Responses to PEG's New Analyses and Studies

(in reply to PEG's April 9, 2026 reports)

Alectra Utilities' Rate Application

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1 PEG's New Benchmarking Analyses and Studies

PEG delivered its *Statistical Cost Research for the Alectra Utilities CIR Plan* report dated April 9, 2026 ("PEG Empirical Report") and on the same date delivered a second report *Issues in the Design of the New Alectra Utilities CIR Framework* ("PEG Design Report") in which PEG describes new analyses and studies it performed and raises certain other new issues. PEG's working papers for both reports were provided to Clearspring on April 14, 2026. PEG provided its accompanying answers to interrogatories on April 24, 2026. Clearspring could not consider or respond to PEG's new analyses/studies or issues in our original report produced in July 2025 since they were disclosed for the first time in PEG's reports on April 9, 2026. In the sections below we respond to PEG's new analyses/studies and the issues it has raised.

The following sections will respond to the new PEG analyses and discussions.

- PEG's productivity trend research and recommendation,
- PEG's cost benchmarking model and stretch factor recommendation,
- PEG's G-Factor analysis and recommendation,
- PEG's IPD analysis and recommendation, and
- PEG's plan design alternatives to Alectra's proposal.

2 PEG's New Productivity Trend Research

In the PEG Empirical Report, new Ontario distribution productivity trend research and results are provided. Based on the industry total factor productivity (TFP) trends, PEG recommends a new Productivity Factor (PF) of 0.16%. The new PF recommendation flows from PEG's finding that the most recent eleven-year TFP trend (2014-2024 growth rates) in the Ontario electric distribution industry equaled +0.16%. The OM&A partial factor productivity (PFP) in this same period was estimated by PEG to be +0.26% and the capital PFP to be +0.05%.

Clearspring was not expecting that the TFP or PFP distribution industry trends and new productivity factors would be re-examined and a new study on this topic put forth in this application, and as a practical matter we do not have time to be able to conduct and put forth our own study regarding this issue. In all prior Custom IR precedents, the productivity factor has been set at 0.0%, consistent with the 4GIR productivity factor. Clearspring continues to recommend a 0.0% productivity factor in this proceeding, consistent with past practice, and is of the view that any re-examination of the industry productivity factor should be conducted in a forum that would allow all industry stakeholders a reasonable opportunity to consider this issue and put forth their own studies and properly examine and respond to the studies of other parties and resulting recommendations.

Notwithstanding the above, in our initial review of PEG's productivity research (in the limited time we have had since receiving its report), we have identified three primary concerns with PEG's approach that would need correction regarding PEG's TFP trend research and productivity factor. These three required corrections, when fixed, results in PEG's TFP and PFP industry trends being below zero, as shown in Table 1 below. PEG's productivity trend results become negative after Correction 3a (TFP trend equals -0.19%) is made or after Correction 3b (TFP trend equals -0.28%) is made.

Table 1: Ontario Productivity Results with Corrections

Ontario Productivity Results (From PEG's Working Papers)				
Correction		**TFP**	**OM&A PFP**	**Capital PFP**
	PEG's Reported 2014-2024 (11-Year Results)	0.16%	0.26%	0.05%
1	Move to 10-Year Results with Far Less Smart Meter Clearance Bias	0.03%	0.10%	0.01%
2	Exclude Alectra (10-Year Trend)	0.03%	0.09%	0.02%
3a	Use Rolling 10-Year Peak Demand so Start Year and End Year Output Definitions are Consistent (10-Year Trend, Alectra Excluded)	**-0.19%**	-0.14%	-0.20%
3b	Use 10-Year Ratchet Peak so Start Year and End Year Output Definitions are Consistent (10-Year Trend, Alectra Excluded)	**-0.28%**	-0.22%	-0.28%

These three required corrections are discussed briefly below.

