska Power Company	08/23	Alaska Power Company	Docket No. TA 909-2 / U-23-054	Capital Structure
ENSTAR Natural Gas Company	08/22	ENSTAR Natural Gas Company	Docket No. TA334-4	Rate of Return
Cook Inlet Natural Gas Storage Alaska, LLC	07/21	Cook Inlet Natural Gas Storage Alaska, LLC	Docket No. TA45-733	Capital Structure
Alaska Power Company	09/20	Alaska Power Company; Goat Lake Hydro, Inc.; BBL Hydro, Inc.	Tariff Nos. TA886-2; TA6-521; TA4-573	Capital Structure
Alaska Power Company	07/16	Alaska Power Company	Docket No. TA857-2	Rate of Return
<b>Alberta Utilities Commission</b>				
AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	02/23	AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	Proceeding ID. 27084	Determination of Cost-of-Capital Parameters
AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	01/20	AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	2021 Generic Cost of Capital, Proceeding ID. 24110	Rate of Return
<b>Arizona Corporation Commission</b>				
EPCOR Water Arizona, Inc.	09/25	EPCOR Water Arizona, Inc.	Docket No. WS-01303A-24-0130	Annual Formula Rate Adjustment Mechanism
EPCOR Water Arizona, Inc.	06/24	EPCOR Water Arizona, Inc.	Docket No. WS-01303A-24-0130	Rate of Return
Arizona Water Company	05/24	Arizona Water Company – Northern Group	Docket No. W-01445A-24-0117	Rate of Return
Foothills Water & Sewer, LLC	10/23	Foothills Water & Sewer, LLC	Docket No. WS-21182A-23-0292	Rate of Return and Fair Value Rate Base
Arizona Water Company	12/22	Arizona Water Company – Eastern Group	Docket No. W-01445A-22-0286	Rate of Return
EPCOR Water Arizona, Inc.	08/22	EPCOR Water Arizona, Inc.	Docket No. WS-01303A-22-0236	Rate of Return
EPCOR Water Arizona, Inc.	06/20	EPCOR Water Arizona, Inc.	Docket No. WS-01303A-20-0177	Rate of Return
Arizona Water Company	12/19	Arizona Water Company – Western Group	Docket No. W-01445A-19-0278	Rate of Return
Arizona Water Company	08/18	Arizona Water Company – Northern Group	Docket No. W-01445A-18-0164	Rate of Return
<b>Arkansas Public Service Commission</b>				
Summit Utilities Arkansas, Inc.	01/24	Summit Utilities Arkansas, Inc.	Docket No. 23-079-U	Rate of Return
Southwestern Electric Power Co.	07/21	Southwestern Electric Power Co.	Docket No. 21-070-U	Return on Equity
CenterPoint Energy Resources Corp.	05/21	CenterPoint Arkansas Gas	Docket No. 21-004-U	Return on Equity
<b>California Public Utilities Commission</b>				
Union Pacific Railroad Co – dba Keene Water System	03/25	Union Pacific Railroad Co – dba Keene Water System	Docket No. A25-03-016	Rate of Return
Southwest Gas Corporation	07/24	Southwest Gas Corporation	Docket No. A24-09-001	Return on Equity
San Gabriel Valley Water Company	05/23	San Gabriel Valley Water Company	Docket No. A23-05-001	Return on Equity
<b>City of Edmonton, Canada</b>				

