ATCO Electric
YUKON

August 19, 2014

Yukon Utilities Board
Box 31728
Whitehorse, YT Y1A 6L3

Attention: Mr. Bruce McLennan
Board Chair

Dear Sir:

RE: Application to Revise the Diesel Contingency Fund (DCF) and Related Amendments to the Energy Reconciliation Adjustment (ERA)

Please find enclosed the Information Responses from ATCO Electric Yukon (AEY) relating to the above noted Application.

Should you have any questions, please contact the undersigned at (780) 733-2489.

Yours truly,

Original Signed By:

James Grattan, CA
Director, Regulatory

JG/llk
Encl.

YUB-YECL-1

Reference: **YECL DCF-ERA filing**

Issue/sub-issue: **DCF**

Quote: The activation of the DCF was based on a simple concept: YEC would determine whether it was actually burning diesel in a given month to determine if diesel was "on the margin" in that month…

…

The ERA and DCF were designed to be closely integrated. The ERA allowed YEC to flow-through its incremental diesel generation costs — as determined by the DCF — to YECL when actual wholesale sales varied from the companies' joint Board-approved forecast.[1]

…

All forecasts were prepared by Yukon Electrical and used jointly for both Yukon Electrical and YEC in common test period GRAs.

…

…in 2012, YEC purported to charge $439,000 to Yukon Electrical based on YEC's unilaterally modified DCF and ERA mechanisms.[2]

Preamble: Further information is required.

Request:

(a) With regard to the ERA as originally approved as part of YECL and Yukon Energy Corporation (YEC) joint general rate applications (GRA),[3] is it correct to assume that the ERA and DCF were activated simultaneously, on the basis of a 250 MW.h diesel usage level per month threshold?

[1] YECL DCF-ERA filing, January 31, 2014, page 2.
[2] YECL DCF-ERA filing, January 31, 2014, page 3.
[3] YECL DCF-ERA filing, January 31, 2014, page 2.

(b) Please provide a past ERA determination and explanations regarding the underlining calculation(s).

(c) On a go-forward basis, if each of the utilities, prior to submitting their respective GRAs, were to consult the other regarding load forecasts, would this serve to mitigate concerns about joint Board-approved forecasts? Please explain.

(d) Prior to YEC submitting its 2012-13 GRA, did YEC consult with YECL about permanently switching on the DCF through the use of a formulaic approach? If so, please provide rationale and reasoning that was proposed and YECL's response. Please provide all documentation.

(e) Considering the DCF only and considering the historical basis for triggering the DCF, is it appropriate to permanently switch on the DCF at this time? Please explain.

(f) If the Board were to adopt a monthly diesel consumption (MW.h/month) threshold to trigger the DCF, as was done in the past, and given that YEC and YECL are not jointly managed,

a. does YECL have any concerns with adopting a DCF MW.h/month trigger approach?

b. what, from YECL's perspective, would be important considerations when choosing an appropriate DCF trigger threshold?

c. what would be an appropriate DCF trigger threshold?

d. What changes and considerations would YECL recommend, if any, to its current DCF proposal?

(g) Please explain the differences between a GRA forecast that you would prepare for YECL GRAs versus one that you would provide for a YEC GRA forecast.

Response:

(a) Correct. It is important to note, however, that activation of the DCF and the ERA did not necessarily result in an ERA charge or refund to YECL in a given month. For instance, in a month where diesel usage exceeded 250 MWh yet YEC's wholesale sales to YECL were equal to forecast (i.e. the variance in the amount of diesel burned was attributed entirely to fluctuations in hydro availability from

long-term averages), the DCF and ERA would have been activated but there would have been no ERA charge from YEC to YECL.

(b) Please refer to YUB-YECL-1(b) Attachment 1 for an illustrative purchased power calculation, including the ERA, from 1997.

The calculation uses the approved Rate Schedule 42 Base Rate of $0.06840 per kWh for YECL's purchases (line 3) from YEC. This rate was based on YEC's approved revenue requirement (line 1) and the approved annual forecast of the kWh to be sold to YECL by YEC (line 2). The approved Rate Schedule 42 "Run-out" rate of $0.10450 per kWh, based on the incremental costs incurred by YEC to generate additional kWh using diesel, is also used in the calculation (line 4).

The amount paid by YECL for wholesale power to YEC (line 18) is based on the actual kWh purchased (line 9) multiplied by the base rate (line 3). The ERA charge (line 20) was an additional amount paid or recovered equal to the difference between the forecast and actual energy purchases in kWh (line 10) multiplied by the difference between the base rate and the run-out rate.

It is important to note the above noted example is illustrative and that YECL and YEC had significant disagreements on the interpretation of Rate Schedule 42 with respect to the calculation of the ERA when actual sales were 10% or greater higher than forecast (e.g. January 1997) and whether the DCF and ERA was to be turned on and off on a monthly basis as opposed to an annual basis. These disagreements ultimately resulted in the need for a Board-sponsored negotiated settlement process. Please refer to Section 2.2 of YECL's Application for further information on the history of the ERA.

(c) No, requiring the utilities to consult each other regarding load forecasts prior to filing GRAs would not serve to mitigate ATCO Electric Yukon's concerns about joint Board-approved forecasts.

Preparing a thorough, GRA-quality forecast is a resource-intensive process. YEC and ATCO Electric Yukon are separate entities that do not necessarily share test periods, so requiring each of them to consult on forecasts on an "as required" basis would result in inefficiencies (which would impose additional costs on ratepayers).

In addition, there are numerous further issues that would result from requiring YEC and ATCO Electric Yukon to consult each other on load forecasts. For instance:

- What would the timelines be? When would ATCO Electric Yukon have to provide forecasts to YEC by?
- How would the forecasts be defended? Would ATCO Electric Yukon be required to answer IRs on behalf of YEC? Would ATCO Electric Yukon be required to provide a hearing witness?
- How would ATCO Electric Yukon make changes to YEC's forecasts should circumstances change? i.e. If ATCO Electric Yukon forecasts YEC test years 2012-2014 in 2011, and then has its own GRA application for test years 2014-2016, ATCO Electric Yukon would typically forecast its 2014-2016 GRA in 2013. Would ATCO Electric Yukon be able to update the forecast for 2014 based on the latest best available data?
- If the vast majority of YEC's forecast sales risk becomes ATCO Electric Yukon's responsibility (i.e. ATCO Electric Yukon assumes risk for YEC's forecast), how does this impact ATCO Electric Yukon's risk profile?

(d) No, ATCO Electric Yukon was not consulted regarding permanently turning on the DCF prior to YEC submitting its 2012-13 GRA.

(e) No. ATCO Electric Yukon recognizes that whenever a material amount of diesel is included in YEC's base rates, and that amount of diesel may significantly fluctuate (due to hydro availability beyond the utility's control), it is reasonable for YEC to have a deferral mechanism to true up diesel costs to actuals. Otherwise, a considerable component of YEC revenue requirement may be under or over-recovered (and YEC could face large shortfalls or windfalls due to circumstances beyond its control).

In fact, such a situation occurred in 2012 and 2013. As shown in the following table, by virtue of including a large component of diesel in its base rates, YEC has recovered significantly more diesel cost from ratepayers than it actually incurred in either 2012 or 2013.

	2012		2013	
	MWh	**$000s**	**MWh**	**$000s**
Diesel recovered by YEC's base rates (Calculated based on embedded diesel component in YEC base rates)	8,288	2,379	11,069	3,178
Actual diesel incurred (YEC Jan 31 filing, Table 1, Line L7b)	2,683	770	1,114	320
Diesel Variance	5,605	1,609	9,955	2,858

(f) a. ATCO Electric Yukon does not have a concern with adopting a monthly MWh diesel consumption threshold for triggering the DCF in some cases, but believes it will be very difficult in the current environment to establish an accurate monthly forecast threshold that can be efficiently and accurately tested.

In the first half of the 1990s, when the DCF was originally designed and proposed, the difference between the load experienced during "on the margin" and "off the margin" conditions was very clear as it was affected by a single industrial customer (the Faro mine). The Yukon Integrated System (YIS) is significantly more complicated due to the increased size of the grid (e.g. the Mayo-Dawson transmission line, the Carmacks-Stewart transmission line), the inclusion of hydro and diesel generation in Mayo, the addition of diesel generation in Dawson City, and the location and quantum of industrial load (e.g. Minto and Alexco). These factors impact decisions on dispatch which, in turn, impact forecast and actual line losses which, in turn, impact when diesel is or is not on the margin.

YEC acknowledged the difficulty of forecasting monthly long-term average hydro availability and the unreliability of those forecasts in its January 31, 2014 filing in this proceeding (at page 1-5 of Appendix 1):

> "…due to imprecision in forecast long-term average hydro monthly distributions it is possible that inappropriate values may arise during monthly estimating but these will not be part of final annual DCF calculations. Monthly calculations will be a placeholder with ultimate final calculations performed only on the annual calendar year values."

b. ATCO Electric Yukon believes the idea of diesel 'on-the-margin' has been overused and overcomplicated and does not necessarily believe a preset

trigger should turn the DCF ON or OFF. As described above, YEC has stated it cannot forecast accurate long-term average hydro monthly distributions experienced by the system and over the past two years secondary sales have been made available to customers. This leads to confusion as to what is really meant by diesel 'on-the-margin'. The concept also makes it very difficult to accurately forecast diesel to an exact amount.

ATCO Electric Yukon understands diesel is a cost on YEC's system. If YEC forecasts this cost, it should be included in a YEC GRA application, tested, and approved (if deemed reasonable) by the Board. If that cost could be subject to material variances due to circumstances beyond the utility's control, it is appropriate that a deferral account be used to protect both YEC and ratepayers.

c. ATCO Electric Yukon suggests that the most important consideration for whether the DCF is ON or OFF is whether or not a material amount of diesel is included in YEC's base rates. If a material amount of diesel is in YEC's base rates, then ratepayers and the utility should be protected from material fluctuations in the amount of diesel consumption due to not reasonably forecastable circumstances via a straight forward deferral mechanism.

d. There are two main aspects of YEC's DCF proposal that ATCO Electric Yukon would recommend require further consideration.

YEC has criticized ATCO Electric Yukon's proposed deferral mechanism for incorporating all fuel variances, including those not caused by fluctuations in water levels. However, ATCO Electric Yukon does not believe that even a model as complex as the YECSIM is able to precisely remove the impacts of all other variables, including YEC's operation of the system, from historical data in order to accurately forecast generation at various levels of load. As well, the purpose of a deferral mechanism such as the DCF or ATCO Electric Yukon's proposed alternative is to simplify the regulatory process by not requiring complicated, expensive and untestable models in an attempt to forecast costs, such as the amount of diesel that will be consumed, that are not reasonably forecastable. A deferral mechanism should be easily understandable and testable by the Board and participants in the GRA process. ATCO Electric Yukon does not believe is to be the case with YEC's current DCF proposal.

ATCO Electric Yukon also suggests setting a lower dispersal threshold for the DCF than that proposed by YEC in order to balance the need to avoid rate shock with the requirement to send appropriate price signals to customers. ATCO Electric Yukon discusses this in further detail in its response to YUB-YECL-5(d).