1. **PEG's Chosen Start Year Biases Results Upwards Due to Extensive AMI Deferral Account Clearances in 2013 and the Arbitrary Choice of 11 years.**

   PEG's new productivity trends are based on an 11-year growth rate period (2014 to 2024). Clearspring has two primary issues with PEG's start year choice. These are:

   - The 11-year choice is arbitrary and produces a higher productivity trend relative to choosing the surrounding years as the starting point.[1] Clearspring agrees with PEG that the productivity period should be after most of the MIFRS accounting transition occurred. Starting the study after the accounting transition would still leave open a 12-year period (2013 to 2024) which would produce a 0.04% TFP trend or a 10-year period (2015 to 2024) which would produce a 0.03% TFP trend, both of which are decreases of 0.12% and 0.13% relative to PEG's TFP of 0.16%. PEG's choice of the 11-year study period produces the highest productivity trends of the available choices (the reason for this period showing a higher productivity trend is because the 11-year period benefits from a bias due to smart meter clearances in 2013, which we discuss in the following point). A better and less arbitrary choice would have been a 10-year study period which would have matched the

[1] PEG also confirmed in its response to PWU-2, (part e, but labeled part b) that the OM&A productivity factor would be lower if any year other than 2014 had been selected as the starting year.

10-year U.S. period used by PEG to support its productivity factor recommendation in its report for the last Toronto Hydro CIR application.[2]

- In the PEG Empirical Report, on page 85, PEG discusses how its analysis now includes smart meter deferral account expenses but they are included in years that they are cleared rather than incurred. PEG states, *"The first sample year that was free of these clearances was 2014."* As this statement indicates that some smart meter clearances occurred in 2013, Alectra asked PEG to investigate the extensiveness of the smart meter clearances in 2013. In response, PEG did not do so and stated, "To figure out the timing and clearing of the smart meter accounts is a burdensome task and PEG does not have ready access to account 1555 and 1556 data since 2012."[3]

  Since PEG did not respond on this point, we examined the trial balance data of distributors in 2012 and 2013 and identified 26 distributors that have cleared expenses out of the OM&A deferral account 1556 in 2013. This figure is significant and helps to explain why PEG reported a negative OM&A PFP growth rate in 2013—the large number of distributors clearing OM&A expenses that year has led to an overstatement of the costs incurred in 2013 (because smart meter costs were not actually incurred in 2013 but merely cleared to accounts), which in turn causes PEG's 11-year productivity growth rates which begin in 2014 to appear higher.

  At first glance, the fact that the smart meter clearances had been mostly finished in 2013 would seem to not impact PEG's study because its productivity trends begin in 2014. However, PEG's productivity sample period is based on the growth rates of productivity from 2014 to 2024. This means that PEG is measuring the average annual growth rate of productivity from the base year of 2013 to the end year of 2024. The first 2014 growth rate is the change in productivity of 2014 compared to 2013. This substantially impacts PEG's reported productivity trends because expenses for numerous utilities in 2013 were artificially elevated due to smart meter clearances.

  PEG's choice of basing its productivity trends on the year 2013 and using 2014 growth rates as the starting point, produces an upward bias in the results because of the substantial number of clearances occurring in 2013. The better approach would be to move the starting year to 2014 (2015 growth rates).[4] This would still be a 10-year study

[2] Statistical Cost Research for THESL's New CIR Plan, May 6 2024 in EB-2023-0195.

[3] PEG response in AUC-29, part (a).

[4] Some smart meter clearances still occurred in 2014 and afterwards. In 2014, there appear to be 6 distributors that cleared account 1556. While much lower than the 26 in 2013, this continues to bias the productivity trends upwards but to a much lesser extent than PEG's 11-year period.

period, the same period length that PEG used to formulate its productivity factor recommendation in the Toronto Hydro case. Using PEG's working papers, the 10-year (2015 to 2024) period indicates a TFP trend of 0.03%, an OM&A PFP trend of 0.10%, and a capital PFP trend of 0.01%.

2. **Alectra is Included in the Productivity Sample**

PEG includes Alectra in its productivity research sample.[5] The productivity factor should be an external measure and not be influenced by the utility it is being applied to. Given PEG's averaging approach, which Clearspring agrees is the appropriate approach, this will have a minor impact on the results, but excluding Alectra from the sample is a clear improvement. When adjusting PEG's working papers, the 10-year (2015 to 2024) productivity trends after Alectra is excluded from the sample show a TFP trend of 0.03%, an OM&A PFP trend of 0.09%, and a capital PFP trend of 0.02%.

3. **PEG's Ratcheted Peak Approach Biases Results Upwards**

PEG defines its peak demand variable in each year in its productivity study as the maximum annual peak demand that has occurred since 2002. This definition incorrectly biases productivity trend results upwards. PEG's variable can never decrease over time. Even when annual peak demands are regularly decreasing for a utility over extended periods of time (in some cases over two decades), PEG's peak demand output variable stays constant. This contradicts industry logic, the distribution cost-savings rationale for CDM, the anticipation of increased infrastructure due to the energy transition, and PEG's own total cost model which shows a statistically significant cost elasticity on peak demand (as does Clearspring's model).