Sponsor	Date	Case/Applicant	Docket No.	Subject
EPCOR Water Services, Inc.	05/24	EPCOR Water Services, Inc.	Performance Based Regulation Application	Cost of Capital
<b>Colorado Public Utilities Commission</b>				
Atmos Energy Corporation	08/22	Atmos Energy Corporation	Docket No. 22AL-0348G	Rate of Return
Summit Utilities, Inc.	04/18	Colorado Natural Gas Company	Docket No. 18AL-0305G	Rate of Return
Atmos Energy Corporation	06/17	Atmos Energy Corporation	Docket No. 17AL-0429G	Rate of Return
<b>Commission of the Canada Energy Regulator</b>				
Trans-Northern Pipelines Inc.	11/22	Trans-Northern Pipelines Inc.	Docket No. C-22197	Cost of Capital
<b>Delaware Public Service Commission</b>				
Artesian Water Company, Inc.	04/25	Artesian Water Company, Inc.	Docket No. 25-0436	Rate of Return
Delmarva Power & Light Co.	09/24	Delmarva Power & Light Co.	Docket No. 24-1044 (Gas)	Return on Equity
Tidewater Utilities, Inc.	08/24	Tidewater Utilities, Inc.	Docket No. 24-0991	Rate of Return
Delmarva Power & Light Co.	07/24	Delmarva Power & Light Co.	Docket No. 24-0868	Alternative Forms of Rate Regulation
Artesian Water Company, Inc.	04/23	Artesian Water Company, Inc.	Docket No. 23-0601	Rate of Return
Delmarva Power & Light Co.	12/22	Delmarva Power & Light Co.	Docket No. 22-0897 (Electric)	Return on Equity
Delmarva Power & Light Co.	01/22	Delmarva Power & Light Co.	Docket No. 22-002 (Gas)	Return on Equity
Delmarva Power & Light Co.	11/20	Delmarva Power & Light Co.	Docket No. 20-0149 (Electric)	Return on Equity
Delmarva Power & Light Co.	10/20	Delmarva Power & Light Co.	Docket No. 20-0150 (Gas)	Return on Equity
Tidewater Utilities, Inc.	11/13	Tidewater Utilities, Inc.	Docket No. 13-466	Capital Structure
<b>Public Service Commission of the District of Columbia</b>				
Washington Gas Light Company	08/24	Washington Gas Light Company	Formal Case No. 1180	Rate of Return
Washington Gas Light Company	04/22	Washington Gas Light Company	Formal Case No. 1169	Rate of Return
Washington Gas Light Company	09/20	Washington Gas Light Company	Formal Case No. 1162	Rate of Return
<b>Federal Energy Regulatory Commission</b>				
LS Power Grid California, LLC	10/20	LS Power Grid California, LLC	Docket No. ER21-195-000	Rate of Return
<b>Florida Public Service Commission</b>				
Peoples Gas System, Inc.	03/25	Peoples Gas System, Inc.	Docket No. 20250029-GU	Return on Equity
Tampa Electric Company	04/24	Tampa Electric Company	Docket No. 20240025-EI	Return on Equity
Peoples Gas System, Inc.	04/23	Peoples Gas System, Inc.	Docket No. 20230023-GU	Rate of Return
Tampa Electric Company	04/21	Tampa Electric Company	Docket No. 20210034-EI	Return on Equity
Peoples Gas System, Inc.	09/20	Peoples Gas System, Inc.	Docket No. 20200051-GU	Rate of Return
Utilities, Inc. of Florida	06/20	Utilities, Inc. of Florida	Docket No. 20200139-WS	Rate of Return
<b>Hawaii Public Utilities Commission</b>				
Kaupulehu Waste Water Company	02/25	Kaupulehu Waste Water Company	Docket No. 2023-0456	Rate of Return
Launiupoko Irrigation Company, Inc.	12/20	Launiupoko Irrigation Company, Inc.	Docket No. 2020-0217 / Transferred to 2020-0089	Capital Structure
Lanai Water Company, Inc.	12/19	Lanai Water Company, Inc.	Docket No. 2019-0386	Cost of Service / Rate Design
Manele Water Resources, LLC	08/19	Manele Water Resources, LLC	Docket No. 2019-0311	Cost of Service / Rate Design
Kaupulehu Water Company	02/18	Kaupulehu Water Company	Docket No. 2016-0363	Rate of Return
Aqua Engineers, LLC	05/17	Puhi Sewer & Water Company	Docket No. 2017-0118	Cost of Service / Rate Design
Hawaii Resources, Inc.	09/16	Laie Water Company	Docket No. 2016-0229	Cost of Service / Rate Design
<b>Illinois Commerce Commission</b>				

Sponsor	Date	Case/Applicant	Docket No.	Subject
Ameren Illinois Company d/b/a Ameren Illinois	01/25	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 25-0084 (Gas)	Return on Equity
Aqua Illinois, Inc.	01/24	Aqua Illinois, Inc.	Docket No. 24-0044	Rate of Return
Ameren Illinois Company d/b/a Ameren Illinois	01/23	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 23-0082 (Electric)	Return on Equity
Ameren Illinois Company d/b/a Ameren Illinois	01/23	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 23-0067 (Gas)	Return on Equity
Utility Services of Illinois, Inc.	02/21	Utility Services of Illinois, Inc.	Docket No. 21-0198	Rate of Return
Ameren Illinois Company d/b/a Ameren Illinois	07/20	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 20-0308	Return on Equity
Utility Services of Illinois, Inc.	11/17	Utility Services of Illinois, Inc.	Docket No. 17-1106	Cost of Service / Rate Design
Aqua Illinois, Inc.	04/17	Aqua Illinois, Inc.	Docket No. 17-0259	Rate of Return
Utility Services of Illinois, Inc.	04/15	Utility Services of Illinois, Inc.	Docket No. 14-0741	Rate of Return
<b>Indiana Utility Regulatory Commission</b>				
Aqua Indiana, Inc.	03/16	Aqua Indiana, Inc. Aboite Wastewater Division	Docket No. 44752	Rate of Return
Twin Lakes, Utilities, Inc.	08/13	Twin Lakes, Utilities, Inc.	Docket No. 44388	Rate of Return
<b>Kansas Corporation Commission</b>				
Atmos Energy Corporation	07/25	Atmos Energy Corporation	26-ATMG-026-RTS	Rate of Return
Atmos Energy Corporation	07/19	Atmos Energy Corporation	19-ATMG-525-RTS	Rate of Return
<b>Kentucky Public Service Commission</b>				
PPL Corporation	05/25	Kentucky Utilities Company / Louisville Gas & Electric Company	2025-00113 / 00114	Rate of Return
Atmos Energy Corporation	09/24	Atmos Energy Corporation	2024-00276	Rate of Return
Bluegrass Water Utility Operating Company	02/23	Bluegrass Water Utility Operating Company	2022-00432	Return on Equity
Atmos Energy Corporation	07/22	Atmos Energy Corporation	2022-00222	PRP Rider Rate
Water Service Corporation of KY	06/22	Water Service Corporation of KY	2022-00147	Rate of Return
Atmos Energy Corporation	07/21	Atmos Energy Corporation	2021-00304	PRP Rider Rate
Atmos Energy Corporation	06/21	Atmos Energy Corporation	2021-00214	Rate of Return
Duke Energy Kentucky, Inc.	06/21	Duke Energy Kentucky, Inc.	2021-00190	Return on Equity
Bluegrass Water Utility Operating Company	10/20	Bluegrass Water Utility Operating Company	2020-00290	Return on Equity
<b>Louisiana Public Service Commission</b>				
Utilities, Inc. of Louisiana	05/21	Utilities, Inc. of Louisiana	Docket No. U-36003	Rate of Return
Southwestern Electric Power Company	12/20	Southwestern Electric Power Company	Docket No. U-35441	Return on Equity
Atmos Energy Corporation	04/20	Atmos Energy Corporation	Docket No. U-35535	Rate of Return
Louisiana Water Service, Inc.	06/13	Louisiana Water Service, Inc.	Docket No. U-32848	Rate of Return
<b>Maine Public Utilities Commission</b>				
Northern Utilities, Inc. d/b/a Unitil	05/23	Northern Utilities, Inc. d/b/a Unitil	Docket No. 2023-00051	Return on Equity
Summit Natural Gas of Maine, Inc.	03/22	Summit Natural Gas of Maine, Inc.	Docket No. 2022-00025	Rate of Return
The Maine Water Company	09/21	The Maine Water Company	Docket No. 2021-00053	Rate of Return
<b>Maryland Public Service Commission</b>				
Washington Gas Light Company	05/23	Washington Gas Light Company	Case No. 9704	Rate of Return
FirstEnergy Service Company	03/23	Potomac Edison Company	Case No. 9695	Rate of Return
Washington Gas Light Company	08/20	Washington Gas Light Company	Case No. 9651	Rate of Return