(g) A sales forecast prepared by ATCO Electric Yukon in preparation for filing a GRA is based on detailed and rigorous analysis of historical trends of all relevant variables, including weather, average energy consumption, customer additions, etc. by community and by customer class. The forecast also takes into account information collected through work ATCO Electric Yukon staff does in the communities it serves as well as consultation with numerous municipalities, government officials and local developers. The process is resource-intensive, time consuming and comprehensive.

A forecast prepared for ATCO Electric Yukon's annual business planning process, as provided to YEC for its GRAs, is prepared at a high level and does not involve detailed and rigorous analysis of historical trends and the information collection through ATCO Electric Yukon staff at the community level.

The Yukon Electrical Company Limited
Illustrative Purchased Power Expense (Including ERA) Calculation
For the Year Ended December 31, 1997

	Wholesale Rates:														
1	YEC Revenue Requirement			14,735,239											
2	Purchase Forecast			215,412,748											
3	Base Rate	L.1 / L.2		$0.06840	per kWh										
4	Run-out Rate			$0.10450	per kWh										
5															
6			**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
7	**Energy (kWh)**														
8	Forecast		22,765,425	20,923,490	19,945,730	17,296,197	15,791,037	14,507,969	14,003,372	14,078,661	15,543,062	17,654,901	20,514,599	22,388,303	215,412,748
9	Actual		26,803,367	19,231,475	20,898,470	17,883,528	16,435,000	14,724,083	14,955,238	15,222,044	15,646,766	19,044,768	19,391,810	21,052,704	221,289,253
10	Variance	L.9 - L.8	4,037,942	(1,692,015)	952,740	587,331	643,963	216,114	951,866	1,143,383	103,704	1,389,867	(1,122,789)	(1,335,599)	5,876,505
11	Variance - %	L.10/ L.8	17.7%	-8.1%	4.8%	3.4%	4.1%	1.5%	6.8%	8.1%	0.7%	7.9%	-5.5%	-6.0%	2.7%
12															
13	**Expense ($)**														
14	Forecast	L.8 x L.3	1,557,155	1,431,167	1,364,288	1,183,060	1,080,107	992,345	957,831	962,980	1,063,145	1,207,595	1,403,199	1,531,360	14,734,232
15	Actual		1,915,533	1,254,351	1,463,849	1,244,436	1,147,401	1,014,929	1,057,301	1,082,463	1,073,982	1,352,836	1,285,868	1,391,790	15,284,740
16	Variance		358,378	(176,816)	99,561	61,376	67,294	22,584	99,470	119,483	10,837	145,241	(117,331)	(139,570)	614,095
17															
18	Expense Recorded	L.9 x L.3	1,833,350	1,315,433	1,429,455	1,223,233	1,124,154	1,007,127	1,022,938	1,041,188	1,070,239	1,302,662	1,326,400	1,440,005	15,136,184
19															
20	ERA Adjustment	L.15 - L.18	82,183	(61,082)	34,394	21,203	23,247	7,802	34,363	41,275	3,743	50,174	(40,532)	(48,215)	148,556

YUB-YECL-2

Reference: YECL DCF-ERA filing

Issue/sub-issue: ERA calculation

Quote: However, circumstances have changed. The original ERA, and YEC's proposed DCF and ERA, are no longer appropriate.

…

…However, YEC's proposed ERA calculation is not based on actual costs incurred; instead, the calculation is based on a derived variance cost from an untested simulator.[4]

Preamble: Further clarification is required.

Request:

(a) Please explain why the original ERA is no longer appropriate. Is it solely a question of not being jointly managed and accordingly, YEC and YECL submit separate GRAs?

(b) For purposes of clarification, please explain:

a. by way of an example calculation, the basis of YECL's submission that the YEC's proposed ERA calculation is not based on actual costs incurred.

b. whether ERA calculations were historically premised on actual costs incurred.

c. historically, how were ERA variance costs determined.

d. whether ERA variance costs required or were dependent upon a simulation.

(c) Please provide an example calculation using one month of actuals provided by YEC for which YECL is being billed.

[4] YECL DCF-ERA filing, January 31, 2014, page 4.

Response:

(a) No, the reason why the original ERA is no longer appropriate is not solely a question of YEC and ATCO Electric Yukon no longer being jointly managed or sharing test periods. Please refer to YUB-YECL-4 Attachment 1 for a full discussion of how circumstances have changed since the ERA was last active and why the former mechanism is no longer appropriate.

(b) To assist in clarification, please see the following:

a. In 2012, YEC's calculation of the ERA charge to ATCO Electric Yukon is as follows (from page 9, YEC's January 31, 2014 submission):

Line	Description	2012	Units	Comments
E	Incremental net of Fish Lake	13,272	MWh	
H	Total YEC incremental generation relative to GRA approved	18,987	MWh	
I	**Expected diesel generation** at actual load	15,622	MWh	This does not match actual diesel cost incurred. From page 8, Table 1 of YEC's January 31 Filing, Line ***L7b*** shows YEC Net Diesel at **2,683 MWh.** All subsequent ERA derivations are made using "Expected diesel generation", 15,622 MWh, Not 2,683 MWh.
J	Expected diesel generation at GRA load	7,926	MWh	
K=I–J	**Total YEC expected incremental diesel generation**	**7,696**	**MWh**	
L=K/H	Incremental Diesel in Base Rates	40.5%		
M=E*L*Losses	Generation Variance Charged for Diesel Cost	5,853	MWh	
N=E*(8.298 + average rider)	Added Cost	1,242	$000	
O=M*28.71	Added Cost [due to Wholesale Variance]	1,680	$000	
P=N-O	Net Impact on YEC	-439	$000	
Q = (-P)	ERA Charge to YECL	439	$000	

Further to the above, in YEC's June 30 Supplemental Filing (at page 1-2 of Attachment 1), YEC defines its "actual diesel costs" in the following way:

> "YEC's "actual diesel costs" as reflected in its accounts are currently determined in any year based on long-term average hydro generation (not actual hydro generation) requirements at the actual grid generation level in that year, i.e., under the proposed DCF in YEC's filing, the difference in diesel generation costs between actual and long-term average requirements is the amount that goes into (or comes out of) the DCF such that in 2012 and subsequent years YEC's "actual diesel costs" are based on long-term average hydro generation."

b. & c. Yes, historical ERA calculations were based on actual costs because the system and the conditions under which the ERA was calculated were far simpler than they are today. Please refer to YUB-YECL-1(b) Attachment 1 for a copy of an ERA calculation from 1997. The historical ERA calculation was based on a very simple premise: When the Faro mine was operating, diesel was "on the margin" and all variances in power purchases by YECL directly correlated to variances in the amount of diesel burned by YEC. In the 1997 example, the approximate incremental cost of an additional kWh of diesel generated by YEC was 3.61 cents (10.45 cents minus 6.84 cents), so any variance in the power purchased by YECL was simply multiplied by 3.61 cents to calculate the ERA charge.

d. No, historical ERA costs were not based on a simulation such as the YECSIM model.

(c) YEC has not provided any monthly data to ATCO Electric Yukon and ATCO Electric Yukon has not been billed any monthly charges from YEC. As such, ATCO Electric Yukon does not have the information available to provide an example calculation.

YUB-YECL-3

Reference: YECL DCF-ERA filing

Issue/sub-issue: ERA charges

Quote: Yukon Electrical would also note that the Board, in Decision 2009-02, approved a wholesale purchase power deferral flow through for Yukon Electrical. This approved deferral was also referenced in Board Order 2010-13 as follows:

> 168. In Board Order 2009-2, the Board approved YECL's wholesale purchase power deferral account that dealt with the treatment of variances between the actual and forecast cost of purchase power for the hydro zone during the period **when diesel generation was on the margin** and when the approved run-out rate set out under the Energy Reconciliation Adjustment (ERA) in Schedule 42 was different than the rates used to determine the forecast cost of purchase power for diesel generation. [emphasis added]

As well, the Board indicated the following:

> 181. Implicit in the Board's approval of the purchase power deferral account is the approval of a future rider to dispense of the accumulated balances in the deferral account.

Based on the above approvals, if it is ultimately determined that an ERA amount should be charged to Yukon Electrical, then Yukon Electrical respectfully submits this amount would be flowed through to all Yukon ratepayers.[5]

Preamble: Clarification is required.

Request:

Respecting the above submission, is YECL indicating that ratepayers, be they YECL customers or YEC, should be paying for ERA charges? Please explain.

[5] YECL DCF-ERA filing, Cover letter, page 8, Yukon Electrical's Proposal.

Response:

Yes, should the Board decide to approve the ERA mechanism as proposed by YEC, ATCO Electric Yukon is proposing the ERA amount should be flowed through to ratepayers. Put differently, this flow through would include any additional amounts charged to ATCO Electric Yukon by YEC for variances between the amount of diesel forecast by YEC and the actual amount of diesel (or, as in the case of YEC's ERA calculation, a derived actual amount of diesel based on the YECSIM model) due to differences between YEC's wholesale sales forecast to ATCO Electric Yukon and actual wholesale sales.

As shown in Table 3.1 of ATCO Electric Yukon's January 31 Application, if YEC's forecast of wholesale sales to ATCO Electric Yukon for 2012 had been equal to actual wholesale sales to ATCO Electric Yukon for 2012, YEC's shortfall for 2012 would have been higher and 100% of the diesel cost YEC is proposing to charge ATCO Electric Yukon through the ERA would have been recovered from ratepayers via YEC's Rider J and Rider R. Therefore, any proposal that recommends that ATCO Electric Yukon bear the costs of an ERA charge would be inappropriate since it would allocate the risk of YEC's forecasting to ATCO Electric Yukon.

It should also be noted that ATCO Electric Yukon has a Board-approved Wholesale Purchased Power Deferral Account.

YUB-YECL-4

Reference: YECL DCF ERA filing, Appendix A

Issue/sub-issue: Past practices

Quote: Yukon Energy continues to rely heavily on past practices and methods even when they do not make sense in today's environment.

Preamble: Clarification is required.

Request:

Please explain DCF and ERA past practices which are in YEC's current proposal and why, if agreed to in the past, YEC's current proposal is unacceptable.

Response:

Current ATCO Electric Yukon personnel were not directly involved in the design of the DCF and ERA. Accordingly, ATCO Electric Yukon engaged Mr. Richard Stout to respond to this question, as he was directly involved in both the design and administration of the DCF and ERA. Please refer to YUB-YECL-4 Attachment 1 for Mr. Stout's explanation of DCF and ERA past practices, including the circumstances under which the DCF and ERA were created, how those circumstances have changed since the mechanisms were last activated, and why in current circumstances YEC's preferred DCF and ERA proposal would be inappropriate

Report on the management of forecast risks related to diesel costs on the integrated Yukon electric system

1. Introduction

My name is Richard Stout and I served as the Manager of regulatory affairs for ATCO from 1989 until 1998. My responsibilities at that time included reaching agreement with Cam Osler of Intergroup Consultants (representing Yukon Energy Corporation ("YEC")) on the design of the DCF and ERA risk transfer mechanisms negotiated between YEC and The Yukon Electrical Company Limited ("YECL") (now operating as ATCO Electric Yukon ("AEY")) when both companies were jointly managed by ATCO.

I currently work as a consultant on utility economics and regulation based in Vancouver. Given my historical knowledge of the DCF and ERA and my subsequent experience in related matters, I was asked by ATCO Electric Yukon to explain DCF and ERA past practices and consider an appropriate solution in the current circumstances. As outlined below, it is my view that the DCF and ERA are no longer appropriate solutions to managing the forecast risks associated with diesel costs on the integrated electric system that they were originally intended to manage.