PEG's ratcheted peak demand is a flawed approach to productivity trend analysis for the following reasons.

- The start year output and input definition needs to match the end year output and input definition to be a valid study of the productivity growth during that time. This is not the case in PEG's analysis. The base (or start) year is currently 2013 and the end year is 2024. The ratcheted peak demand variable in 2013 is defined as the maximum of the last 12 years' worth of annual peak demands (2002 to 2013). In 2024, the ratcheted peak demand variable is defined as the maximum of the last 23 years' worth of annual peak demands (2002 to 2024).[6] This is a mismatch in output definitions from the start year relative to the end year. A proper productivity study would have a consistent output definition for the start year and end year (and all years in between). This mismatch in the output definition is causing an obvious upward bias in PEG's productivity results. It creates a productivity advantage for 2024 relative

[5] PEG confirmed this in its response to AUC-18, part (d).

[6] PEG confirms this mismatch in its responses to AUC-30, part (b) and (c).

to 2013. This is not a proper approach in a productivity trend analysis. The start year and end year should have the same output and input definitions.

As PEG's output definition currently stands, 2024 has nearly twice as many years to set a higher peak value than 2013 does. This clearly increases the chances that 2024 would be higher than 2013 due only to the variable definition used by PEG and biases the output upwards in the later years of PEG's study, thus biasing the productivity trends higher. As an illustrative example, assume a utility has zero growth for the last two decades. However, despite having zero growth, annual peak demands will still fluctuate significantly from year-to-year due mainly to local weather variations. Years with extreme weather in the territory will cause higher annual peak demands relative to normal or mild years, even though for this zero-growth utility the underlying peak demand forecasts will be constant from year-to-year. Despite this zero-growth scenario, PEG's ratcheted peak demand will produce a higher value in 2024 for this utility than in 2013 in almost half the cases (and 2013 will never be higher than 2024) only because PEG's definition gave the end year of 2024 more opportunities (23 chances) to experience extreme weather than PEG's definition gave 2013 (only 12 chances).

- A utility with steadily declining annual peak demands is not planning for a distribution capacity level based on 2002 peak demands in 2024. Clearspring recognizes that there may be a lag in a utility being able to save costs due to declining demand, but certainly utilities will find cost savings of serving lower peak demands at some point in time. PEG's ratcheted peak definition does not align with the long-term cost elasticity on peak demands that both Clearspring and PEG have estimated with a high degree of statistical significance in both consultants cost benchmarking models. Utilities, at some point, will find ways to adjust to lower peak demand expectations on its system.

This imbalance in the output definition between the start year and end year is a large issue in Ontario and with PEG's chosen study period. Over half of the distributors in PEG's productivity sample set their maximum ratcheted peak for 2024 before 2011. PEG's ratcheted peak demand variable is using observations 14 or more years ago to set the 2024 value for over half of the distributors. The 2013 value is disadvantaged because it can only look back 12 years. The PEG 2024 peak demand value for over half of the Ontario distributors would be lower if PEG had a consistent statistical definition of its variable.

If we adjust PEG's working papers to instead use a fair and consistent definition such as a 10-year rolling average of the peak demands, the 10-year productivity trends (2015 to 2024), after Alectra is excluded from the sample, show a TFP trend of -0.19%, an OM&A PFP trend of -0.14%, and a capital PFP trend of -0.20%.[7] This is labeled as Correction 3a in Table 1 above.

[7] PEG was requested to produce this result in AUC-19, part (c) but refused on the basis it was not feasible in the time allowed for interrogatory responses.

Another alternative (which we labeled as Correction 3b in Table 1 above) would be to define the peak demand variable as a 10-year ratchet peak demand. This means that each year would take the maximum peak demand in the prior ten years. This would solve the end-year bias of PEG's ratcheted peak and addresses concerns regarding a lag in utilities responding to lower peak demands. Both the start year and end year output definitions would be consistent, that is, the maximum of the prior ten annual peak demands. This would eliminate the concern that PEG's output definition is changing and becoming more advantageous (and thus biased) to higher productivity as time passes.