Sponsor	Date	Case/Applicant	Docket No.	Subject
FirstEnergy Corporation	08/18	Potomac Edison Company	Case No. 9490	Rate of Return
<b>Massachusetts Department of Public Utilities</b>				
Unitil Corporation	09/23	Fitchburg Gas & Electric Co. (Elec.)	D.P.U. 23-80	Rate of Return
Unitil Corporation	09/23	Fitchburg Gas & Electric Co. (Gas)	D.P.U. 23-81	Rate of Return
Unitil Corporation	12/19	Fitchburg Gas & Electric Co. (Elec.)	D.P.U. 19-130	Rate of Return
Unitil Corporation	12/19	Fitchburg Gas & Electric Co. (Gas)	D.P.U. 19-131	Rate of Return
Liberty Utilities	07/15	Liberty Utilities d/b/a New England Natural Gas Company	D.P.U. 15-75	Rate of Return
<b>Minnesota Public Utilities Commission</b>				
Northern States Power Company	11/01	Northern States Power Company	Docket No. G002/GR-21-678	Return on Equity
Northern States Power Company	10/21	Northern States Power Company	Docket No. E002/GR-21-630	Return on Equity
Northern States Power Company	11/20	Northern States Power Company	Docket No. E002/GR-20-723	Return on Equity
<b>Mississippi Public Service Commission</b>				
Atmos Energy Corporation	06/25	Atmos Energy Corporation	Docket No. 2025-UN-59	Rate of Return
Great River Utility Operating Co.	07/22	Great River Utility Operating Co.	Docket No. 2022-UN-86	Rate of Return
Atmos Energy Corporation	03/19	Atmos Energy Corporation	Docket No. 2015-UN-049	Capital Structure
Atmos Energy Corporation	07/18	Atmos Energy Corporation	Docket No. 2015-UN-049	Capital Structure
<b>Missouri Public Service Commission</b>				
Confluence Rivers Utility Operating Company, Inc.	01/23	Confluence Rivers Utility Operating Company, Inc.	Case No. WR-2023-0006/SR-2023-0007	Rate of Return
Spire Missouri, Inc.	12/20	Spire Missouri, Inc.	Case No. GR-2021-0108	Return on Equity
Indian Hills Utility Operating Company, Inc.	10/17	Indian Hills Utility Operating Company, Inc.	Case No. SR-2017-0259	Rate of Return
Raccoon Creek Utility Operating Company, Inc.	09/16	Raccoon Creek Utility Operating Company, Inc.	Case No. SR-2016-0202	Rate of Return
<b>Public Utilities Commission of Nevada</b>				
Southwest Gas Corporation	09/23	Southwest Gas Corporation	Docket No. 23-09012	Return on Equity
Southwest Gas Corporation	09/21	Southwest Gas Corporation	Docket No. 21-09001	Return on Equity
Southwest Gas Corporation	08/20	Southwest Gas Corporation	Docket No. 20-02023	Return on Equity
<b>New Hampshire Public Utilities Commission</b>				
Unitil Energy Systems, Inc.	5/25	Unitil Corporation	Docket No. DE 25-025	Return on Equity
Aquarion Water Company of New Hampshire, Inc.	12/20	Aquarion Water Company of New Hampshire, Inc.	Docket No. DW 20-184	Rate of Return
<b>New Jersey Board of Public Utilities</b>				
Middlesex Water Company	06/25	Middlesex Water Company	Docket No. WR25060372	Rate of Return
Atlantic City Electric Company	11/24	Atlantic City Electric Company	Docket No. ER24110854	Rate of Return
New Jersey Natural Gas Company	01/24	New Jersey Natural Gas Company	Docket No. GR24010071	Rate of Return
Middlesex Water Company	05/23	Middlesex Water Company	Docket No. WR23050292	Rate of Return
FirstEnergy Service Company	03/23	Jersey Central Power & Light Co.	Docket No. ER23030144	Rate of Return
Atlantic City Electric Company	02/23	Atlantic City Electric Company	Docket No. ER23020091	Return on Equity
Middlesex Water Company	05/21	Middlesex Water Company	Docket No. WR21050813	Rate of Return
Atlantic City Electric Company	12/20	Atlantic City Electric Company	Docket No. ER20120746	Return on Equity
FirstEnergy Service Company	02/20	Jersey Central Power & Light Co.	Docket No. ER20020146	Rate of Return
Aqua New Jersey, Inc.	12/18	Aqua New Jersey, Inc.	Docket No. WR18121351	Rate of Return
Middlesex Water Company	10/17	Middlesex Water Company	Docket No. WR17101049	Rate of Return
Middlesex Water Company	03/15	Middlesex Water Company	Docket No. WR15030391	Rate of Return

