

YUKON UTILITIES BOARD

**IN THE MATTER OF ATCO ENERGY YUKON
2023 General Rate Application**

WRITTEN ARGUMENT OF NATHANIEL YEE

13-December, 2023

Introductory Comments:

In this document I will address expression of rates on billing statements, grid modernization, incentivization and coordination with YEC, interim rates and of course ROE and timing of the GRA. In the GRA timing issue, my arguments are meant to compliment the arguments of other interveners as I believe there is some general agreement in this area.

Issues not addressed in this document are not implying agreement or disagreement, but are left to other intervenors and the Board.

Arguments:

Rates – Expression on Billing Statements.

1. *“In AEY’s view, the primary advantage to customers of being informed of what they are actually paying for electricity is that it allows them to make informed decisions about energy usage, including adjusting their energy usage to save on their monthly bills. That advantage only arises if the information on billing statements is useful and comprehensible.”¹*
2. I am in complete agreement with AEY in the advantages of customers being informed of what they are paying for electricity, and support making the information on billing statements more useful and comprehensible to give customers this advantage and benefit.
3. The current billing statement does not give a clear view of rates or of fixed charges and therefore does not help the customer *“to make informed decisions about energy usage, including adjusting their energy usage to save on their monthly bills.”*
4. In the IR process for this proceeding, I presented a modified billing statement that would be far more useful to the customer and would provide the advantage to customers that AEY has described.
5. Asked for comment or improvement to this billing statement, AEY noted only that *“The findings in Board Order 2023-08, however, suggest that temporary adjustment riders, rate stabilization mechanisms, and government subsidies that are temporary in nature and updated from time to time should continue to be displayed separately for greater transparency.”*
6. Once again I find myself in complete agreement with AEY. My change to the billing statement will continue to display all riders, and also inform customers of what they are

1 AEY Response to Motions and YUB Directions - Oct. 27, 2023, pdf p.5 response to AEY-NY-005.

actually paying for electricity, allowing them the advantage that AEY so clearly stated. Greater transparency is achieved by displaying the riders separately and displaying the actual rates that result from the riders.

- The new billing statement is presented here, unchanged from what I submitted for AEY’s comment and suggestions in the IR process.

I have simply added the new summary to the left of the current billing statement. The best of both worlds, two ways to read your billing statement.

Adding this readable summary to the left of.... the current billing statement here,

Current Charges Inclusive of Riders		CURRENT CHARGES DETAILS	
Monthly Customer Charge Including Riders	21.37	CUSTOMER CHARGE	14.65
Energy Charge Including Riders	42.36	ENERGY CHARGE	30.10
(248 kWh @ .1708 per kWh)		AEY TEMPORARY RATE ADJUSTMENT	0.12CR
(0 kWh @ .1825 per kWh)		FUEL ADJUSTMENT RIDER	4.06
(0 kWh @ .1992 per kWh)		YEC TEMPORARY RATE TRUE UP	1.35
		YECL RATE ADJUSTMENT RIDER	3.71
		YUKON ENERGY REVENUE SHORTFALL RIDER	15.59
		YUKON INTERIM ELECTRICAL REBATE	5.61CR
Sub-Total	63.73	SUB-TOTAL	63.73
GST	3.19	GST	3.19
Current Billing	66.92	CURRENT BILLING	66.92
Amount Due	66.92	AMOUNT DUE	66.92

- AEY’s initial response to this sample billing statement was to claim that in the Rate Rebasing proceeding, *“the idea of a summarized charge per kWh was thoroughly discussed, evaluated and, ultimately, was not accepted by the Board.”*²
- However this was not correct, as the Board had actually indicated that this discussion was outside of the scope of the Rebasing Proceeding and should be addressed in a GRA. In response to a motion concerning this IR, the Board noted that *“Further, it is clear from the Rate Rebasing proceeding that this would be a GRA issue.”*³,
- Despite being reminded repeatedly that this is a GRA issue, AEY then replied that they would consider it in Q2 of 2024, outside of the GRA proceeding.⁴
- AEY presented no objections to my suggested change to the billing statement at any time during the GRA proceeding, and agrees that this will provide a benefit to the customer.