If we adjust PEG's working papers to instead use an unbiased 10-year ratchet peak demand approach, the 10-year productivity trends (2015 to 2024), after Alectra is excluded from the sample, show a TFP trend of -0.28%, an OM&A PFP trend of -0.22%, and a capital PFP trend of -0.28%.[8]

Other Concerns with PEG's Productivity Research

Clearspring has the following other concerns with PEG's productivity research and analysis.

- U.S. productivity results are not provided. PEG confirmed that U.S. productivity trends would be relevant in the context of Alectra's productivity factor in its response to interrogatory AUC-6. In the most recent Toronto Hydro application, PEG based its recommendation on the productivity factor for Toronto Hydro using a 10-year study period for the U.S. industry, but it contained two key issues that needed to be corrected. These were that the averaging approach should be used and that the output quantity index should include a peak demand variable rather than only use customers. PEG has, correctly, fixed those issues in this application in its Ontario productivity research, but did not show corresponding U.S. productivity results. In Clearspring's Reply Report in the Toronto Hydro application, we showed that if PEG made only those two changes that they have now made in this application, the 10-year U.S. TFP trend would equal -0.45%.[9]

  This shows that if PEG implemented the same methodology that it is using now in this proceeding, the U.S. industry would likely show a negative productivity trend. PEG and Clearspring both agree that U.S. results are relevant to setting a productivity factor for Alectra.

[8] We note also that using PEG's 11-year period (2014-2024) would also produce negative productivity results. These are -0.16%, -0.08%, and -0.26% for TFP, OM&A PFP, and Capital PFP, respectively.

[9] Please see Clearspring's Reply Report in EB-2023-0195, *Responses to PEG's New Analyses and Studies*. On page 7 of that report Clearspring discusses how PEG should include both customers and peak demand in its output definition for its productivity study (which it has correctly done now in its Alectra study), we state, "If PEG had taken the correct approach, the TFP trends for the U.S. industry would be lower. PEG's reported cost-weighted TFP trend would change from 0.10% to -0.26%. The average-weighted (which is the more appropriate TFP trend for Toronto Hydro as discussed in the prior point) would change from -0.13% to -0.45%.

- Both Clearspring and PEG agree that the MIFRS transition biases Ontario productivity results upwards even in the years after the transition by an unknown amount.[10] This artificial impact of an accounting change is causing the TFP trend to appear higher than what has actually occurred.

- Hydro One Network's IPO in 2015 produced a large productivity boost in that one year. According to PEG's working papers, Hydro One's TFP increased by over 11% in 2015 and its OM&A PFP increased by over 17% just in that one year. This increases PEG's average productivity results by a small amount. However, given the relatively large size of Hydro One, this IPO has a large influence on the cost-weighted productivity results provided in PEG's report. After adjusting PEG's working papers to exclude Hydro One from the sample, the cost-weighted Ontario TFP trend becomes negative. The substantial impact of one utility observation undergoing an IPO over ten years ago illustrates why the cost-weighted productivity results should not be given weight when considering productivity factors. We agree with PEG regarding its support in this proceeding in using average-weighting productivity trends to support recommendations.[11]

In the above discussion, we have demonstrated (using PEG's own working papers) that when certain necessary corrections are made to the PEG analysis, the Ontario TFP and OM&A PFP trends are in fact negative. Regardless of the negative productivity trend reality for both TFP and PFP, Clearspring also wishes to comment on PEG's suggestion of using OM&A PFP trends in the escalation formula when applied to OM&A revenue.

We advise against this approach for the following reasons:

- Just like with disaggregated cost benchmarking, as OM&A and capital are separated this creates an unknown error from items such as capitalization differences between utilities and substitution issues where capital and OM&A investment strategies differ between utilities and through time. TFP trends mitigate these unknown errors because both capital and OM&A are combined in the analysis.

- OM&A PFP trends vary from year to year by a much larger amount than TFP trends. The increased annual standard deviations of OM&A PFP results decrease the statistical confidence one should put in the results and increase the impacts of choices like the start year. TFP trends are far more stable and do not fluctuate from year to year to the same extent that OM&A PFP trends do.

[10] PEG confirms this in its response to AUC-11, part (c).

[11] An additional reason against cost-weighting productivity trends is that since they are highly influenced by a handful of observations, cost-weighted productivity trends will tend to have much higher annual standard deviations than the more stable average-weighted results.