2. The appropriate allocation of forecast risks in general

The DCF and ERA were designed to manage forecast risks associated with diesel costs on the Yukon Whitehorse Aishihik Faro (WAF) integrated grid. Since that point in time, it is my understanding the transmission grid has grown and now includes generation and customers north of Faro including such locations as Dawson City and Mayo

The most easily comprehended point to begin a discussion of the appropriate treatment of forecast risks is to consider the general circumstances of a single vertically integrated utility with a single owner. The simpler circumstances of a vertically integrated utility with a single shareholder allows for a less confusing discussion of risk allocation than has previously been presented in these proceedings and is generally one that all participants can agree with.

YEC has correctly outlined the appropriate treatment of the various forecast risks under these more general and simpler circumstances in Table 1.1 of YEC's supplementary evidence (filed June 30, 2014) with a brief description of cause, risk allocation and mechanisms for placing the risk on the appropriate party. The risk relationships and recovery mechanisms for the first three items listed in Table 1.1

— diesel price variance, water volume variance, and sales volume variance — are widely accepted by regulators and customers.

For illustrative purposes, and to understand **why** the outdated DCF/ERA era mechanisms need to be replaced, consider how the risk relationships would work under generally accepted practice for a **single vertically integrated utility** without the complexity of two separate or partial owners:

1. Diesel price risk. Diesel price changes from forecast are a risk normally borne by utility ratepayers. A diesel price is forecast for the GRA test period (assume 2 years for convenience) that becomes part of the cost recovery in setting the utility's retail rates for that 2year period.

   To the extent that actual diesel prices experienced then are higher or lower than diesel price forecast in the GRA, the difference accumulates in a deferral or adjustment account and the balance is later recovered from or refunded to ratepayers through a fuel price adjustment rider.

2. Water level risk. On an integrated hydraulic system (where diesel or other fuel will be burnt if the volume of water is insufficient to meet customer demands) the cost of extra diesel dispatched as a result of experiencing lower water levels than the GRA forecast is normally borne by ratepayers and is usually "smoothed" through use of deferral accounts.

   The utility forecasts the water volumes it expects to be available for electricity generation on the basis of a long term average (or sometimes on the basis of specific shorter term forecasts for the GRA test period that recognizes an unusually low or high reservoir level). Based on the forecast retail sales volumes (adjusted for transmission losses) *for the same GRA period*, the utility forecasts the volume of diesel generation that it expects will be required to make up any shortfall in the hydraulic supply. This forecast volume of diesel generation (if any) and its forecast cost is then built into the utility's retail rates set for that (assumed 2 year) GRA period.

   To the extent that the actual water volumes depart from the forecast (due to more or less precipitation than forecast) the utility will experience a need to burn more or less diesel fuel than was forecast in the GRA and used to determine its rate levels. The resultant difference in the cost of diesel fuel accumulates in a deferral or adjustment account (the equivalent of the DCF) and the balance is later recovered from or refunded to ratepayers through a rate rider.

   It is sometimes attempted in the design of such deferral or adjustment mechanisms to minimize or avoid the application of recovery riders on the expectation that shortfalls in water volumes in one period will be offset by

saleable surplus in subsequent periods, though this is difficult to achieve in practice and may result in large account balances carried forward.

3. Sales volume risks are normally borne by the utility shareholder. The utility will forecast the sales volumes it expects and the total energy production costs of satisfying them. To the extent that the utility experiences higher than forecast sales it will receive both higher than forecast revenues and incur higher than forecast costs (or vice versa). To the extent that the utility's incremental revenues exceed its incremental production costs it will make more money than forecast if it sells more than expected or forecast. If on the other hand the utility's incremental revenues are less than its incremental costs (perhaps due to having high cost generation such as diesel on the margin) it will make less money than forecast.

   These risks of gain or loss driven by variances in the sales forecast are borne by the shareholder and no accounting mechanism to mitigate them such as a deferral or adjustment rider is normally provided. Where there is a significant step in incremental production costs to meet sales volume variances, such as a change in supply from hydraulic to diesel, the utility may manage the risk of over/under earning through designing stepped retail rate blocks for energy sales. This form of rate design is often supported on the basis that it also provides appropriate price signals for customers to conserve energy. It is considered appropriate for the shareholder to bear this variance risk as it provides an incentive for the design of rates for each test period that encourage conservation that may in turn reduce the extent of diesel burnt.

It is important to note that all of the variances are calculated as differences between a forecast provided for GRA rate-setting purposes and after-the-fact measurements of actual quantities experienced later in the test period. It would make little sense for rate or rider setting purposes to calculate a variance on the basis of the differences between forecasts and simulated dispatch calculations such as YECSIM that amount to essentially comparing two different forecasts. It is also important to note that the appropriate risk allocation mechanisms are based on contemporary designs within the same GRA test period (in this example of 2 years).

In the case of a single utility with an integrated supply mix of hydraulic, wind and diesel generation, all of the risks are appropriately allocated through the provision of a diesel fuel price variance account (with associated fuel price retail rider) and a diesel (low water) contingency account (with associated retail rider). There is no need for an "ERA" adjustment as there is no transfer between two separately owned segments of the single vertically integrated utility. The single utility owner bears the risk of sales volume variances and appropriately mitigates them through a blocked retail rate design that provides a conservation price signal to customers.

3. Risk allocation for completely segmented utilities

To represent the distinctly different situation in the Yukon, assume that the single vertically integrated utility in the initial example is now divided into two segments where one utility "A" owns most of the hydraulic generation and the other utility "B" distributes electricity to most of the customers (although both may own some generation and serve customers of their own). Once the utilities have separate ownership and management, independent rate setting procedures and separate rate schedules for their own customers, then a wholesale tariff is necessary to ensure that all of the costs and forecast risks listed above are appropriately allocated through the energy transfers and pricing structure between utilities "A" and "B".

Under these circumstances utility "A" would forecast its hydraulic and diesel production costs in its GRA as in the vertically integrated example. Utility "A" would also forecast its sales volumes to utility "B" and design a wholesale tariff to recover its costs of supplying energy to utility "B". The sales risk that the wholesale volumes between utility "A" and utility "B" experienced in the test years turn out to be different than the GRA forecast is borne by the shareholder of utility "A" as with any other sales forecast risk.

Knowing that it faces this sales variance risk, utility "A" might then seek approval for a stepped wholesale rate design representing the likelihood that higher costs of diesel will be incurred at higher than forecast sales volumes. Utility "A" would then be incented by the risk exposure to design a wholesale rate structure that will encourage conservation when flowed through the GRA process to similarly effect the end-use customer rates of utility "B".

The arrangements for diesel price variances and water level variances for utility "A" would remain as before, with any after-the fact riders applicable to the wholesale rate of utility "A", just as they would be to other direct customers of utility "A".

As an important practical matter, whenever utility "A" made changes to its wholesale rate design, utility "B" would reasonably be given the opportunity to change its own retail rates to match the significant change in supply costs and risks that this would represent. If the GRA's of "A" and "B" were not synchronized, a flow-through rider would be required to pass on or refund costs to the retail customers of utility "B" until its basic rates could be updated in a subsequent GRA. To do so otherwise results in variance risks reasonably attributable to utility shareholder "A" being unfairly transferred to utility shareholder "B".

Similarly, any application of recovery riders for diesel price variance or water level variance by "A" to the wholesale rate would be flowed through to the customers of utility 'B" as these are risks that are correctly intended to be borne by end-use

customers (who may change consumption levels in response to the price change) and not by any utility shareholder.

This completely segmented utility model is comparable[1] to the circumstances of YEC as utility "A" and AEY as utility "B".

In its submissions on DFC and ERA, YEC identifies three forecast risks associated with: diesel fuel price, water levels and sales volumes. It is clear from YEC's table 1.1 and the foregoing examples, that the first two risks are appropriately addressed by deferral accounts and riders that transfer these risks to end-use customers. These transfers, once approved by the Board, can be made directly to end-use customers from YEC, or if necessary as Board approved flow-through riders by AEY.

The third risk of sales volumes is appropriately borne by the utility forecasting and making the sales on the rate designs within its control. In the case of a wholesale rate, the entity that reasonably bears the risk of actual wholesale volumes differing from forecast wholesale volumes is YEC. YEC may seek to structure the wholesale rate in a fashion that better reflects the step in production costs between hydraulic and diesel dispatch. If YEC does so, AEY must then be provided with the opportunity to alter its rates to flow through this change in its own supply costs beyond its control.

4. Risk allocation when segmented utilities are jointly managed as a quasi-vertically integrated utility.

When the vintage DCF and ERA arrangements were developed in the mid 1990's, the ownership of YEC and YECL was similar to "A" and "B" above (except that the integrated system has expanded since and now includes a wind-turbine).

Agreements were in place at that time for YEC to be managed by YECL and for both utilities to operate in a manner indistinguishable by the end-use customer from a vertically integrated utility. In order to achieve this, the GRAs of both utilities were submitted jointly for identical test periods with rates for all customers essentially undifferentiated by which utility served them. To all intents and purposes YEC and YECL were operated as a single integrated utility with an internal transfer price from the primary owner of generation to the primary owner of distribution.

[1] *Comparable for the purposes of understanding the risk transfers involved in the current segregated operation. YEC and AEY do not have completely independent retail rate setting procedures and rate schedules for their own customers. A consolidated Phase II process was held in 2010 based on the 2009 approved revenue requirements for Yukon Electrical's 2008-2009 GRA and YEC's 2008-2009 GRA reviewed by the YUB at different points in time in 2008*

This model of separate ownership portions managed and operated jointly as a single utility required something other than the normal wholesale tariff as might exist between a generating utility and a distributor. The internal cost and risk transfer mechanism agreed on at that time was the single block DCF/ERA arrangement. The DCF was also greatly simplified by only being active in periods when diesel was considered to be on the margin. This was feasible as there were many hours when water levels were expected to be adequate without diesel operations and the need for diesel could be based solely on the status of the Faro mine operations. Dispatch circumstances today are considerably more complicated.

The simple ERA transfer price designed under those simpler conditions balanced the sales volume risks of incremental revenues being captured largely by YECL with the incremental costs of diesel borne by YEC. As both utilities designed their rates in concert with their costs and rate designs filed in simultaneous GRAs and test years, this resulted in appropriate risk allocation. The cost of diesel price variances and diesel costs related to water level variances accumulated in accounts that were cleared by uniform riders on the customers of the two utilities. The risks of sales variances were balanced between the two ownership partners through a jointly agreed and simple transfer mechanism (the ERA) that could not be considered equivalent to a wholesale rate between separately managed utilities.

None of these DCF/ERA mechanisms are applicable in today's circumstances. The two organizations are no longer managed as an integrated utility with synchronized GRA's and all that was entailed with coordinated and simultaneous GRA standard forecasts of sales revenues and production costs. The ERA fell into disuse when the loss of the major mining load at Faro left ample hydraulic generation, diesel was no longer on the margin and DCF was not activated for many years. Since then, decisions were made for YEC and YECL (now AEY) to operate as separate utilities with separate unsynchronized forecasts and rate setting timeframes that require different risk management mechanisms as explained in section 3 above.