² AEY-NY-004 AEY Consolidated Responses Sept 28 pdf p. 972

³ Board Order 2023-24 appendix B p.1

⁴ AEY Response to Motions and YUB Directions - Oct. 27, 2023, pdf p.4, response to AEY-NY-004

12. As an added benefit, the costs of future rate rebasing proceedings could be minimized or eliminated, as there would be no need to roll riders into base rates to simplify billing statements. The transparency provided in listing the riders is preserved, and also providing actual rates to customers adds a new level of transparency.
13. **Recommendation:** That the Board direct AEY to implement the new two column billing statement format in Q2 of 2024 – or in Q1 off 2024 along with the changes being made as a result of the Rebasing proceeding if that would be easier for AEY from technical and/or customer service perspectives. It is notable that with the new billing statement in place however, there would be no real need for the changes proposed in the Rebasing proceeding and greater transparency would be achieved by not rolling riders R & J into base rates. “AEY’s objective is to present complex utility rates in a manner that is clear, detailed, and informative to all customers.”⁵ This change to the billing statement fully realizes AEY’s stated objective.

Rates Display – the online Bill Calculator.

14. While YEC has committed “to updating the bill calculator to match the output that is displayed on the bill statements,”⁶ the idea that an online display should be limited to what is available on a printed page is a bit backwards. People go to the website when they want more and better information. Limiting a website to what is on a printed page makes no sense at all.
15. Fortunately, this is not how AEY currently approaches the Bill Calculator. It is notable that the online Bill Calculator already provides more information than what is on the printed bill statements, including basic calculations of the riders as shown below. This is useful and should not be removed. If anything, these calculations should also be shown on billing statements, as I suggested in the Rebasing proceeding.

Detail currently shown on the Bill Calculator:

Yukon Energy Revenue Shortfall Rider	$37.85\% \times \$44.76 = \16.94
AEY Rate Adjustment Rider	$8.3\% \times \$44.76 = \3.72
Rider S Purchase Power Adjustment Rider	$0.001 \times 248 \text{ kWh} = \0.25
Yukon Interim Electrical Rebate	$\$-0.02262 \times 248 \text{ kWh} = (\$5.61)$
Fuel Adjustment Rider (\$/kWh)	$\$0.01635 \times 248 \text{ kWh} = \4.05

16. In AEY-NY-010, I asked for AEY’s comments about a couple of simple enhancements to the Bill Calculator.

5 AEY Response to Motions and YUB Directions - Oct. 27, 2023, pdf p.6, response to AEY-NY-008

6 AEY Response to Motions and YUB Directions - Oct. 27, 2023, pdf p.6, response to AEY-NY-010

17. AEY's initial response was that this was outside of the scope of the GRA.⁷ This was incorrect, as the Board confirmed in Board Order 2023-24, "*Further, it is clear from the Rate Rebasing proceeding that this would be a GRA issue.*"⁸
18. Informed that this is a GRA issue, AEY said they would "*consider further improvements*"⁹ outside of the GRA process, but provided no input or comment, and notably no objections to my suggested improvements.
19. The first of my suggestions was to display the actual cost of electricity inclusive of the riders, that is, the data in my two column billing statement above. There are of course other ways these totals could be displayed, but customers benefit most from the parallel display, and it would be more intuitive to have the Bill Calculator and billing statement resemble each other.
20. Combined with the detailed rider calculations already displayed by the Bill Calculator, a much better picture of how rates function in the Yukon is provided.
21. And as previously noted, "*In AEY's view, the primary advantage to customers of being informed of what they are actually paying for electricity is that it allows them to make informed decisions about energy usage, including adjusting their energy usage to save on their monthly bills.*"¹⁰
22. **Recommendation:** That the Board direct AEY to implement the new two column Bill Calculator format in Q2 of 2024 or before, as this change will provide benefit to the customer, and rolling it out before changes to the billing statement could be used as a way to prepare the customer for changes to the statement. AEY has stated that there is an advantage to customers knowing what they are actually paying for electricity, and has not made any objections to this change.
23. The second improvement discussed was linking the riders on the Bill Calculator to detailed and current descriptions of the riders. That is, clicking on

[Rider S Purchase Power Adjustment Rider](#)

$0.001 \times 248 \text{ kWh} = \0.25

would bring one to a detailed description of how this particular rider works. There is no cost involved in creating or maintaining this detailed description, as it already exists. The schedule for this rider approved by the Board would be ideal. In the case of Rider S, this is:

https://yukonutilitiesboard.yk.ca/pdf/Board_Orders_2020/Attachment_to_2023-17_-_Rider_S_Schedule.pdf

There is nothing new to create as the link would provide the customer with a pdf of the relevant schedule. These links would only need to be updated when the riders change – at the same time that Bill Calculator is already being updated.