Sponsor	Date	Case/Applicant	Docket No.	Subject
The Atlantic City Sewerage Company	10/14	The Atlantic City Sewerage Company	Docket No. WR14101263	Cost of Service / Rate Design
Middlesex Water Company	11/13	Middlesex Water Company	Docket No. WR1311059	Capital Structure
<b>New Mexico Public Regulation Commission</b>				
New Mexico Gas Company	09/23	New Mexico Gas Company	Case No. 23-00255-UT	Return on Equity
Southwestern Public Service Co.	11/22	Southwestern Public Service Co.	Case No. 22-00286-UT	Return on Equity
Southwestern Public Service Co.	01/21	Southwestern Public Service Co.	Case No. 20-00238-UT	Return on Equity
<b>North Carolina Utilities Commission</b>				
Carolina Water Service, Inc.	07/25	Carolina Water Service, Inc.	Docket No. W-354, SUB 450	Rate of Return
Aqua North Carolina Inc.	04/25	Aqua North Carolina Inc.	Docket No. W-218, Sub 629	Rate of Return
Pluris Hampstead, LLC	09/24	Pluris Hampstead, LLC	Docket No. W-1305, Sub 38	Rate of Return
Old North State Water Co., Inc.	06/24	Old North State Water Co., Inc.	Docket No. W-1300, Sub 100	Rate of Return
Carolina Water Service, Inc.	07/22	Carolina Water Service, Inc.	Docket No. W-354 Sub 400	Rate of Return
Aqua North Carolina, Inc.	06/22	Aqua North Carolina, Inc.	Docket No. W-218 Sub 573	Rate of Return
Carolina Water Service, Inc.	07/21	Carolina Water Service, Inc.	Docket No. W-354 Sub 384	Rate of Return
Piedmont Natural Gas Co., Inc.	03/21	Piedmont Natural Gas Co., Inc.	Docket No. G-9, Sub 781	Return on Equity
Duke Energy Carolinas, LLC	07/20	Duke Energy Carolinas, LLC	Docket No. E-7, Sub 1214	Return on Equity
Duke Energy Progress, LLC	07/20	Duke Energy Progress, LLC	Docket No. E-2, Sub 1219	Return on Equity
Aqua North Carolina, Inc.	12/19	Aqua North Carolina, Inc.	Docket No. W-218 Sub 526	Rate of Return
Carolina Water Service, Inc.	06/19	Carolina Water Service, Inc.	Docket No. W-354 Sub 364	Rate of Return
Carolina Water Service, Inc.	09/18	Carolina Water Service, Inc.	Docket No. W-354 Sub 360	Rate of Return
Aqua North Carolina, Inc.	07/18	Aqua North Carolina, Inc.	Docket No. W-218 Sub 497	Rate of Return
<b>North Dakota Public Service Commission</b>				
Northern States Power Company	09/21	Northern States Power Company	Case No. PU-21-381	Rate of Return
Northern States Power Company	11/20	Northern States Power Company	Case No. PU-20-441	Rate of Return
<b>Public Utilities Commission of Ohio</b>				
Aqua Ohio, Inc.	07/25	Aqua Ohio, Inc.	Case No. 25-0594-WW-AIR	Rate of Return
FirstEnergy	06/24	Ohio Edison Co., Cleveland Electric Illuminating Co., Toledo Edison Co.	Case No. 24-0468-EL-AIR	Rate of Return
Aqua Ohio, Inc.	11/22	Aqua Ohio, Inc.	Case No. 22-1094-WW-AIR	Rate of Return
Duke Energy Ohio, Inc.	10/21	Duke Energy Ohio, Inc.	Case No. 21-887-EL-AIR	Return on Equity
Aqua Ohio, Inc.	07/21	Aqua Ohio, Inc.	Case No. 21-0595-WW-AIR	Rate of Return
Aqua Ohio, Inc.	05/16	Aqua Ohio, Inc.	Case No. 16-0907-WW-AIR	Rate of Return
<b>Oklahoma Corporation Commission</b>				
Summit Utilities Oklahoma, Inc.	6/25	Summit Utilities Oklahoma, Inc.	Docket No. PUD25-000028	Return on Equity
<b>Pennsylvania Public Utility Commission</b>				
The York Water Company	05/25	The York Water Company	Docket Nos. R-2025-3053442 & R-2025-3053573	Rate of Return
Valley Energy, Inc.	04/25	C&T Enterprises	Docket No. R-2025-3054393	Rate of Return
Wellsboro Electric Company	04/25	C&T Enterprises	Docket No. R-2025-3054392	Rate of Return
Citizens' Electric Company of Lewisburg	04/25	C&T Enterprises	Docket No. R-2025-3054394	Rate of Return
FirstEnergy	04/24	Pennsylvania Electric Company	Docket No. R-2024-3047068	Rate of Return
Columbia Water Company	05/23	Columbia Water Company	Docket No. R-2023-3040258	Rate of Return
Borough of Ambler	06/22	Borough of Ambler – Bureau of Water	Docket No. R-2022-3031704	Rate of Return