3 PEG's New Cost Benchmarking Model

PEG's total cost benchmarking model shows that Alectra's 2027 to 2031 costs are -19.1% below PEG's benchmarks. This result is very similar to Clearspring's result of a -21.5% benchmark score. Both results indicate a 0.15% stretch factor is appropriate, and both consultants expressly recommend a 0.15% stretch factor for Alectra.

Despite this overall alignment in results and stretch factor recommendation, Clearspring has some methodological concerns regarding PEG's new modeling approach and dataset. We have three immediate issues requiring corrections that would impact Alectra's benchmarking score under PEG's new model. Clearspring does not have the time needed (prior to having to deliver this reply report) to investigate new variable values and correct those values in PEG's model, however, each of the following three corrections should be made and would improve Alectra's 2027 to 2031 benchmark scores using PEG's model.

1. PEG included a new renewable distributed generation ("DG") penetration variable in its model. This variable has a positive sign, implying that costs are expected to increase as DG penetration increases. While Clearspring has no objection to the variable itself being included, unfortunately, PEG held Alectra's renewable DG capacity flat at 2024 levels through 2031. This implies zero growth in DG capacity for seven years. Assuming zero growth in renewable DG capacity means that the DG penetration (which is the variable that PEG inserts into its model) is declining for Alectra since PEG divides the DG capacity by its peak demand variable. Correcting this error would improve Alectra's 2027 to 2031 benchmark scores.

   Related to this error is the implausibly low value given to Alectra. Alectra's renewable DG penetration in 2024 is 0.0031% in PEG's dataset. According to Table 6 in the PEG Empirical Report, the sample average is 6.50%. This means that Alectra's renewable DG penetration is given a value of .05% of the sample and that the sample has over 2,000 times the amount of renewable penetration as Alectra has, according to PEG's variable value. This appears incorrect to Clearspring at face value. The value used by PEG implies that Alectra has less than 0.2 MW of renewable DG on its system.[12] The level of this value should be increased to a reasonable level and it then be allowed to increase from 2024 values through 2031. These corrections would improve Alectra's benchmark score in PEG's model.

2. PEG held flat its skyscraper count variable for Alectra to its 2025 values through 2031. This assumes the number of skyscrapers will not increase over that six-year period in the cities served by Alectra. PEG's working papers show that Alectra added 22 skyscrapers to its service area from 2019 to 2025, a rise of over 50%. Therefore, assuming zero new skyscrapers from 2025 to 2031 (as PEG's dataset does) is clearly incorrect. For example, Mississauga continues to see growth and will add multiple skyscrapers during the CIR period. If PEG's dataset increased the skyscraper

[12] In Clearspring's examination of PEG's working papers, it appears that the value that PEG had gathered for renewable DG for Alectra in 2024 is 169 MW. This is about 1,000 times larger than the value implied in PEG's modeling dataset.

count through 2031 using reasonable assumptions, this would also result in an improvement to Alectra's benchmark score in PEG's model.

3. PEG states in its interrogatory response to AUC-28, part (b) that it had made an error in marking up the three Alberta utility's OM&A input price, making them 23% higher than they should have been. Reducing these input prices for Alberta would most likely alter and improve Alectra's benchmark results in PEG's model.

Clearspring also has other concerns regarding PEG's methodology and the explanatory variables included in the model. These include, but are not necessarily limited to: the inclusion of a quadratic variable on the density variable, changing to a skyscraper variable instead of the much more thorough percent congested urban variable, using a count of skyscrapers rather than divided by area or a composite output quantity index like most other business conditions are treated, including Alberta utilities despite them performing fewer functions than Alectra and the U.S. sample, excluding ATCO Utilities despite including the rest of the Alberta utilities on the basis ATCO's results look poor,[13] using the ratcheted peak demand variable (see the discussion in the prior section), adjusting for capital gains in the capital service price, and using a different rate of return for each utility rather than using the same rate of return as Alectra is given.

4 PEG's New G Factor Analysis

PEG and Clearspring both agree that the inclusion of a G Factor is supported by, and consistent with, cost theory and that it should be calculated using an elasticity-weighted scale index. On page 37 of PEG's Design Report, PEG states, "Furthermore, in a revenue cap index the inclusion of an escalator for growth in operating scale is consistent with cost theory and this theory specifically calls for an elasticity-weighted scale index."