⁷ AEY-NY-010 AEY Consolidated Responses Sept 28 pdf p. 978

⁸ Board Order 2023-24 Appendix B, pdf p.11

⁹ AEY Response to Motions and YUB Directions - Oct. 27, 2023, pdf p.6, response to AEY-NY-010

¹⁰ AEY Response to Motions and YUB Directions - Oct. 27, 2023, Response to AEY-NY-005 pdf p.5

24. AEY's "Understanding Your Bill" page also has brief descriptions of the riders, and these too should link to the actual schedules.
25. I am in agreement with AEY and with the Board that "it is important that temporary rate adjustment riders, stabilization mechanisms and government subsidies be considered separate from base rates."¹¹ For greater transparency and for those who want to understand more about rates and regulation in Yukon, linking to the appropriate schedules is an easy and accurate solution.
26. And for anyone digging this far in, along with the pdf of the schedule there could be a suggestion that one look at the YUB page and consider becoming an intervener in a future proceeding. Customers could be encouraged to understand the role of the Board and also to understand how they could potentially have a voice in the process if they were willing to put in the considerable time and effort. Interveners add validity to the process, and it might be good to encourage those who already find themselves looking at rate schedules.
27. These simple changes to the website, along with changes to the billing statement outlined earlier, would eliminate the need for rebasing proceedings claimed to simplify billing statements, and would provide the customer with information that AEY agrees is valuable. The Utilities can add as many riders as needed, as long as they are adequately explained to the customer and summary totals are provided. These changes provide a simple and cost effective approach.
28. **Recommendation:** That the board direct AEY to link to the appropriate schedules on the Bill Calculator and Understanding Your Bill pages.
29. And while there is room for improvement of AEY's presentation of rates via the Bill Calculator and Understanding Your Bill pages as outlined above, both pages are quite good, particularly in comparison with similar pages on the YEC site.
30. Before Mr. Maissan mentioned his appreciation of the Bill Calculator in the Rebasing proceeding, I had not known about it. As a customer of YEC, I had no reason to look at the AEY website. AEY's Understanding Your Bill page is much better than the YEC equivalent which has not been updated since 2020, and YEC does not have a Bill Calculator. It is not possible to "understand your bill" using the outdated and incomplete YEC website, whereas the AEY site just about does the job.
31. So why are we paying AEY and YEC to do the same thing? AEY and YEC both maintaining separate pages for the same information does not make sense. Given that AEY handles billing for YEC and does a much better job maintaining their website, it would make more sense to have YEC link to AEY for Understanding Your Bill and the Bill Calculator. YEC could note that with Yukon's postage stamp rate design, AEY and YEC bills are the same, and then provide the link to AEY.
32. While I realize that changes to the YEC website at first appear to be out of scope of the AEY GRA, this is an issue of coordination between the two companies, and ideally

¹¹ Board Order 2023-08, PDF p. 13, para. 55. and AEY Response to Motions and YUB Directions - Oct. 27, 2023, Response to AEY-NY-004 pdf p.5

could be handled by the Board in this GRA. Having to go through the same issue in both GRAs would be redundant work, like AEY and YEC spending time and money to attempt to provide exactly the same information to customers. Asking YEC to improve their pages to the level of AEY would add cost for YEC and take time in YEC's GRA. A simple link would minimize this waste.

33. **Recommendation:** That the Board direct AEY and YEC to coordinate using the same web pages for explanation of billing to customers. For the reasons above, these should be the AEY's Understanding Your Bill and Bill Calculator pages. This will enhance customer understanding of billing statements and the relation between AEY and YEC and reduce redundant work. As AEY already handles billing for YEC, it would make sense for AEY to handle explanation of billing also.