Sponsor	Date	Case/Applicant	Docket No.	Subject
Citizens' Electric Company of Lewisburg	05/22	C&T Enterprises	Docket No. R-2022-3032369	Rate of Return
Valley Energy Company	05/22	C&T Enterprises	Docket No. R-2022-3032300	Rate of Return
Community Utilities of Pennsylvania, Inc.	04/21	Community Utilities of Pennsylvania, Inc.	Docket No. R-2021-3025207	Rate of Return
Vicinity Energy Philadelphia, Inc.	04/21	Vicinity Energy Philadelphia, Inc.	Docket No. R-2021-3024060	Rate of Return
Delaware County Regional Water Control Authority	02/20	Delaware County Regional Water Control Authority	Docket No. A-2019-3015173	Valuation
Valley Energy, Inc.	07/19	C&T Enterprises	Docket No. R-2019-3008209	Rate of Return
Wellsboro Electric Company	07/19	C&T Enterprises	Docket No. R-2019-3008208	Rate of Return
Citizens' Electric Company of Lewisburg	07/19	C&T Enterprises	Docket No. R-2019-3008212	Rate of Return
Steelton Borough Authority	01/19	Steelton Borough Authority	Docket No. A-2019-3006880	Valuation
Mahoning Township, PA	08/18	Mahoning Township, PA	Docket No. A-2018-3003519	Valuation
SUEZ Water Pennsylvania Inc.	04/18	SUEZ Water Pennsylvania Inc.	Docket No. R-2018-000834	Rate of Return
Columbia Water Company	09/17	Columbia Water Company	Docket No. R-2017-2598203	Rate of Return
Veolia Energy Philadelphia, Inc.	06/17	Veolia Energy Philadelphia, Inc.	Docket No. R-2017-2593142	Rate of Return
Emporium Water Company	07/14	Emporium Water Company	Docket No. R-2014-2402324	Rate of Return
Columbia Water Company	07/13	Columbia Water Company	Docket No. R-2013-2360798	Rate of Return
Penn Estates Utilities, Inc.	12/11	Penn Estates, Utilities, Inc.	Docket No. R-2011-2255159	Capital Structure / Long-Term Debt Cost Rate
<b>South Carolina Public Service Commission</b>				
Blue Granite Water Co.	12/19	Blue Granite Water Company	Docket No. 2019-292-WS	Rate of Return
Carolina Water Service, Inc.	02/18	Carolina Water Service, Inc.	Docket No. 2017-292-WS	Rate of Return
Carolina Water Service, Inc.	06/15	Carolina Water Service, Inc.	Docket No. 2015-199-WS	Rate of Return
Carolina Water Service, Inc.	11/13	Carolina Water Service, Inc.	Docket No. 2013-275-WS	Rate of Return
United Utility Companies, Inc.	09/13	United Utility Companies, Inc.	Docket No. 2013-199-WS	Rate of Return
Utility Services of South Carolina, Inc.	09/13	Utility Services of South Carolina, Inc.	Docket No. 2013-201-WS	Rate of Return
Tega Cay Water Services, Inc.	11/12	Tega Cay Water Services, Inc.	Docket No. 2012-177-WS	Capital Structure
<b>South Dakota Public Service Commission</b>				
Northern States Power Company	06/22	Northern States Power Company	Docket No. EL22-017	Rate of Return
<b>Tennessee Public Utility Commission</b>				
CSWR – Limestone Water Utility Operating Company	07/24	CSWR – Limestone Water Utility Operating Company	Docket No. 24-00044	Capital Structure, Cost of Debt, Return on Equity
Piedmont Natural Gas Company	07/20	Piedmont Natural Gas Company	Docket No. 20-00086	Return on Equity
<b>Public Utility Commission of Texas</b>				
Oncor Electric Delivery Co. LLC	06/25	Oncor Electric Delivery Co. LLC	Docket No. 58306	Return on Equity
Aqua Texas, Inc.	06/25	Aqua Texas, Inc.	Docket No. 58124	Rate of Return
CSWR TX Utility Operating Co, LLC	12/24	CSWR TX Utility Operating Co, LLC	Docket No. 57386	Rate of Return
BVRT Utility Holding Co., LLC	07/24	Texas Water Utilities, LP	Docket No. 56664	Rate of Return
Texas Water Utilities, LP	06/24	Texas Water Utilities, LP	Docket No. 56665	Rate of Return
Southwestern Public Service Co.	02/23	Southwestern Public Service Co.	Docket No. 54634	Return on Equity
CSWR – Texas Utility Operating Company, LLC	02/23	CSWR – Texas Utility Operating Company, LLC	Docket No. 54565	Rate of Return
Oncor Electric Delivery Co. LLC	05/22	Oncor Electric Delivery Co. LLC	Docket No. 53601	Return on Equity