The disagreement between Clearspring and PEG is regarding which econometric cost model to base the output weights on. Clearspring used weights which are derived from our total cost model, while PEG suggests using weights derived from its OM&A cost model. As PEG continues on page 37, "Our chief concern with Clearspring's G factor calculation is that it is based on econometric *total* cost rather than *OM&A* cost research." PEG calculates a G Factor of 1.08% versus Clearspring's G Factor of 1.81%.

As noted above, Clearspring does not support the use of OM&A cost models (and PFP trends) in setting parameters within a price or revenue cap index. Accounting differences in capitalization policies between utilities and substitution decisions between OM&A and capital will distort these disaggregated models. Both an OM&A cost model and PFP trends will cause results that have much high standard deviations and variances between utilities. These issues are mitigated when using a total cost model approach and TFP trends. For these reasons, Clearspring continues to recommend that the G Factor use the total cost model cost elasticity weights, resulting in a 1.81% value for Alectra.

[13] Please see PEG's response to AUC-14, part (a). PEG states, "ATCO Electric has been excluded from the samples for our transnational benchmarking due to extremely poor scores in runs where its data were included."

If, however, an OM&A model were to be used for the G Factor output weights, the model should not include the ratcheted peak demand definition used by PEG for the detailed reasons outlined in Section 2 above. Since PEG's ratcheted peak variable is never able to decline and has a definition that is constantly changing based on the year of the observation, PEG's variable is less responsive and less reflective to the costs attributed to peak demand in PEG's model. These deficiencies result in lower cost elasticity estimates for peak demand in PEG's model relative to Clearspring's model which has a consistent variable definition through time and does allow the variable to decrease. The first order peak demand variable in Clearspring's total cost model has a higher t-statistic than PEG's and is more precise.[14] PEG's lower and less precise cost elasticity estimates on peak demand reduce the weight given to peak demand growth in the G Factor calculation.

Despite our reservations in using an OM&A cost model to determine G Factor output weights, in examining this issue for this Reply Report, Clearspring modified its total cost model to an OM&A model.[15] Using this model, we can ascertain cost elasticities and, thus, weights for the growth in customers and peak demand to construct anticipated multi-dimensional output growth of Alectra from 2027 to 2031. Consistent with PEG's findings, the elasticity on peak demand decreased relative to a total cost model when the model is constrained to only an OM&A model. However, given the unbiased and unrestrained peak demand variable definition used by Clearspring, the decrease in the peak demand coefficient is less than what PEG observed. Clearspring estimated a 0.5959 cost elasticity for customers and a 0.3148 cost elasticity for peak demand when estimating the OM&A model. When using these cost elasticities in the G Factor calculation, we calculate a G Factor of 1.45%.

As noted, our recommendation remains that the correct G Factor value is 1.81% for reasons referred to above and in our original report. However, in the event the OEB prefers the use of an OM&A model for these purposes, the applicable G Factor would then be 1.45%.

5 PEG's New IPD Analysis

PEG and Clearspring agree that the Board's IPI tends to understate OM&A input price inflation. PEG states on page 7 of the PEG Design Report, "PEG agrees with Clearspring that the OEB's I factors tend to understate OM&A input price inflation." In PEG's response to interrogatory AUC-31, PEG recommends an IPD of 0.20% which is based on the 15-year historical inflation differential between the Board's IPI and Alectra's OM&A input price index. In addition to the 15-year historical IPD, PEG also calculates the IPD based on the most recent 10-year period of 2015 to 2024 on page 36, Table 2 of the PEG Design Report.

[14] The first order term is where only the variable is inserted in the model and not interacted with itself or other output variables. Its value is the estimated cost elasticity at the mean of the dataset. Clearspring's peak demand cost elasticity estimate is more precise than PEG's at the mean of the dataset. Both consultants use the cost elasticity at the mean of the dataset to calculate the G Factor.

[15] This model was estimated only for the purpose of attaining cost elasticity weights. Clearspring inserted OM&A expenses in the place of total costs and then only eliminated variables that became statistically insignificant or switched signs because of this change.

The reported 10-year historic IPD value is 0.26% and is more likely to be reflective of future economic conditions.