Incentive Alignment, DSM, AMI and TOU.

34. With responsibility for Yukon's electrical system split between AEY and YEC, and differing objectives and incentives, the Board needs to take the lead in driving coordination between the two, particularly in light of the goals of decarbonization as presented in Our Green Future.
35. While YEC would definitely benefit from DSM, AMI and TOU rates that would help address peak loads, the benefit to AEY is less pronounced, and yet much of what needs to be done will have to be implemented on the AEY side. Costs and benefits are not particularly well aligned. For this reason it is important that the Board take a stronger approach to making DSM work, including AMI and TOU rates.
36. Responding to questioning by Mr. Maissan about YEC's interest in controlling peak demand and the role of AMI, Mr. Massie noted that while AMI will be implemented by AEY, it is YEC that will benefit. *"So part of AMI can also have behind the meter, load control, which is more of a benefit to the generator, which on the grid is Yukon Energy being able to control whatever customer load in behind the meter."*¹²
37. AEY, on the other hand, generally benefits from sales growth, or increased electrical usage regardless of peak loads or timing.
38. AEY seems to look at IPPs and micro generation as risks and perhaps burdens. However if this is the direction we are going in terms of decarbonization, structures need to change to turn this into more of an opportunity for AEY.
39. *"You know, even I would say these IPP projects, when we first looked at it a number of years ago, and in the communities doing renewable studies, there was some -- it made a lot of sense of course, shifting -- reducing diesel reduction. But we as a utility, there was no way to fit it in rates."*¹³
40. *And "It is important to note that the IPP and MG programs were established as Yukon Government initiatives. As they were designed for non-utility participation in power*

12 Hearing transcript, Nov 27, 2023 p.55 line 13.

13 Hearing transcript, Nov 29, 2023 p.128 line 23.

generation, they do not precisely align with regulated utility responsibilities to provide a safe and reliable power supply or principles of ratemaking.”¹⁴

41. It is clear that without some modification, the lowest cost model promotes short term thinking and disregards longer term environmental concerns. This may have worked before, but it does not work now. As energy needs and environmental concerns evolve, regulation must also evolve to support this.
42. **Recommendation:** That the Board consider the bigger picture in the approach to funding and encouraging grid modernization. With AEY and YEC being separate, the costs and incentives and the cost-of-service model are not entirely in alignment with what is best for Yukon in the longer term. I ask that the Board look to updating the approach to regulation in a way that aligns with the evolving role of electrification and increasing demand for clean energy including IPPs and micro generation. While parts of rethinking the regulatory framework are perhaps “out of scope” in this GRA, I ask that the Board provide guidance on how and when regulation modernization can occur, realizing it is a bit abstract at the moment.
43. I am not yet familiar enough with Performance-Based Regulation (PBR) as championed previously by UCG to recommend it at this time, though it is clear that some a different approach is needed to support grid modernization, the Our Green Future initiative and the public interest. This is particularly clear with the separation of AEY and YEC. The current model provides insufficient incentive for AEY to implement grid modernization and AMI which would benefit YEC and the public. In describing PBR, UCG noted the misalignment of the current model in relation to the public interest.¹⁵

Customer focus, DSM and TOU rates.

44. It is concerning that DSM programs suggested by AEY and YEC for the most part do not sufficiently involve the customer. Given the state of the environment, many customers would be quite willing to shift some of the timing of some of their usage if they understood peak load issues and knew it meant less diesel and LNG being burned.
45. *“AEY’s communications with customers are primarily centered on sharing critical safety messages, providing service updates, and conveying important operational information.”¹⁶*

14 AEY-NY-018 AEY Consolidated Responses Sept 28 pdf p. 986

15 UCG final argument, YEC 2021 GRA para 112: 112. *“UCG submits it is precisely for these reasons why the UCG preference for evolving our regulatory framework from the current business model for utilities based on cost-of-service regulation, which was built for a time when safe and reliable power were the principle public interest; to a new strategy called performance base regulation (PBR) which most often better aligns utility performance with the public interest. In this new world of green energy, decarbonization as well as more involvement and investment by First Nations, PBR can support new business models by typing utility profits to achieving desired outcomes like reducing greenhouse gas emissions or making investments in decarbonization.”*