5. Conclusions

In the Yukon, the mechanisms that were developed to deal with forecast risks associated with diesel costs in the 1990's were greatly complicated by the unusual and quite possibly unique segmented and joint relationship between YEC and YECL at that time. These unusual relationships have since changed significantly and have rendered the earlier simple DCF/ERA internal cost transfer mechanisms inappropriate and in need of a complete redesign.

The ERA cannot be considered an appropriate wholesale rate between two separately owned and managed utilities. To the extent that YEC finds it necessary to manage the risks of variance in its sales forecasts (including wholesale energy

transfers to AEY), it needs to design an appropriate wholesale rate that addresses those risks and provides an incentive for energy conservation through the corresponding rate designs of AEY. To the extent that any of this precedes or is out of step with the GRA and rate design changes by AEY, then the suggestion by AEY that YEC recover its variances through riders directly applicable to retail customers of both YEC and AEY will most suitably preserve the appropriate risk relationships that are applicable as detailed in Table 1.1 of YEC's evidence.

RAS 2014.08.11

YUB-YECL-5

Reference: YECL DCF-ERA filing, cover letter

Issue/sub-issue: YECSIM modelling & YECL deferral account proposal

Quote: While Yukon Electrical recognizes that the design of a deferral account will require further consideration, Yukon Electrical submits a deferral account can provide a more simple and transparent solution that would better accord with well established regulatory principles, as opposed to the complex custom rate-smoothing mechanism YEC has proposed. A deferral account would eliminate the perverse outcome of allocating diesel costs to either Yukon ratepayers or Yukon Electrical based on the accuracy of YEC's forecast. The use of a deferral account would obviate the need for the inefficient and time consuming testing that will be required of YEC's YECSIM and YEC's future forecasts and operations. A deferral account can also be designed in a manner that will at least partially mitigate the Board's concerns with respect to the DCF muting market signals and creating intergenerational inequity.[6]

Preamble: Further clarification is required regarding YECL's proposed deferral account.

Request:

(a) Respecting YECL's submission that the design of a deferral account would require further consideration, does YECL have any further submissions regarding the design of a deferral account since its last submission? Please provide example calculations based on 2012 actuals.

(b) Is YECL familiar with YEC's YECSIM modelling tool? Please provide the testing YECL is referring to in the above quote.

(c) Respecting the above quote, is YECL indicating that further testing is required prior to YECL accepting and moving forward with YEC forecasts based on YECSIM, or is YECL indicating that using a forecast tool as YECSIM will require extensive testing of results?

[6] YECL DCF-ERA filing, cover letter, pages 7 to 8

(d) Can YECL further clarify what it means by "at least **partially [mitigating]** the Board's concerns with respect to the DCF muting market signals and creating intergenerational inequity," in the above quote?

Response:

(a) Please refer to YUB-YECL-5(a) Attachment 1 for an example calculation based on 2012 and 2013 actuals.

(b) ATCO Electric Yukon is not familiar with the YECSIM. The testing that is referred to is testing of the inputs, assumptions and outputs from YECSIM that would be required as well as the external expertise that would be required to ensure the model's inputs are reasonable and outputs can be relied upon for forecasting as well as the determination of derived actuals. To better understand this issue, ATCO Electric Yukon has requested further information from YEC on the YECSIM model as part of AEY-YEC-5 in this proceeding.

(c) While the YECSIM may be an appropriate tool for YEC to generate forecasts for inclusion in its base rates (notwithstanding the complexity of the YECSIM and the associated difficulties in testing it), it should not be used as an after-the-fact "forecasting" tool, instead of using actual diesel consumption, to bill ERA charges. YECSIM is not an appropriate source for an ERA invoice to ATCO Electric Yukon because YEC is not proposing to manage any errors or variances in its diesel forecasts via a deferral for ATCO Electric Yukon.

(d) ATCO Electric Yukon understands that the concerns with the DCF and ERA that have been expressed by the Board regarding masked market signals and intergenerational inequity (as detailed in paragraphs 253 and 254 of Board Order 2013-01) are premised on the desire to send appropriate price signals to ratepayers.

Such concerns would be fully addressed if:

i. actual diesel costs were trued up to actual diesel revenues (recovered in YEC's base rates); and

ii. shortfalls or surpluses are addressed on a timely basis.

ATCO Electric Yukon's proposal accomplishes the first of these requirements, i.e. true up actual diesel costs to actual diesel revenues. YEC's proposal does not.

The need for surpluses and shortfalls to be addressed on a timely basis is where the "**partially**" comes in. The DCF is designed to provide "rate stability and predictability". This is the opposite of "sending appropriate price signals to ratepayers". While these are conflicting requirements, if the Board determines the DCF should continue to exist, ATCO Electric Yukon believes a balance can be struck by selecting a more appropriate dispersal threshold for the fund that prevents ratepayers from short-term rate shock while better sending appropriate price signals.

To better understand what might be an appropriate balance, it is helpful to consider the possible dispersal thresholds at either end of the spectrum of options:

1. A dispersal threshold of zero would be most desirable if "sending appropriate market signals" was the sole goal, as it would result in the DCF being collected or refunded regularly (i.e. quarterly).

2. A very high dispersal threshold would be desirable if "rate stability and predictability" was the sole goal, as it would allow the DCF to undergo large swings without immediate rate consequences.

ATCO Electric Yukon believes that an appropriate balance might be in the form of a percentage of YEC's revenue requirement (which is similar to the method approved by the NWTPUB for Northland Utilities' Rider A).

The Northland Utilities Rider A, a fuel deferral rider, has a threshold set at 2% of Northland Utilities' most-recent revenue requirement. In contrast, the +/-$8M dispersal threshold proposed by YEC is roughly 20% of YEC's revenue requirement.

If the Board determines the DCF or a similar low water deferral is to continue to exist in the Yukon, the desire to prevent masked market signals and reduce intergenerational inequity can be "partially" addressed by:

1. ensuring actual costs are trued up to actual revenues; and

2. selecting a lower percentage of YEC's revenue requirement as a dispersal threshold – the lower the percentage, the better the price signal.

In order to address the Board's concerns and balance the principles of rate stability and appropriate price signals, and based on the above, ATCO Electric Yukon would propose a threshold approximately equal to 5% of YEC's revenue requirement (or +/-$2M).

Line	Description	2012	2013	Units	Source
1	Diesel Included in YEC Base Rates	7,926	11,006	MWh	Table 2, Line J, YEC January 31 Filing
2	YEC Price of Diesel	0.2871	0.2871	$/kWh	Table 1, Line 1, YEC January 31 Filing
3=1*2	**Amount of Diesel Included in Rates**	**2,276**	**3,160**	**$000s**	
2	YEC Forecast Retail and Industrial Sales	77,094	75,913	MWh	Schedule 9, YEC 2012/13 GRA Compliance Filing
3	YEC Forecast Wholesale Sales	296,000	307,147	MWh	Schedule 9, YEC 2012/13 GRA Compliance Filing
4=2+3	**YEC GRA Forecast Sales**	**373,094**	**383,060**	**MWh**	
5=3/5	Diesel Component Embedded in YEC Rate	0.00610	0.00825	$/kWh	
6	YEC Actual Retail and Industrial Sales	79,861	77,335	MWh	2012 from Discussions with YEC re DCF / ERA. 2013 derived based on 8.
7	YEC Actual Wholesale Sales	310,264	307,927	MWh	Table 2, Line B, YEC January 31 Filing
8=6+7	**Total Actual YEC Sales**	**390,125**	**385,262**	**MWh**	
9=5x8	Actual Diesel Revenues Recovered by Rates	**2,379**	**3,178**	$000s	
10	Actual Diesel Used*	2,683	1,114	MWh	Table 1, Line L7b, YEC January 31 Filing
11	YEC Price of Diesel	0.2871	0.2871	$/kWh	Table 1, Line 1, YEC January 31 Filing
12=10*11	**Diesel Variance - Surplus / (Shortfall)**	**770**	**320**	**$000s**	
13=9-12	Deposit to / (Withdraw from) Deferral Account	**1,609**	**2,858**	$000s	

* - Actual diesel used can be adjusted for operational inefficiencies or diesel used for capital to ensure diesel usage is more appropriately allocated to

YUB-YECL-6

Reference: YECL DCF-ERA filing, Appendix A

Issue/sub-issue: YECL proposed deferral account

Quote: To address these principles, Yukon Electrical proposes that Yukon Energy calculate a full fuel volume variance for a DCF based on the following:

A. Determine diesel revenues recovered by YEC rates.

B. Determine actual diesel costs.

C. Take the difference between A) & B) and either deposit-to or withdraw-from the deferral account.

Preamble: Further clarification is required.

Request:

Please provide an example making use of YEC's 2012 results.

Response:

Please refer to YUB-YECL-5(a) Attachment 1.

YUB-YECL-7

Reference: YEC DCF-ERA filing, page 2

Issue/sub-issue: DCF

Quote: The DCF continues to set out how YEC's annual diesel cost variances due solely to water related hydro and wind generation variances from YUB approved GRA forecasts are to be addressed on behalf of ratepayers.

Request:

(a) Does YECL disagree with this purpose for the DCF? Please explain.

(b) Does YECL support a DCF or similar fund?

Response:

(a) ATCO Electric Yukon believes a reasonable purpose for a DCF (or a similar deferral) is to protect ratepayers and the utility from windfalls/losses related to material variances in actual diesel costs versus forecast diesel costs that are caused by circumstances that cannot be forecast and are beyond the utility's control (e.g. hydro availability due to unusually high or low precipitation). That being said, ATCO Electric Yukon has concerns with the following aspects of the quoted statement:

a. "continues" – The DCF is not continuing. YEC is proposing material changes to it, so it should be recognized that it is a new mechanism. If the word "continues" was replaced by "proposes", ATCO Electric Yukon believes that the statement would be more accurate.

b. "variances due **solely to water-related** hydro and wind generation variances" – Because the assumptions built into the YECSIM model are not transparent and have not been comprehensively explained or identified, it is difficult to assess the degree to which YEC's DCF proposal appropriately strips out water-related variances as opposed to variances caused by other factors (i.e. YEC's past operation of the system, past one-time events, etc.).

(b) ATCO Electric Yukon supports the existence of a fund to ensure that neither ratepayers nor the utilities experience windfalls or losses as a result of material and not reasonably forecastable fluctuations in the amount of diesel costs incurred. However, ATCO Electric Yukon shares the Board's concerns regarding masked market signals and intergenerational inequity and believes sending appropriate market signals to ratepayers is an important consideration.

ATCO Electric Yukon does not support the DCF as proposed by YEC because (among other reasons):

1. It is overly complex and relies on forecasts that cannot readily be tested;

2. It is not trued up to actual data;

3. It has a very high dispersal threshold (approximately 20% of YEC's revenue requirement); and

4. It does not send appropriate market signals to customers.

Please also refer to YUB-YECL-10(a) for additional comments on ATCO Electric Yukon's concerns with the DCF mechanism as proposed by YEC.

YUB-YECL-8

Reference: YEC/YECL DCF-ERA Filings of January 31, 2014

Issue/sub-issue: Joint Agreement

Request:

(a) With respect to the DCF and ERA materials, please confirm that the Companies (YEC and YECL) were not able to agree on any single item. If not confirmed, please explain.

(b) Please provide YECL's opinion on what purpose the DCF and ERA mechanisms should serve. Please also indicate whether that purpose has been adequately served in the past.

Response:

(a) Confirmed.