Sponsor	Date	Case/Applicant	Docket No.	Subject
Southwestern Public Service Co.	02/21	Southwestern Public Service Co.	Docket No. 51802	Return on Equity
Southwestern Electric Power Co.	10/20	Southwestern Electric Power Co.	Docket No. 51415	Rate of Return
<b>Texas Railroad Commission</b>				
Atmos Energy Corporation – Mid-Texas Division	11/24	Atmos Energy Corporation – Mid-Texas Division	Docket No. OS-24-00019196	Return on Equity
Atmos Energy Corporation – West Texas Division	10/24	Atmos Energy Corporation – West Texas Division	Docket No. OS-24-00018879	Return on Equity
Atmos Pipeline – Texas, a Division of Atmos Energy Corporation	05/23	Atmos Pipeline – Texas, a Division of Atmos Energy Corporation	Docket No. OS-23-00013758	Return on Equity
<b>Virginia State Corporation Commission</b>				
Washington Gas Light Company	07/25	Washington Gas Light Company	PUR-2025-00091	Return on Equity
Aqua Virginia, Inc.	07/25	Aqua Virginia, Inc.	PUR-2025-00071	Rate of Return
Aqua Virginia, Inc.	07/23	Aqua Virginia, Inc.	PUR-2023-00073	Rate of Return
Washington Gas Light Company	06/22	Washington Gas Light Company	PUR-2022-00054	Return on Equity
Virginia Natural Gas, Inc.	04/21	Virginia Natural Gas, Inc.	PUR-2020-00095	Return on Equity
Massanutten Public Service Corporation	12/20	Massanutten Public Service Corporation	PUE-2020-00039	Return on Equity
Aqua Virginia, Inc.	07/20	Aqua Virginia, Inc.	PUR-2020-00106	Rate of Return
WGL Holdings, Inc.	07/18	Washington Gas Light Company	PUR-2018-00080	Rate of Return
Atmos Energy Corporation	05/18	Atmos Energy Corporation	PUR-2018-00014	Rate of Return
Aqua Virginia, Inc.	07/17	Aqua Virginia, Inc.	PUR-2017-00082	Rate of Return
Massanutten Public Service Corp.	08/14	Massanutten Public Service Corp.	PUE-2014-00035	Rate of Return / Rate Design
<b>Public Service Commission of West Virginia</b>				
FirstEnergy Service Company	05/23	Monongahela Power Company and The Potomac Edison Company	Case No. 23-0460-E-42T	Return on Equity
FirstEnergy Service Company	12/21	Monongahela Power Company and The Potomac Edison Company	Case No. 21-0857-E-CN (ELG)	Return on Equity
FirstEnergy Service Company	11/21	Monongahela Power Company and The Potomac Edison Company	Case No. 21-0813-E-P (Solar)	Return on Equity

### Summary

Ryan Kucan first joined ScottMadden in 2016 as an analyst and rejoined in 2021 as an associate. The majority of his experience has been providing primary support for the preparation of cost-of-capital expert witness testimony to support utility rate case filings before multiple jurisdictions in the United States and Canada. Ryan earned a B.S. in business administration, with a double concentration in accounting and finance, at the D'Amore-McKim School of Business at Northeastern University and an M.B.A. at the University of Toronto's Rotman School of Management. Ryan also earned his Certified Rate of Return Analyst designation in 2023.

### Areas of Specialization

- Rates and regulation
- Capital market assessment
- Valuation
- Regulatory strategy and analysis
- Rate-of-return analysis
- Financial modeling

### Recent Assignments

- Performed a net-financing-benefits analysis to support utility procurement contracts of offshore wind generation
- Reviewed financial models and state regulatory conditions to assist a potential private equity acquisition of a utility
- Assisted with a market-based valuation of natural gas pipeline assets for a transaction between utilities
- Conducted an analysis to calculate the historical return on equity based on a new model outlined in FERC Opinion No. 531
- Supported expert testimony on the cost of capital for ratemaking purposes before numerous state utility regulatory agencies for electric, natural gas, and water utilities

## EXPERT WITNESS TESTIMONY LISTING

Sponsor	Date	Case/Applicant	Docket No.	Subject
<b>New Hampshire Public Utilities Commission</b>				
Unitil Energy Systems, Inc.	05/25	Unitil Energy Systems, Inc.	DE 25-025	Return on Equity
<b>Pennsylvania Public Utility Commission</b>				
Valley Energy, Inc.	04/25	C&T Enterprises	Docket No. R-2025-3054393	Rate of Return
Wellsboro Electric Company	04/25	C&T Enterprises	Docket No. R-2025-3054392	Rate of Return
Citizens' Electric Company of Lewisburg	04/25	C&T Enterprises	Docket No. R-2025-3054394	Rate of Return