16 Response to AEY-FB-002 (a) AEY_Consolidated_Responses__Sept._28__2023Round1-IRs pdf p. 15

46. However YEC notes that *“Consumer education is also important. Educating people to avoid using electric intensive appliances at peak times can help shift peak load.”*¹⁷
47. This is yet another instance of misaligned incentives, where AEY, as the point of contact for most customers is not active in consumer education. That said, YEC and AEY have both failed to explain to customers how they could help in addressing peak load issues, and also failed to explain the benefits. YEC has more motivation, while AEY will have to help deliver the message. The Board will have to align incentives.
48. As an example, if customers knew that a simple and inexpensive timer on a water heater set to switch off during peak times would result in less diesel being burned, they just might do it. Many customers might not realize that they would still have hot water during these peak times, with the water heater only drawing energy off peak.
49. Regardless of how many customers initially took the initiative without further incentive, a customer understanding of this and related ideas are essential to the future acceptance and success of DSM. An informed customer benefits AEY and YEC.
50. For the most part, DSM in Yukon has been approached from the perspective of the Utilities and has not been much concerned with the customer. Proprietary peak shifting devices for controlling heat and hot water continue to be the approach, with some obvious problems that could be addressed by involving the customer and incentivizing through TOU rates.
51. The idea of giving control of power to home heating and hot water to AEY or YEC will certainly be a difficult sell to some. The customer gives control to the Utilities, who in turn use proprietary devices and software to control power usage in people's homes. What could go wrong? Many modern software systems do not have great records of reliability and resilience, nor do the companies that create and market them. The easiest example is the Peak Smart pilot launched in 2019, and suspended in 2021 when the maker of the system quit the business.
52. By following this approach, the Utilities are taking a risk in investing in systems that are relatively new and might disappear or be replaced as technologies change. Vendors in technology are always trying to sell upgrades that make existing systems obsolete. While I do like the ideas and can see that this technology will become important, following this route is not prudent until the technology has matured a little bit more as Peak Smart 2019-2021 has shown.
53. There is a way around this, however which is to focus on the customer. After all, the customers do not have much choice about a continued engagement with the Utilities, short of going off the grid. Whatever technologies appear and disappear, customers will remain. Educating and incentivizing the the customer to help address peak loads should be the first priority in DSM.
54. The clearest example is Time of Use rates. This motivates the customer to be aware of peak load times and to find ways to avoid them.

17 Response to NY-YEC-1-26 in YEC Consolidated IR Responses, November 29, 2023 for YEC’s 2023 GRA pdf p.102

55. As mentioned earlier, customers might not realize that that their water heaters do not need to be on all of the time, and that they will still have hot water when they want it. Even without TOU rates, installing a timer on a water heater can save customers' money and help address peak load issues along the way, but very few seem to know this. Simple mechanical timers are available for less than \$100 and work quite well.
56. And if customers are installing "smart home" technologies, they can install controls for heat and hot water that are compatible with whatever systems they have chosen. Customers rather than the Utilities will be responsible for the risk and the fix should this equipment fail or no longer be supported.
57. There are of course other ways to get customers involved, but this approach is universal and shifts the responsibility and liability away from the Utilities. Informed and motivated customers are an important part of the future of energy, and a resource that should not be ignored.
58. I do see advantages of the types of DSM programs that are currently being investigated, but motivating the customer should be first.
59. The current approach to DSM focuses on the M for Management and ignores the D for Demand. More than being a function of what the Utilities prefer, demand is a function of customers behavior and choices, and failing to focus on this is missing the point.
60. TOU rates have been mentioned as an obvious option, but of course there are others to be explored, and AMI is the basis of most options.
61. **Recommendation:** I ask that the Board direct AEY to provide a plan and schedule towards implementation of AMI and TOU rates, and to explore other ideas that inform, educate and motivate customers.

GRA Timing and ROE.