(b) Please refer to YUB-YECL-4 as well as YUB-YECL-7 for a discussion of the purposes that may appropriately be served by such mechanisms.

YUB-YECL-9

Reference: YEC DCF-ERA filing

Issue/sub-issue: Response to previous Board directions

Request:

(a) How does the filed application conform with the direction from Board Order 2013-1, to provide a revised DCF proposal that incorporates specific changes noted in that Order and to work with YECL to provide a joint recommendation regarding how the DCF will affect the ERA in Rate Schedule 42, or Board Order 2013-3 that YEC and YECL provide a joint filing regarding the revised DCF proposal, and the ERA, stating if agreement cannot be reached, a filing in which the Companies state which aspects they agree upon, the aspects they disagree upon and the position of each company on those aspects they disagree upon.

(b) Please summarize in YECL's view, any aspects the Companies agree upon, the points the Companies disagree upon, why there is disagreement and what would be necessary to bridge those areas of disagreement.

(c) If the Companies cannot agree on changes to the DCF and ERA, should the DCF and ERA be discontinued? Please explain.

(d) Is there a legislative requirement to continue with the DCF? Please explain.

(e) Is there a legislative requirement to continue with the ERA? Please explain.

(f) Would any DCF or ERA calculations be valid for any years that are not a GRA test year? Please explain.

Response:

(a) ATCO Electric Yukon devoted significant time and resources to working with YEC over a period of time in an attempt to provide a joint recommendation. When it became clear that there was little common ground, it was determined that a joint filing was neither feasible nor practicable given the widely differing views of the two utilities. ATCO Electric Yukon believes that its January 31, 2014 submission addresses its areas of disagreement with YEC, which are

ATCO Electric Yukon's concerns with YEC's proposed mechanisms, and proposes an appropriate alternative to address those concerns.

(b) Please see the following table for a summary of how the companies address the design principles recommended by ATCO Electric Yukon and what would be required to bridge the gap between the proposals:

Principles	Yukon Energy's Proposal		ATCO Electric Yukon's Proposal	How to bridge the gap
	DCF	ERA		
1) Simple, transparent, easily explainable and easily testable	**No.** Yukon Energy's proposed DCF mechanism is complex and relies on "expected" diesel based on results from the YECSIM model. ATCO Electric Yukon is unsure how testable this model is. Invoicing based on difference between two different YEC forecasts does not make sense and does not true up to actual amounts.	**No.** Expected diesel is based on results from the YECSIM hydro/diesel generation simulation model which has not been tested. ATCO Electric Yukon is unsure how testable this model is. Invoicing based on difference between two different YEC forecasts does not make sense and does not true up to actual amounts.	**Yes.** The fuel variance is simply the difference between diesel recovered by rates and actual diesel used.	A mechanism needs to be straightforward in its approach: it must be easily explainable, and easily testable. It must not be based on a comparison of two different YEC forecasts. If the mechanism is not straightforward (or well understood), the utilities will be indebted to "expert" consultants on an ongoing basis and perpetuate disagreements between the utilities...
2) Allow a utility to recover its prudently-incurred costs	**No.** The $3.7M cost is derived based on the variance between forecast diesel costs and derived actual diesel costs (rather than actual diesel costs).	**No.** The $0.439M ERA charge being proposed to ATCO Electric Yukon in 2012 is derived based on the variance between forecast diesel costs at actual grid loads and forecast diesel costs at GRA forecast loads. Further, YEC is proposing these costs not be recoverable from ratepayers, unless they exceed any margin revenue ATCO Electric Yukon might have received due to system growth or sales beyond **YEC** forecasts.	**Yes.** Costs are derived based on the variance between diesel revenue and actual cost.	A mechanism should not be based on the difference between two different forecasts made by one utility to the detriment of the other utility. If these costs are prudently-incurred by YEC (based on YEC forecasts) and invoiced to ATCO Electric Yukon, then they must be prudently-incurred by ATCO Electric Yukon and should be recoverable by ATCO Electric Yukon.
3) Based on actual data	**No.** The variance is calculated using 'expected' diesel at actual grid load levels.	**No.** Although there are elements of actual wholesale sales and grid load utilized, these values are only used to derive an 'expected' variance.	**Yes.** Actual diesel generation is directly used in the determination of the variance.	The mechanism should be based on actual data.

Principles	Yukon Energy's Proposal		ATCO Electric Yukon's Proposal	How to bridge the gap
	DCF	ERA		
4) Dispersed in a timely manner, so as to not mask market signals in times of a drought and to avoid intergenerational inequity.	**No.** Yukon Energy has proposed to increase the DCF threshold caps from +/-$4M to +/-$8M. +/-$8M represents approximately 20% of YEC's revenue requirement.	**Unclear/No.** Yukon Energy's derived ERA balance of $0.439M is being proposed to be charged to ATCO Electric Yukon on an annual basis, despite YEC's proposed wording in Schedule 42 referring to monthly calculations. If this amount is approved and to be recovered from ratepayers, it will be recovered sometime in the year after YEC determines the ERA value and invoices ATCO Electric Yukon.	**Yes.** ATCO Electric Yukon believes this variance can be dispersed in a timely manner by adopting a lower dispersal threshold and reviewing on a regular basis. Furthermore, ATCO Electric Yukon's proposes these variances are addressed by a YEC deferral, thereby reducing "middleman" delays of flowing through charges to ratepayers.	To limit masked market signals and intergenerational inequity, a lower threshold should be adopted. Also, the variances should be addressed via a YEC deferral in order to limit the "middleman" delays of YEC invoicing ATCO Electric Yukon, then ATCO Electric Yukon invoicing ratepayers.
5) The deferral account balance thresholds that trigger the disposal should be set at a reasonable level so as to not cause undue rate changes or rate impacts to customers.	**No.** Yukon Energy has proposed to increase the DCF threshold caps from +/-$4M to +/-$8M. +/-$8M represents approximately 20% of YEC's revenue requirement. By setting the dispersal threshold at a high value, ATCO Electric Yukon believes there will be excessive rate stability, to the detriment of sending appropriate market signals.	**Not applicable.**	**Yes.** To not cause undue rate changes or impacts to ratepayers, ATCO Electric Yukon recommends a more modest threshold be established to trigger the disposal of funds greater than the cap.	A lower threshold is required in order to balance the concerns of the Board – market signals – and the desires of YEC – rate stability.

(c) Regarding the DCF: ATCO Electric Yukon recognizes that some form of diesel volume deferral mechanism is appropriate because hydro/diesel volume fluctuations can cause material variability in YEC's diesel costs. The mechanism should ensure ratepayers are neither over-paying nor under-paying for diesel costs.

Regarding the ERA: Since the ERA is out of step with the GRA, and does not accord with appropriate rate design principles, the ERA cannot be considered an appropriate wholesale rate.

(d)&(e) No. There is no "legislative requirement", nor is there any regulatory requirement, to continue with either the DCF or the ERA. While section 8 of OIC 1995/90 does provide for Board acceptance of YEC and ATCO Electric Yukon rate adjustment mechanisms relating to diesel fuel prices, it is noteworthy that there is no similar requirement for a rate adjustment mechanism relating to diesel fuel volumes. Rather, the Board would have discretion under the *Public Utilities Act* in terms of the nature and form of any rate adjustment mechanism relating to diesel fuel volumes (subject to other applicable requirements of the *Public Utilities Act* and the Orders in Council that have been issued thereunder, including OIC 1995/90, as amended).

(f) In so far as YEC proposals impact ATCO Electric Yukon, they are not valid in any year for ATCO Electric Yukon under the current retail rate structure. Further to this, YEC's DCF/ERA proposals do not work in years that are not YEC test years because YEC proposes diesel variance costs be derived by comparing forecasts based on the most recent year's actual data to YEC's "most recent test year" forecasts. This is problematic because system growth is expected, yet YEC proposes to invoice ATCO Electric Yukon based on YEC's "most recent test year" forecasts. Based on above, YEC's proposed mechanisms should be considered invalid for all years.

ATCO Electric Yukon's proposals will work in all years, regardless of whether they are test years or not, because ATCO Electric Yukon compares revenues from diesel costs embedded in YEC's rates to actual diesel costs in the year and credits/debits the variance to a deferral account.

YUB-YECL-10

Reference: YEC DCF-ERA filing, page 2

Issue/sub-issue: ERA

Quote: …the ERA should be discontinued and YEC's diesel cost variance, regardless of its cause, should be recovered through a new deferral account to be administered by YEC…

Request:

(a) Does YECL agree with this summary of the YECL position as provided by YEC?

(b) Does the above imply that YECL assumes no volume risk in regards to increased sales over forecast amounts? Please explain.

(c) Should the incremental wholesale costs be passed on to customers? That is, if the incremental revenue exceeds the incremental wholesale costs, would a deferral account imply double dipping? Please explain.

Response:

(a) No, ATCO Electric Yukon does not agree with YEC's summary of ATCO Electric Yukon's position.

When ATCO Electric Yukon referred to "all fuel variances" in its January 31, 2014 submission, it was meant to refer to all types of fuel, including both diesel and LNG, due to the impending use of LNG in the Yukon. It was not meant to underscore that ATCO Electric Yukon believes that its proposed deferral account does not differentiate between fuel consumption variances resulting from various factors (such as hydro availability).

ATCO Electric Yukon agrees that YEC's material diesel cost variances that are not forecastable and beyond the control of YEC should be recovered through a deferral account to be administered by YEC. ATCO Electric Yukon disagrees, however, that its deferral proposal is flawed because it deals with diesel cost variances "regardless of cause."

It is correct that ATCO Electric Yukon's proposed deferral account, for the purposes of simplicity, transparency, and testability, does not attempt to differentiate between the many factors that influence diesel consumption. YEC's DCF proposal, however, is significantly more complex and purports to isolate the impact of hydro availability from the numerous other factors that can impact diesel consumption, including:

- Load;
- Location of load;
- Power factor of load;
- Timing of load;
- Secondary sales;
- Timing of secondary sales;
- Generation dispatched;
- Efficiencies of dispatched generation;
- Water availability at dispatched generation;
- Location of water availability;
- Location of dispatched generation;
- Outages on the system;
- Generation required to restore system outages;
- Operating reserve;
- Water spillage;
- Appropriateness of water spillage; and
- System losses.

While ATCO Electric Yukon's proposed deferral mechanism does, as YEC states in its summary, allow YEC to apply for and seek recovery of diesel cost variance regardless of their cause, ATCO Electric Yukon believes that the fact that the mechanism is simple, easily understandable by all parties, testable, and does not require complex and expensive models such as the YECSIM, makes it a superior alternative to YEC's proposed DCF mechanism. As well, YEC has not provided any proof that its model can properly isolate the impact of hydro availability on fuel consumption from the numerous other facts listed above, making the additional complexity and difficulty in testing YEC's DCF proposal of questionable value.

(b) No, the quote does not imply that ATCO Electric Yukon assumes no volume risk in regards to increased sales over forecast amounts. Currently, ATCO Electric

Yukon assumes full forecast risk regarding the volume of sales to its customers and the volume of wholesale power purchases from YEC as compared to ATCO Electric Yukon's approved GRA forecast volumes. ATCO Electric Yukon has not requested approval for a deferral on its sales or purchase power volumes.