## PRIMARY TESTIMONY SUPPORT EXPERIENCE

Sponsor	Date	Case/Applicant	Docket No.	Subject
<b>Alberta Utilities Commission</b>				
AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	02/23	AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	Proceeding ID. 27804	Determination of Cost-of-Capital Parameters
<b>Arizona Corporation Commission</b>				
EPCOR Water Arizona, Inc.	06/24	EPCOR Water Arizona, Inc.	Docket No. WS-01303A-24-0130	Rate of Return
Arizona Water Company	05/24	Arizona Water Company – Northern Group	Docket No. W-01445A-24-0117	Rate of Return
Foothills Water & Sewer, LLC	10/23	Foothills Water & Sewer, LLC	Docket No. WS-21182A-23-0292	Rate of Return

Sponsor	Date	Case/Applicant	Docket No.	Subject
Arizona Water Company	12/22	Arizona Water Company – Eastern Group	Docket No. W-01445A-22-0286	Rate of Return
EPCOR Water Arizona, Inc.	08/22	EPCOR Water Arizona, Inc.	Docket No. WS-01303A-22-0236	Rate of Return
<b>Arkansas Public Service Commission</b>				
Summit Utilities Arkansas, Inc.	01/24	Summit Utilities Arkansas, Inc.	Docket No. 23-079-U	Rate of Return
Southwestern Electric Power Co.	07/21	Southwestern Electric Power Co.	Docket No. 21-070-U	Return on Equity
CenterPoint Energy Resources Corp.	05/21	CenterPoint Arkansas Gas	Docket No. 21-004-U	Return on Equity
<b>California Public Utilities Commission</b>				
Southwest Gas Corporation	07/24	Southwest Gas Corporation	Docket No. A24-09-001	Return on Equity
San Gabriel Valley Water Company	05/23	San Gabriel Valley Water Company	Docket No. A23-05-001	Return on Equity
<b>City of Edmonton, Canada</b>				
EPCOR Water Services, Inc.	05/24	EPCOR Water Services, Inc.	Performance Based Regulation Application	Cost of Capital
<b>Commission of the Canada Energy Regulator</b>				
Trans-Northern Pipelines Inc.	11/22	Trans-Northern Pipelines Inc.	Docket No. C-22197	Cost of Capital
<b>Public Service Commission of the District of Columbia</b>				
Washington Gas Light Company	08/24	Washington Gas Light Company	Formal Case No. 1180	Rate of Return
Washington Gas Light Company	04/22	Washington Gas Light Company	Formal Case No. 1169	Rate of Return
<b>Florida Public Service Commission</b>				
Tampa Electric Company	04/21	Tampa Electric Company	Docket No. 20210034-EI	Return on Equity
<b>Illinois Commerce Commission</b>				
Aqua Illinois, Inc.	01/24	Aqua Illinois, Inc.	Docket No. 24-0044	Rate of Return
<b>Kentucky Public Service Commission</b>				
Atmos Energy Corporation	07/22	Atmos Energy Corporation	2022-00222	PRP Rider Rate
Water Service Corporation of KY	06/22	Water Service Corporation of KY	2022-00147	Rate of Return
Atmos Energy Corporation	07/21	Atmos Energy Corporation	2021-00304	PRP Rider Rate
Atmos Energy Corporation	06/21	Atmos Energy Corporation	2021-00214	Rate of Return
Duke Energy Kentucky, Inc.	06/21	Duke Energy Kentucky, Inc.	2021-00190	Return on Equity
<b>Louisiana Public Service Commission</b>				
Utilities, Inc. of Louisiana	05/21	Utilities, Inc. of Louisiana	Docket No. U-36003	Rate of Return
Southwestern Electric Power Company	12/20	Southwestern Electric Power Company	Docket No. U-35441	Return on Equity
<b>Maine Public Utilities Commission</b>				
Northern Utilities, Inc. d/b/a Unitil	05/23	Northern Utilities, Inc. d/b/a Unitil	Docket No. 2023-00051	Return on Equity
Summit Natural Gas of Maine, Inc.	03/22	Summit Natural Gas of Maine, Inc.	Docket No. 2022-00025	Rate of Return
The Maine Water Company	09/21	The Maine Water Company	Docket No. 2021-00053	Rate of Return
<b>Massachusetts Department of Public Utilities</b>				
Unitil Corporation	08/23	Fitchburg Gas & Electric Co. (Elec.)	D.P.U. 23-80	Rate of Return
Unitil Corporation	08/23	Fitchburg Gas & Electric Co. (Gas)	D.P.U. 23-81	Rate of Return
Unitil Corporation	05/22	Fitchburg Gas & Electric Co.	D.P.U. 22-72	Remuneration Rate for Wind project
<b>Maryland Public Service Commission</b>				
Washington Gas Light Company	05/23	Washington Gas Light Company	Case No. 9704	Rate of Return
FirstEnergy Corporation	03/23	Potomac Edison Company	Case No. 9695	Rate of Return