The key IPD difference between Clearspring and PEG is that PEG bases its IPD calculation using the historical differences and Clearspring uses 2027 to 2031 inflation forecasts for its IPD calculation. Both approaches have certain advantages. The advantage of the PEG historical approach is that the IPD value is set and does not change during the proceeding as new inflation forecasts become available. For example, in the Clearspring Report, Clearspring's IPD recommendation is 0.36%. In interrogatory responses, Clearspring was asked to use the latest forecasts and re-run the IPD calculation. The recalculated number became 0.24%.[16] In more recent forecasts, the IPD calculation has bounced back to 0.30%.[17]

The advantage of Clearspring's approach of using inflation forecasts to project the IPD is that the IPD is calibrated to the particular years of the upcoming CIR period and any historical economic changes that have occurred would be accounted for in the forecasts. Historic results do not necessarily predict the future and economic changes have occurred in recent years.

6 PEG's New Plan Design Alternatives

Clearspring has had limited time to examine PEG's "straw man" proposal discussed in the PEG Design Report regarding own-cost trending ("K-Bar"). The K-Bar approach is not an option under the OEB's Renewed Regulatory Framework and is not an approach being proposed by Alectra. Clearspring's view is that this approach is not appropriate for Alectra and should not be considered in this application for several main reasons.

First, a K-Bar approach (using properly constructed calculations to align with economic theory) would in our view only be a potential option for utilities that are in a "steady state" situation. The approach's foundational calculations are based on using historic spending amounts to forecast future spending amounts. This only potentially works, although would still require appropriate consideration and complex calculations, when future circumstances will be quite similar to past circumstances. We understand from Alectra that this "steady state" situation is undoubtedly not the case for Alectra in upcoming years. PEG tries to acknowledge this reality by excluding high growth cost items from the calculations to make the results close to the Company's forecasts. This defeats the purpose of pursuing a historical indexing approach in the first place.

Second, evaluating the merits and design of a K-Bar approach is a large undertaking that should be undertaken carefully and involve multiple stakeholders. A generic proceeding where all stakeholders and experts can put forth proposals and counterproposals and fully analyze the models of others is the proper place for this discussion. In our view, a single utility rate application (with a new proposal like this being

[16] Please see Clearspring's response to 1-Staff-17, part (b).

[17] This is based on Signal49 (formerly Conference Board of Canada) forecasts downloaded on March 19, 2026.

put forward partway through the process) is not the appropriate forum to consider PEG's "straw man" proposal.

Third, calibrating and testing any such proposed model to align with economic theory for a steady state K-Bar model is a highly complex undertaking requiring analysis and consideration of several parameters. Upon preliminary review, it is clear there are several notable omissions and issues with PEG's straw man proposal that require full investigation to consider the merits of a steady state K-bar model—these include an appropriate asset price inflation adjustment, future growth assumptions, historic base years used in the calculation, and historic growth escalators.[18] All of these entail complex and time-intensive analysis and evaluation, which cannot in the remaining timeline (and in our view should not in any event) be undertaken in the context of this single utility rate application.

PEG ends the K-Bar section on page 55 of the PEG Design Report by offering two alternatives assuming the OEB decides not to pursue further consideration of PEG's K-Bar approach in this proceeding. The first alternative, PEG says, would be to add a supplemental stretch factor and the second would be to reduce the proposed capex spending plan. Clearspring responds to these suggested alternatives with the following considerations:

- Both Clearspring and PEG have found that Alectra's costs are substantially below industry benchmarks, demonstrating consistently strong cost performance. This high level of cost efficiency persists even with full funding for the Company's proposed investment plan. These strong benchmark results do not justify arbitrary reductions in capital expenditures or the application of additional capital stretch factors.

- An X Factor of 0.15%, as proposed by the Company, is already significantly higher than the industry productivity trend expectations, which are negative after correcting PEG's working papers. Clearspring discussed these corrections and resulting negative productivity trends in Section 2 of this Reply Report. The fact that the Company is proposing a productivity factor of 0.0% despite its industry peers experiencing negative productivity trends already amounts to an implicit supplemental stretch factor on top of the proposed stretch factor of 0.15%.

- Electric distribution asset price inflation has exceeded 6% average annual growth rates for the last twenty years.[19] This compares to the Board's IPI calculation which as been less than 3% over that same period. Given the pressure on commodities and utilities across North America and globally to increase infrastructure to meet the needs of the future and with this historical track record, it is likely asset price inflation in the electric distribution industry will be higher than the 2% assumed in Alectra's capital planning process.[20] Managing this continued discrepancy between actual and

[18] In PEG's strawman proposal in this application, it also adds to this list the complex (if not impossible) task of deciding what spending should be considered "steady state" and what spending is not.