In YEC's proposed ERA, ATCO Electric Yukon would be required to bear forecast risk on the wholesale rate charged by YEC as determined based on YEC's GRA forecast and actual volumes and YEC's YECSIM model, ostensibly without ATCO Electric Yukon having an opportunity for these costs to be flowed through to customers. This is not a risk ATCO Electric Yukon should be required to accept, as ATCO Electric Yukon does not have any control over YEC's forecasts nor does it have control over any of the variables that impact the actual final rate, such as YEC's operation of the hydro system and the opaque and complicated YECSIM model.

As well, YEC's ERA proposal requires ATCO Electric Yukon to net any incremental margin on changes in sales and purchase power volumes from YEC's forecasts against any ERA charges from YEC. In effect, YEC is proposing a deferral on ATCO Electric Yukon sales and purchase power volumes based on YEC's own forecasts. Such a volume deferral has never been requested by ATCO Electric Yukon and, in fact, would be detrimental to customers. ATCO Electric Yukon's incremental margin growth (as compared to ATCO Electric Yukon's own GRA forecasts) in the non-test years 1998-2007 and 2010-2012 was offset against inflationary increases in costs and system growth costs, allowing ATCO Electric Yukon to avoid expensive and time-consuming GRAs in those years. Imposing an ATCO Electric Yukon volume deferral, as is being proposed by YEC, would likely result in ATCO Electric Yukon having to file GRAs more often which is not in the interest of ratepayers or ATCO Electric Yukon as the cost of regulatory applications is largely bourn by ratepayers and the utility and it diverts limited and valuable resources away from the day-to-day operation of ATCO Electric Yukon's system and its interconnections with YEC's system.

(c) Yes, incremental costs due to circumstances beyond the utilities' control, such as ERA charges from YEC to ATCO Electric Yukon, should be passed on to customers. As outlined in (b) above, ATCO Electric Yukon has forecast risk based on its GRA approved volume of sales and power purchases. An ERA charge from YEC is a change in the wholesale rate charged by YEC and is a

change in rate after the fact, which makes it impossible for ATCO Electric Yukon to forecast.

As well, as outlined in the response to YUB-YECL-3, if YEC's forecast of wholesale sales to ATCO Electric Yukon were equal to actual wholesale sales to ATCO Electric Yukon, the total costs of generation including diesel costs would be passed on to customers through YEC's rate riders. Therefore, it follows that such costs, if charged through the ERA mechanism, should be charged to customers. If ATCO Electric Yukon cannot pass these costs onto customers, ATCO Electric Yukon is being asked to assume risk associated with YEC's forecasts and diesel costs, neither of which ATCO Electric Yukon can control.

ATCO Electric Yukon's proposed deferral account does not imply any "double-dipping." Under ATCO Electric Yukon's proposal, ATCO Electric Yukon has volume forecast risk on both its approved forecast sales and power purchases, and YEC has volume risk on its own approved sales forecast volumes. After YEC seeks to recover its actual fuel costs via a deferral application, customers would be responsible for paying the amount approved by the Board.

YUB-YECL-11

Reference: YEC DCF-ERA filing, page 2

Issue/sub-issue: DCF/ERA

Quote: The Board's current and past Orders for both utilities continue to support implementation of DCF and ERA mechanisms in Yukon, …

Request:

What is the impact if the Board determines that the DCF and ERA are no longer required?

Response:

If the Board determined that the DCF and ERA are no longer required (and absent the approval of a deferral), YEC would bear all risk associated with actual diesel generation costs being higher (or lower) than approved forecasts due to non-price related variances.

YUB-YECL-12

Reference: YEC DCF-ERA filing, page 2

Issue/sub-issue: ERA

Quote: … (b) to provide for YECL recovery through a Rate Rider of any net added YECL cost not otherwise recovered from ratepayers after full consideration of YECL revenue changes related to the wholesale variance.

Request:

Please provide an illustrative example.

Response:

YEC provided the following example of how it has proposed such a Rate Rider/deferral mechanism would work in Table 2 of its January 31, 2014 submission:

Line	Description	2012	2013 Preliminary	
Q = (-P)	ERA Charge to ATCO Electric Yukon	439	13	$000
R=E/1.062 * "average energy rate"	Added [ATCO Electric Yukon] Revenue	1,672	11	$000
S=E*8.298+Q	Added [ATCO Electric Yukon] Cost [due to Wholesale Purchases and ERA]	1,540	20	$000
T=R-S	Impact on YECL	132	-9	$000
U=If T>0, then 0; otherwise (-T)	ATCO Electric Yukon Deferral Account – Rider charge (Rebate)	-	9	$000
V=T+U	Net Impact on ATCO Electric Yukon after Deferral Charge (Rebate)	132	-	$000

YEC is proposing that it would change the wholesale rate to ATCO Electric Yukon and invoice additional charges to ATCO Electric Yukon for 2012 and 2013 of $439,000 and $13,000, respectively. Of this amount, YEC is proposing that $nil would be recovered from ratepayers for 2012 and $9,000 for 2013.

Regardless of the numerous reasons ATCO Electric Yukon has for disagreeing with the ERA amounts calculated in line Q of the table above (which ATCO Electric Yukon has outlined), ATCO Electric Yukon also strongly disagrees with the component of YEC's proposal that only allows ATCO Electric Yukon to recover ERA charges from ratepayers after "full consideration of YECL revenue changes related to the wholesale variance." ATCO Electric Yukon believes that if such ERA charges were to be levied on ATCO Electric Yukon — despite the fact that YEC actually burnt less diesel in 2012 and 2013 than it originally forecast in its GRA — the amounts of $439,000 and $13,000 should be recoverable from ratepayers by ATCO Electric Yukon through a deferral/Rate Rider for the following reasons:

- A general principal of regulation is that a utility entitled to recover its prudently incurred costs. If, as a result of this proceeding, the Board approves the ERA calculation as proposed by YEC, the ERA charges would be prudently incurred costs of YEC that are being charged through to ATCO Electric Yukon. Therefore, they would also be prudently incurred costs of ATCO Electric Yukon, which ATCO Electric Yukon should then be allowed to recover from ratepayers.

- The ERA is a material change to the wholesale rate charged to ATCO Electric Yukon by YEC that is not forecastable nor controllable by ATCO Electric Yukon. As such, it is reasonable that it qualify for deferral treatment. That YEC purports to consider "rate stability and predictability" of paramount importance to ratepayers is entirely inconsistent with how its proposal would ignore ATCO Electric Yukon wholesale "rate stability and predictability".

- The Board approved YECL's request for a Wholesale Purchased Power Deferral Account for changes in rates in Decision 2009-2.

YUB-YECL-13

Reference: YEC DCF-ERA filing, page 5

Issue/sub-issue: Net Revenue Cost

Quote: After the ERA, YECL would retain a net revenue cost impact of $0.009 million as a result of the wholesales variance; …

Request:

(a) Does this example mean that in certain situations, the revenues from the incremental sales over the forecast amount are less than the wholesale costs of the energy associated with those incremental sales?

(b) In YECL's view, is this a forecast risk that should be borne by the utility? Please explain.

(c) How would YECL view this situation during a non-test year?

Response:

(a) Yes. Based on YEC's calculations, YEC is showing that ATCO Electric Yukon's increased sales revenues (based on YEC's forecast of ATCO Electric Yukon sales revenue as opposed to ATCO Electric Yukon's approved forecast sales revenues that was used to derive the retail rates being charged to customers) do not cover ATCO Electric Yukon's increased wholesale expense (which includes YEC's proposed ERA).

More importantly, however, ATCO Electric Yukon notes that YEC's calculation referenced above does not consider any of ATCO Electric Yukon's incremental costs incurred when non-test year sales are higher than the last approved sales forecast. In other words, YEC's proposals do not allow for any of ATCO Electric Yukon's other costs that increase year-over-year due to inflation, required additional infrastructure (rate base) or other factors that accompany load growth. This situation will effectively limit ATCO Electric Yukon's ability to avoid costly GRAs when it has, in the past, been able to offset increased costs in non-test years via seeking out efficiencies and recognizing increased sales margins due

to load growth. ATCO Electric Yukon submits this would not be a positive or efficient result for either ratepayers or ATCO Electric Yukon.

(b) No. ATCO Electric Yukon should not bear any risk based on the 2013 "net revenue cost" as calculated by YEC as it is based on YEC GRA forecasts that are out of sync with ATCO Electric Yukon's approved sales forecast and cannot be controlled by ATCO Electric Yukon. Please refer to YUB-YECL-4 on ATCO Electric Yukon's views on the appropriate allocation of risk under the current retail rate structure in the Yukon.

(c) ATCO Electric Yukon's views on this matter would not change, regardless of whether it is a test year or a non-test year for ATCO Electric Yukon.

YUB-YECL-14

Reference: YEC DCF-ERA filing, page 6.

Issue/sub-issue: Rate Rider

Quote: Industrial and retail firm sales would be required to pay a rate rider for recovery of the above DDA amounts for 2012 and 2013 (total $0.540 million).

Request:

Please explain how YECL envisions this deferral account operating?

Response:

YEC's Option B, a new YEC administered Diesel Deferral Account (DDA), is a YEC deferral account that was proposed as part of its January 31, 2014 Application. YEC has not had discussions with ATCO Electric Yukon on how it would operate. ATCO Electric Yukon anticipates that collection or refund of the deferral balance would be handled in a similar way to past situations where YEC has applied to the YUB for a rate rider. In this instance, YEC would file an application to the YUB for approval of a rate rider to recover from or refund to customers the deferral balance, at some periodic interval or when the deferral balance exceeds a predetermined +- threshold.

YUB-YECL-15

Reference: YEC DCF-ERA filing, page 6.

Issue/sub-issue: Charges to YECL

Quote: There would be no new charges to YECL under this option related to any of the wholesales variances from approved GRA forecasts (i.e., the ERA would be discontinued, and YECL net revenue gains from added wholesales of $0.571 million in 2012 and $0.004 million in 2013 would be retained). [Footnote omitted]

Request:

In YECL's view does this shift forecast risk from YECL to the customer?

Response:

As detailed in YUB-YECL-4, it is ATCO Electric Yukon's position that sales volumes risks are normally borne by the utility preparing the forecast. In the case of 2012 and 2013:

- YEC's actual wholesale sales were higher than its approved forecasts;
- YEC's YECSIM model determined that it should have incurred additional diesel generation costs to supply these sales (even though it actuality it did not incur these increased diesel generation costs); and
- YEC is seeking to recover these derived additional diesel costs either through the ERA or a YEC administered Diesel Deferral Account (DDA).

It is important to note that 2012 was a non-test year for ATCO Electric Yukon, meaning it had no approved GRA forecast for wholesale power purchases. While 2013 was a test year for ATCO Electric Yukon, its approved wholesale power purchases are different than, and out of sync with, YEC's approved 2013 wholesale power sales. These synchronization issues, as well as ATCO Electric Yukon not having an opportunity to alter its retail rates to flow through this change in its own purchased power supply costs beyond its control, confirm this forecast risk should not be to the account of ATCO Electric Yukon.

YUB-YECL-16

Reference: YEC DCF-ERA filing, page 6.

Issue/sub-issue: YECL Deferral Account

Quote: Under Option A, added YECL revenues from increased retail sales variances either equal or exceed any net ERA cost to YECL (due to ability to flow through any net costs to the YECL deferral account).

Request:

Does the deferral account only apply to the change in rates for wholesale purchases from YEC or does it consider changes in volume too?