Washington Gas Light Company	08/20	Washington Gas Light Company	Case No. 9651	Rate of Return
<b>Mississippi Public Service Commission</b>				
Great River Utility Operating Co.	07/22	Great River Utility Operating Co.	Docket No. 2022-UN-86	Rate of Return
<b>Missouri Public Service Commission</b>				
Spire Missouri, Inc.	12/20	Spire Missouri, Inc.	Case No. GR-2021-0108	Return on Equity
<b>Public Utilities Commission of Nevada</b>				
Southwest Gas Corporation	09/23	Southwest Gas Corporation	Docket No. 23-09012	Return on Equity
Southwest Gas Corporation	09/21	Southwest Gas Corporation	Docket No. 21-09001	Return on Equity
<b>New Hampshire Public Utilities Commission</b>				
Northern Utilities, Inc. d/b/a Unitil	08/21	Northern Utilities, Inc. d/b/a Unitil	D-DG-21-104	Rate of Return
<b>New Jersey Board of Public Utilities</b>				
FirstEnergy Service Company	03/23	Jersey Central Power & Light Co.	Docket No. ER23030144	Rate of Return
Middlesex Water Company	05/21	Middlesex Water Company	Docket No. WR21050813	Rate of Return
<b>New Mexico Public Regulation Commission</b>				
Southwestern Public Service Co.	01/21	Southwestern Public Service Co.	Case No. 20-00238-UT	Return on Equity
<b>North Carolina Utilities Commission</b>				
Pluris Hampstead, LLC	09/24	Pluris Hampstead, LLC	Docket No. W-1305, Sub 38	Rate of Return
Carolina Water Service, Inc.	07/22	Carolina Water Service, Inc.	Docket No. W-354 Sub 400	Rate of Return
Aqua North Carolina, Inc.	06/22	Aqua North Carolina, Inc.	Docket No. W-218 Sub 573	Rate of Return
Carolina Water Service, Inc.	07/21	Carolina Water Service, Inc.	Docket No. W-354 Sub 384	Rate of Return
Piedmont Natural Gas Co., Inc.	03/21	Piedmont Natural Gas Co., Inc.	Docket No. G-9, Sub 781	Return on Equity
<b>Public Utilities Commission of Ohio</b>				
FirstEnergy	06/24	Ohio Edison Co., Cleveland Electric Illuminating Co., Toledo Edison Co.	Case No. 24-0468-EL-AIR	Rate of Return
Aqua Ohio, Inc.	11/22	Aqua Ohio, Inc.	Case No. 22-1094-WW-AIR	Rate of Return
Duke Energy Ohio, Inc.	10/21	Duke Energy Ohio, Inc.	Case No. 21-887-EL-AIR	Return on Equity
Aqua Ohio, Inc.	07/21	Aqua Ohio, Inc.	Case No. 21-0595-WW-AIR	Rate of Return
<b>Pennsylvania Public Utility Commission</b>				
FirstEnergy	04/24	Pennsylvania Electric Company	Docket No. R-2024-3047068	Rate of Return
Borough of Ambler	06/22	Borough of Ambler – Bureau of Water	Docket No. R-2022-3031704	Rate of Return
Citizens' Electric Company of Lewisburg	05/22	C&T Enterprises	Docket No. R-2022-3032369	Rate of Return
Valley Energy Company	05/22	C&T Enterprises	Docket No. R-2022-3032300	Rate of Return
Community Utilities of Pennsylvania, Inc.	04/21	Community Utilities of Pennsylvania, Inc.	Docket No. R-2021-3025207	Rate of Return
Vicinity Energy Philadelphia, Inc.	04/21	Vicinity Energy Philadelphia, Inc.	Docket No. R-2021-3024060	Rate of Return
<b>Public Utility Commission of Texas</b>				
BVRT Utility Holding Co., LLC	07/24	Texas Water Utilities, LP	Docket No. 56664	Rate of Return
Texas Water Utilities, LP	06/24	Texas Water Utilities, LP	Docket No. 56665	Rate of Return
Southwestern Public Service Co.	02/23	Southwestern Public Service Co.	Docket No. 54634	Return on Equity
Oncor Electric Delivery Co. LLC	05/22	Oncor Electric Delivery Co. LLC	Docket No. 53601	Return on Equity
Southwestern Public Service Co.	02/21	Southwestern Public Service Co.	Docket No. 51802	Return on Equity
<b>Virginia State Corporation Commission</b>				
Washington Gas Light Company	06/22	Washington Gas Light Company	PUR-2022-00054	Return on Equity
Virginia Natural Gas, Inc.	04/21	Virginia Natural Gas, Inc.	PUR-2020-00095	Return on Equity
<b>Public Service Commission of West Virginia</b>				



*Resume & Testimony Listing of:*  
**Ryan M. Kucan, CRRM**  
**Manager**

FirstEnergy Corporation	05/23	Monongahela Power Company and The Potomac Edison Company	Case No. 23-0460-E-42T	Return on Equity
FirstEnergy Corporation	12/21	Monongahela Power Company and The Potomac Edison Company	Case No. 21-0857-E-CN (ELG)	Return on Equity
FirstEnergy Corporation	11/21	Monongahela Power Company and The Potomac Edison Company	Case No. 21-0813-E-P (Solar)	Return on Equity