[19] Please see Clearspring's interrogatory response to 1-CCC-2, part b.

[20] Ibid.

forecasted inflation, and the continued misalignment of capital asset inflation within the I-factor, already places an additional challenge on the utility to find productivity savings to deliver its capital investment plan program. This is another implicit supplemental stretch factor on top of both the 0.15% and the productivity factor not being set at the negative industry productivity level.

7 Concluding Remarks

The following points provide a high level summary of Clearspring's responses to PEG's new studies and issues raised:

- PEG has put forth a new base productivity factor recommendation of 0.16% based on its Ontario TFP trend research. While Clearspring has not had the opportunity to conduct and put forth its own study on this issue, using PEG's own research and with the three required corrections discussed in Section 2 above, PEG's research shows a negative TFP trend. Clearspring demonstrated that by using the more appropriate 10-year period and using an output definition that is consistent through the study period, the productivity trend for Ontario is in fact negative.

  While we would support a negative productivity trend being included in the revenue escalation formula, as the economic theory would dictate, we are not recommending a re-opening of the productivity factor parameters for purposes of this proceeding, as we do not consider this to be necessary. The well-established 0.0% base productivity factor should be continued until a more comprehensive evaluation can be conducted in an appropriate forum. That forum should allow all parties time to produce their own industry productivity studies and have those studies considered and vetted appropriately. Clearspring, therefore, continues to recommend the use of a 0.0% base productivity factor in this application, albeit with recognition that this value of 0.0% includes an implicit supplemental stretch factor as both the Ontario and U.S. industry TFP trends show strong indications that they are in fact negative.

- Clearspring has several methodological concerns with PEG's new total cost benchmarking methodologies in this application as they are inconsistent in several significant ways with the established practices that both Clearspring and PEG supported and followed previously. These concerns are discussed in Section 3 above. However, despite these concerns, PEG's cost benchmarking results are very similar to Clearspring's benchmarking results, and both consultants recommend a 0.15% stretch factor.

- PEG and Clearspring both agree that the inclusion of a G Factor is supported and consistent with cost theory and that it should be calculated using an elasticity-weighted scale index. The disagreement between Clearspring and PEG is which econometric cost model to base the output weights on. For the reasons outlined in Section 4 above, Clearspring continues to recommend against the use of OM&A cost models (and PFP trends) in setting parameters within a price or revenue cap index. We continue to recommend a G Factor of 1.81%.

- PEG and Clearspring agree that the Board's IPI tends to understate OM&A input price inflation. An IPD would reconcile this difference and allow a proper inflation adjustment for OM&A expenses during the CIR plan. As discussed in Section 5 above, Clearspring uses Conference Board of Canada (now called Signal49) inflation projections for upcoming plan years as the basis for the IPD. PEG suggests using the historic differences in the Board's IPI and Alectra's OM&A input price inflation. Clearspring recommends using the forecasted approach and based on recent inflation forecasts, the IPD value is 0.30% for the 2027 to 2031 period.

- PEG's alternative "straw man" own-cost trending proposal is not appropriate for consideration in this application for several reasons which are discussed in Section 6 above. Alectra is not expecting to be in or even close to a steady state situation which immediately undermines the applicability of a K-Bar approach. Further, a potential K-Bar approach is a large undertaking that should involve all stakeholders beyond one utility's application, and the economic theory for a developing even a steady state K-Bar model is complex and would require careful analysis and consideration.

  In response to PEG suggesting other alternatives (instead of consideration of a K-Bar approach), such as adding a supplemental capital stretch factor or cutting proposed spending outright, Clearspring provided responses and considerations regarding these alternatives in Section 6 above. These include:

  - ✓ The Company is projected to be well below benchmark expectations in both the Clearspring and PEG models even with full funding for the Company's proposed investment plan; this finding does not warrant adding a supplemental stretch factor or reducing the investment plan.

  - ✓ There already exists an implicit supplemental stretch factor due to a X factor of 0.15% when the industry productivity trend, after correcting PEG's working papers, is in fact negative. The size of this implicit supplemental stretch factor is calculated to be around 0.2% to 0.3%.

  - ✓ Asset price inflation rates have historically exceeded 6% for the last two decades and do not appear to be abating, yet Alectra used a 2% inflation assumption in its capital planning process. This is effectively an implicit supplemental stretch factor on top of both the proposed 0.15% and the productivity factor not being set at the negative industry productivity level.