Response:

The deferral would only apply to changes in rates for wholesale purchases. As noted in Board Order 2010-13:

> 168. In Board Order 2009-2, the Board approved YECL's wholesale purchase power deferral account that dealt with the treatment of variances between the actual and forecast cost of purchase power for the hydro zone during the period when diesel generation was on the margin and when the approved run-out rate set out under the Energy Reconciliation Adjustment (ERA) in Schedule 42 was different than the rates used to determine the forecast cost of purchase power for diesel generation.

Please refer to YUB-YECL-16 Attachment 1 for a sample calculation for 2012.

		2012	
1	ATCO Electric Yukon Actual Primary Wholesale Purchases from YEC	310,264	MWh
2	YEC Wholesale Rate (per Rate Schedule 42)	0.08298	$ per kWh
3 = 1x2	ATCO Electric Yukon Primary Energy Charges from YEC at Rate Schedule 42 Rate	25,746	$000s
4	YEC Proposed Primary Energy Charges to ATCO Electric Yukon (including $439,000 ERA Charge)	26,185	$000s
5 = 3 - 4	Amount to Be (Collected From) Refunded to Customers	(439)	

YUB-YECL-17

Reference: YEC DCF-ERA filing, Table 4, page 11.

Issue/sub-issue: Summary of Impacts

Request:

Does YECL disagree with the summary as shown in Table 4 of YEC's January 31, 2014 filing? If so, please identify each specific discrepancy and explain in YECL's view why there is a discrepancy.

Response:

ATCO Electric Yukon disagrees with, or wishes to clarify, the following statements:

Statement	Disagreement or Clarification
Option A - YEC is held whole through the ERA mechanism provided in Rate Schedule 42 Option B – YEC held whole through the Diesel Deferral Account	YEC is being held whole based on the derived diesel generation costs determined by YECSIM. In fact, YEC's actual diesel generation costs were lower than those included in its approved revenue requirement.
Option A – ATCO Electric Yukon is held whole through Deferral Account mechanism for ERA-related incremental costs that exceed 100% of its incremental revenues related to added sales.	ATCO Electric Yukon is not held whole because ATCO Electric Yukon has not been given an opportunity to alter its rates to flow through this change in its own supply costs beyond its control.
Option A - ERA charge of $0.439 million in 2012 reduces ATCO Electric Yukon's added net revenue due to added sales from $0.571 to $0.132 million.	This calculation is a YEC derivation based on YEC's approved 2012 wholesale forecast. Since 2012 was not a test year for ATCO Electric Yukon, it has no approved forecast against which to derive added net revenue.
Option A - ERA charge of $0.013 million in 2013 reduces ATCO Electric Yukon's added net revenue due to added sales from $0.004 to ($0.009) million (this $0.009 million shortfall is recovered from ATCO Electric Yukon's deferral account).	This calculation is a YEC derivation based on YEC's approved 2013 wholesale forecast. ATCO Electric Yukon has different approved wholesale purchases (arising from its 2013-2015 GRA). YEC's determination of added net revenues is incorrect.
Option B – No longer requirement for YECL Purchased Power Flow Through Account or Rider D Collection Mechanism	ATCO Electric Yukon will still require a Purchased Power Flow Through Account to flow through changes in the Rate Schedule 42 base wholesale power rate.

Statement	Disagreement or Clarification
Option B - ATCO Electric Yukon retains added net revenue related to added sales of $0.571 million in 2012 and $0.004 million 2013.	ATCO Electric Yukon does not have added net revenues in 2012 as 2012 was a non-test year. ATCO Electric Yukon's 2013 added net revenues are out of sync with those derived by YEC as ATCO Electric Yukon has an approved 2013 sales forecast (and wholesale purchased power) from its 2013-2015 GRA that is different from the wholesale sales approved in YEC's 2012-2013 GRA.
Option A - Ratepayers cost impacts offset by added revenues for both YEC and ATCO Electric Yukon as well as exclusion of YEC industrial and retail sales variances.	ATCO Electric Yukon does not have added net revenues in 2012 as 2012 was a non-test year. ATCO Electric Yukon's 2013 added net revenues are out of sync with those derived by YEC.

YUB-YECL-18

Reference: YEC DCF-ERA filing, Appendix 1.1, page 1.1-6.

Issue/sub-issue: Fish Lake Hydro

Quote: In contrast to YEC hydro generation, YECL's Fish Lake hydro generation is not affected in any material way by YECL's wholesales load levels or YEC's overall grid loads.

Request:

(a) What is the impact ($) to YECL if Fish Lake hydro generation is above long-term average?

(b) What is the impact ($) to YECL if Fish Lake hydro generation is below long-term average?

Response:

(a) & (b) The impact to ATCO Electric Yukon of variances in Fish Lake hydro generation from the long-term average as approved in the 2013-2015 GRA is savings or additional costs that can be calculated as the kWh variance multiplied by the $/kWh rate set out in Rate Schedule 42 – i.e. $0.08298/kWh.

If Fish Lake generates more energy than the long-term average in a given year, ATCO Electric Yukon's purchase power costs would decrease by the kWh variance multiplied by $0.08298.

If Fish Lake generates less energy than the long-term average in a given year, ATCO Electric Yukon's purchase power costs would increase by the kWh variance multiplied by $0.08298.

YUB-YECL-19

Reference: YECL DCF-ERA filing, page 2

Issue/sub-issue: DCF

Quote: The DCF was designed to apply narrowly based on the specific circumstances of the time.

Request:

(a) Do the circumstances as known then for the DCF exist today? Please explain.

(b) Please provide YECL's interpretation/definition of a drought condition.

Response:

(a) No, the circumstances under which the DCF was designed do not exist today. Please refer to YUB-YECL-4 Attachment 1 for a full discussion of the circumstances that the DCF was intended to address, and how circumstances have changed from then to present day.

(b) ATCO Electric Yukon would interpret conditions under which water availability remained significantly below long-term averages for a prolonged period of time as a drought condition. While ATCO Electric Yukon has not determined the specific time period that would constitute a prolonged period, ATCO Electric Yukon would expect that YEC would be able to confirm that the availability of water in the Aishihik Lake watershed is a function of drought conditions over a period of one or more years, as opposed to weeks or months.

YUB-YECL-20

Reference: YECL DCF-ERA filing, page 2.

Issue/sub-issue: ERA

Quote: The ERA allowed YEC to flow-through its incremental diesel generation costs – as determined by the DCF – to YECL when actual wholesale sales varied from the companies' joint Board-approved forecast.

Request:

(a) Has the Board in the past directed the Companies to provide joint "sales forecasts"? Please explain.

(b) If the answer to part A is affirmative, have the Companies complied with that direction? Please explain.

Response:

(a) No, ATCO Electric Yukon is not aware of any Board Orders directing ATCO Electric Yukon and YEC to provide joint "sales forecasts". When the companies were under joint management from the from 1987 through to 1997, the companies prepared and filed joint Phase I and Phase II filings for the years 1989/1990, 1991/1992, 1993/1994 and 1996/1997 that resulted in YECL and YEC's approved revenue requirements and associated approved rates being fully in sync. Since 1997, there have been no joint Phase I filings and one Joint Phase II filing for the year 2010.

(b) N/A

YUB-YECL-21

Reference: YECL DCF-ERA filing, page 3.

Issue/sub-issue: ERA

Quote: If actual wholesale sales were higher (or lower) than the joint forecast, then one company would benefit to the detriment of the other. Given this arrangement, the ERA was developed to facilitate the two companies sharing sales forecast risk.

Request:

(a) Is it the Companies that assume all risks with the sales forecasts? Please explain.

(b) Please explain through an illustrative example how one company benefits to the detriment of the other.

(c) In terms of detriment to YECL, please explain what the potential impact would be on YECL.

Response:

(a) Sales volume risks are normally borne by the utility shareowner. Under the single management structure of joint Phase I and Phase II filings, YEC and YECL had wholesale and retail rates that were in sync and designed to address this risk.

(b) Please refer to YUB-YECL-1(b) Attachment 1 for a sample ERA calculation from the 1997 test year. Based on this example, the rate at which ATCO Electric Yukon (then YECL) would purchase power from YEC was set at 6.84 cents/kWh, which was calculated from YEC's approved revenue requirement (including the cost of diesel generation that was forecast to be required to meet YEC's forecast sales) and approved forecast wholesale sales. However, when diesel was "on the margin," YEC's actual incremental cost or savings of generating a higher or lower amount than the forecast wholesale sales was 10.45 cents/kWh.

Absent the ERA, in a year where YEC's wholesale sales to ATCO Electric Yukon were 2% higher than the approved joint forecast of 215,412,748 kWh,

ATCO Electric Yukon would pay YEC an additional $294,685 (215,412,748 kWh x 2% x 6.84 cents/kWh) for power purchases.

Assuming ATCO Electric Yukon's losses were 6.6% and the revenue earned for each additional kWh sold was 11.57 cents (assumptions taken from the joint YEC-YECL 1996-97 GRA filing), ATCO Electric Yukon would earn additional revenue on incremental sales of $465,566 (215,412,748 kWh x 2% x (100% - 6.6%) x 11.57 cents/kWh). Thus, overall, ATCO Electric Yukon would have additional pre-tax earnings of $170,881 ($465,566- $294,685).

YEC, on the other hand, would earn additional revenue from wholesale sales to ATCO Electric Yukon of $294,685. YEC's additional cost of generating the additional energy (including losses) would be $450,213 (215,412,748 kWh x 2% x 10.45 cents/kWh). Overall, YEC's earnings would decrease by $155,528 ($294,685 - $450,213).

Given ATCO Electric Yukon was responsible for preparing the forecasts that impacted both YEC and ATCO Electric Yukon, the ERA mechanism was designed to provide an additional payment of $155,528 (215,412,748 kWh x 2% x (10.45 cents/kWh – 6.84 cents/kWh)) to be made from ATCO Electric Yukon to YEC for purchase power/wholesale sales.

(c) Similar to the example in (b) above, absent the ERA mechanism, in a year where ATCO Electric Yukon's (then YECL's) purchases from YEC were 2% lower than the forecast, the detrimental impact on ATCO Electric Yukon's earnings before tax would be $170,881. Since the ERA mechanism was abandoned in the late 1990s, ATCO Electric Yukon has assumed the risk for variances in sales and associated purchase power volumes such as this.

YUB-YECL-22

Reference: YECL DCF-ERA filing, page 3.

Issue/sub-issue: ERA, OIC 1995/90

Request:

Please provide YECL's interpretation of OIC 1995/90 as it relates to recovery of wholesale costs.

Response:

Section 7 of OIC 1995/90 provides certain directions to the Board in relation to the fixing of YEC's wholesale customer rates. Section 7 states:

> Wholesale rates
>
> 7. The Board must fix rates of Yukon Energy Corporation for the wholesale power customer in accordance with the following rate policy for Yukon:
>
> (a) Yukon Energy Corporation shall sell electricity to The Yukon Electrical Company Limited at the same demand rate and the same energy rate throughout the Yukon and those rates must be sufficient to enable Yukon Energy Corporation to recover its costs that are not recovered from its other customers;
>
> (b) the wholesale rate to The Yukon Electrical Company Limited shall include appropriate provisions to ensure that Yukon Energy Corporation will recover its costs for retail and major industrial power service with adoption of the rates for retail power customers and major industrial power customers as specified herein.