62. I am in agreement with other interveners in believing that AEY should have had a GRA before now, and that their ROE over the past years has been unreasonable. I will leave the bulk of the argument to others but will highlight AEY's flawed reasoning for not having a GRA.
63. *"And we've also heard a significant amount of evidence from Mr. Massie and Ms. Rogers and I think Mr. Martino as well in terms of the reasons that they weren't before the board in the period between 2018 and 2022. And a large part of that was because of the inability to accurately forecast given things like hyperinflation, even things like a global pandemic, and given things like global wars that have been ongoing."*¹⁸
64. AEY's claims of hyperinflation in the hearing and "exceptional hyperinflation in 2022"¹⁹ in IR responses exhibit an extreme exaggeration of the facts. The common definition

¹⁸ Hearing transcript, November 29, 2023 p.113 line 17.

¹⁹ AEY-NDP-009 AEY Consolidated Responses p.117

of hyperinflation is a monthly rate that exceeds 50%, which corresponds to a yearly rate of 12,874.63%. For comparison, Canada's annual rate for 2022 was 6.8%. Hyperinflation would have caused a \$100 item to cost \$13,000 at the end of a year. Does anyone other than AEY think this happened?

65. YEC in their 2023 GRA does mention inflation in the context of rising costs but does not claim "the inability to accurately forecast" because of it, and adjusts accordingly. Their take on inflation is more measured and correct. *"General Inflation – YEC and Yukon have experienced the recent higher inflation impacts that have affected all other markets."*²⁰
66. As for the global pandemic, it did present many unknowns. For this reason, YEC noted the following in their 2021 GRA, submitted in November of 2020. *"However, the effort to implement any rate change in 2020 had to be suspended in the spring in response to the disruptive impacts on all parties of the COVID-19 pandemic."*²¹ Was AEY forecasting affected by COVID where YEC's was not?
67. And while the Russia / Ukraine war has contributed to inflation and supply chain issues, it began in 2022 and referring to this as *"global wars that have been ongoing"* is again quite an exaggeration. While noted in YEC's GRA, it was not seen as a reason to avoid one.
68. AEY resorted to such exaggerations to rationalize not doing a GRA earlier because they did not have any real reasons. Did AEY experience hyperinflation that nobody else noticed? How was AEY so much more severely impacted by COVID and Russia / Ukraine than YEC or anyone else? It seems more likely that AEY just liked their ongoing ROE numbers. AEY claims hyperinflation and global wars affected their ability to bring forward a GRA, but curiously did not affect their bottom line.

Interim Rates – future considerations.

69. Terms like "rate stability" and "rate shock" have been used as justifications in discussion of interim rates. However it is difficult to see how these are sufficient rationalizations for the temporary rate increase that interim rates provide.
70. If a Rider is supposed to be temporary, and it happens to expire, it is operating as it should. If a variable rider goes to zero, it is operating as it should. If AEY wants to raise rates by a particular date or replace expiring temporary riders before it would happen in their GRA, AEY should have (and could have) filed the GRA earlier.
71. Interim rates being implemented in January is particularly unconscionable given that this is typically one of the highest usage months. In January, customers will be paying higher rates than approved in a GRA, while being protected from "rate shock" months later when overall bills will be lower and higher rate would have less of an impact. Somehow this is presented as a benefit to the customer. And somehow this rationalization is accepted.

²⁰ YEC 2023 GRA p. 21

²¹ YEC 2021 GRA p. 17

72. Rate shock and rate stability are also meaningless from a customer perspective, given that currently customers have no clear view of rates. YEC agrees with this assessment in using the term “bill stability” instead of “rate stability” in their GRA, which would be meaningful if energy usage were stable, though of course it is not. While I am still not convinced of the validity of interim rates for the reasons above, my recommendation of showing actual rates on billing statements would at least make the discussion reasonable.
73. Some form of rate shock might be felt by customers upon learning that AEY has exceeded their approved ROE in 13 of the last 15 years²² and is now in the process of applying to raise rates with interim rates starting in January.
74. **Recommendation:** While interim rates might sometimes be justified (hyperinflation and global wars come to mind), there should be a more cautious approach to using them otherwise. They should be the exception and not the rule. This should take into account not just what AEY wants, but also what is fair and just for the customer.

Respectfully submitted,

Nathaniel Yee
December 13, 2023