ATCO Electric Yukon submits that section 7 requires two things. First, paragraph 7(a) requires YEC to charge both a single demand rate and a single energy rate to be paid by ATCO Electric Yukon for its purchased power from YEC (which rates must be approved by the Board), i.e. YEC shall charge "postage stamp" wholesale demand and energy rates to ATCO Electric Yukon. Second, paragraph 7(a) and (b) require that those postage stamp rates be sufficient for YEC to recover its costs that are not recovered from through retail and industrial customers rates (whose rates must be set

in accordance with sections 2.1 and 4 through 6 of OIC 1995/90, as amended by OIC 2012/68 and OIC 2014/23, as well as in accordance with the principles of cost causation pursuant to section 3 of OIC 1995/90).

ATCO Electric Yukon, in turn, is entitled to recover the costs it incurs in paying those wholesale rates —which costs cannot be forecasted by ATCO Electric Yukon and are clearly outside of the control of ATCO Electric Yukon — from its customers pursuant to section 3 of OIC 1995/90, as that provision requires the Board to review and approve ATCO Electric Yukon rates in accordance with the well-established principle that a utility is entitled to recover its prudently incurred costs.[6]

[6] For example, The Alberta Court of Appeal has ruled that the rate-setting tribunal in Alberta must "ensure that the utility has a reasonable opportunity to recover its costs, providing they are prudent": *ATCO Electric Ltd. v. Alberta (Energy and Utilities Board)*, 2004 ABCA 215, para. 131. In *Enbridge Gas Distribution Inc. v. Ontario (Energy Board)*, [2005] O.J. 756 (S.C.J.), at para. 8, the Ontario Superior Court of Justice held: "Essentially, a utility is entitled to recover its prudently incurred costs". The decision was reversed on appeal on other grounds; however, the Ontario Court of Appeal confirmed that the utility was entitled to recover its prudently incurred costs: [2006] O.J. No. 1355 (C.A.), at para. 11; leave to appeal ref'd [2006] S.C.C.A. No. 208. See also: *Natural Resource Gas Ltd. v. Ontario (Energy Board)*, [2006] O.J. No. 2961 (Ont. C.A.); TransCanada *PipeLines Ltd. v. Canada (National Energy Board)*, 2004 FCA 149, at para. 32]

YUB-YECL-23

Reference: YECL DCF-ERA filing, page 5.

Issue/sub-issue: Secondary Sales

Quote: Additionally, the suggestion that diesel is now “always” on the margin appears to be flawed.

Request:

Please explain the relationship between secondary sales and diesel on the margin.

Response:

Secondary sales are only available when there is surplus hydro. When surplus hydro is not available and diesel is required to be utilized to meet energy requirements, diesel is "on the margin". Therefore, a situation where surplus sales are available, yet diesel is considered to be always on the margin, appears to be contradictory.

YUB-YECL-24

Reference: YECL DCF-ERA filing, page 5.

Quote: A further flaw in YEC's proposals is that it will create a regulatory structure where Yukon Electrical's actual sales revenue will be no greater or no less than what YEC forecasts in a YEC GRA.

Request:

(a) Should the incremental generation costs (costs greater than forecast volumes) for incremental sales (sales volumes greater than forecast) be matched to the incremental sales revenue? Please explain.

(b) Is YECL proposing that it should retain the incremental sales revenue dollars, but that customers should pay the incremental costs of the generation? Please explain.

Response:

(a) Yes, the incremental generation costs resulting from changes in sales volume should be matched to incremental sales revenue for each utility, based on variances from each utility's own GRA approved forecasts. That is currently what is happening – each utility has forecast volume risk on its own approved sales based on its own forecasts. For instance, in ATCO Electric Yukon's 2013-2015 GRA, ATCO Electric Yukon forecast a volume of sales and purchase power volume for each test year, with purchase power being charged at a primary rate of 8.298 cents/kWh. If ATCO Electric Yukon's actual sales are higher than the approved forecast, ATCO Electric Yukon will earn more money than forecast. Conversely, if actual sales are lower than forecast, ATCO Electric Yukon will earn less money than forecast.

However, ATCO Electric Yukon has three issues with YEC's proposed ERA mechanism in this regard: First, an ERA charge to ATCO Electric Yukon doesn't impact ATCO Electric Yukon's forecast volume of purchase power as approved in its GRA, it affects the rate charged by YEC for purchase power, which is beyond the control of ATCO Electric Yukon and is not forecastable by ATCO Electric Yukon. Second, an ERA charge to ATCO Electric Yukon requires ATCO Electric Yukon to net any incremental margin on variances in sales and

purchase power volumes from YEC's forecasts (not even ATCO Electric Yukon's own approved forecasts) against any ERA charges from YEC, thereby imposing a sales volume deferral on ATCO Electric Yukon that ATCO Electric Yukon has not requested and is opposing. Third, such a volume deferral would be detrimental to customers as it would eliminate ATCO Electric Yukon's additional margin resulting from growth in the system, which is what has allowed ATCO Electric Yukon to avoid filing costly and time-consuming GRAs for large periods of time (1998-2007 and 2010-2012).

(b) Consistent with past practice, ATCO Electric Yukon is proposing that it should retain the incremental sales margin dollars (incremental revenue less incremental revenue at forecast wholesale purchase power rates), not the incremental sales revenue dollars. That is, ATCO Electric Yukon has forecast risk for changes, both up and down, in its volume of both sales and associated purchase power.

Should the Board choose to approve YEC's ERA mechanism, ATCO Electric Yukon in turn is proposing that customers should pay the incremental costs due to changes in YEC's wholesale purchase power rate, as ERA charges from YEC are effectively changes in the purchase power rate. This is consistent with the Purchase Power Flow Through deferral approved for ATCO Electric Yukon as part of its 2008-09 GRA.

YEC-YECL-1

YECL proposed approach, section 4 of cover letter, section 4.2 of Appendix A.

Requests:

(a) Using actuals for 2012 and 2013 as provided in filings to date, please provide examples of the calculation to determine the deferral account deposit-to or withdraw-from described in YECL's proposed approach, as described in YECL's January 31, 2014 submission (section 4 of letter to YUB and section 4.2 of Appendix A).

(b) With reference to the 2012 and 2013 examples provided under (a), please provide details regarding:

- How "diesel revenues recovered by YEC rates" will be determined with YECL's proposed approach; and
- How "actual diesel costs" will be determined with YECL's proposed approach.

Responses:

(a) Please refer to YUB-YECL-5(a) Attachment 1.

(b) "Diesel recovered by YEC rates" is determined according to YEC's total sales multiplied by the diesel component embedded in YEC's rates. The diesel component embedded in YEC's rates is equal to the forecast diesel expense divided by YEC's forecast sales. This is appropriate according to the well accepted cost-of-service principle that diesel fuel expense is allocated 100% to energy. As a result, the "[d]iesel recovered by YEC rates" included in YUB-YECL-5(a) Attachment 1 is determined based on total YEC sales multiplied by the embedded diesel component of YEC's rate.

"Actual diesel costs" are determined based on actual amount of diesel used by YEC in that year.

YEC-YECL-2

YECL January 31, 2014 submission, page 7 of cover letter.

Requests:

(a) Please provide a copy (with the relevant date) of the proposal "submitted to YEC during the utilities' discussions" as identified by YECL in its January 31, 2014 submission cover letter page 7.

(b) Please explain the differences, if any, between the YECL proposal "submitted to YEC during the utilities' discussions" as noted in a) above and the YECL proposal in its January 31, 2014 submission.

Responses:

(a) The following documents were submitted to YEC by ATCO Electric Yukon during the utilities' discussions:

YEC-YECL-2(a) Attachment 1	Position paper provided to YEC at a meeting occurring on July 10, 2013 which outlined the principles that ATCO Electric Yukon believed the DCF and ERA mechanisms should adhere to
YEC-YECL-2(a) Attachment 2 YEC-YECL-2(a) Attachment 3	Diesel Variance Proposal submitted to YEC on October 11, 2013

(b) There are no material differences. ATCO Electric Yukon has consistently proposed that diesel volume variances should be addressed through the use of a simple deferral account for YEC and that the DCF and ERA mechanisms should be simple, transparent, easily explainable, and should be based on actual data and related to all fuel volume variances on the interconnected system

ERA/DCF Position Paper

Background

Two mechanisms exist to deal with diesel variances: DCF and ERA.

- The DCF intends to address diesel energy volume shortfalls/surpluses due to water availability.
- The ERA intends to address diesel energy volume differences from GRA-approved wholesale sales forecast.

The Diesel Contingency Fund (DCF)

"The DCF was created (1996-97 GRA Negotiated Settlement) when the Faro mine was operating and the DCF only pertained to the WAF system. The fund was established to ensure that ratepayers, rather than YEC, covered the risk of changes in grid diesel generation due to fluctuations in hydro generation resulting from factors outside of the utility's control (such as drought conditions). The effect of the DCF is to allow rates to be based on long-term forecast hydro generation versus short-term hydro generation. The effect of the DCF is to shield rates from volatility due to hydro generation variances based on fluctuating water levels."

- Both mechanisms have been dormant since around 1999 (B.O. 2013-01, App. A).
- In YEC's most recent GRA, YEC proposed to activate the DCF and ERA because diesel is now on-the margin. In doing so, YEC proposed changes to the wording for the mechanisms and provided new calculations for how they would be implemented.
- In B.O. 2013-01 the Board:
  - "is concerned that the DCF masks market signals and that, in times of a drought, consumers will be removed from the signal to reduce consumption. The problem with smoothing rates is that it mutes market signals and hence consumer behavior."
  - "notes that the use of the fund in the past has been sporadic as evidenced by the fact that the fund has not been active since 1999. Such periods of infrequent use raise issues of intergenerational inequity in that a consumer contributing to a fund today may benefit another consumer several years later."
  - Directs "YEC is to work with YECL, and the two utilities will provide a joint recommendation on how the DCF will affect the Energy Reconciliation Account in Rate Schedule 42 and any proposed wording changes to that rate schedule. The Board will leave it to the discretion of YEC and YECL as to when the revised DCF proposal is to be filed with the Board."
- The Board notes in B.O. 2013-3 that the revised DCF proposal was not filed jointly by YEC and YECL and that there was not a joint recommendation by the companies on how to amend the wording regarding the ERA in Rate Schedule 42. The Board considers that the revised DCF proposal has not been tested in a proceeding. Given the foregoing, the Board does not approve

ERA/DCF Position Paper

the revised DCF proposal filed in YEC's 2012-13 GRA compliance filing. Consequently, the Board will not allow any changes regarding 2012 and the effects of any DCF proposal. YEC may file a future revised DCF proposal and ERA application.

The Board prefers a joint filing from YEC and YECL. However, if agreement cannot be reached, a filing in which the companies state which aspects of the revised DCF proposal and ERA amendment they agree upon, the aspects they disagree upon, and the position of each company on those aspects they disagree upon is acceptable. The filing must also address the concerns raised in Board Order 2013-01 Attachment A: Reasons for Decision. This future revised DCF proposal and ERA application will be separate from the compliance filing directed in this order.

YEC proposed increasing the DCF dispersal "trigger" from ±$4M to ±$8M in its compliance filing.

The Energy Reconciliation Account (ERA)

The ERA was proposed in the 1993/94 GRA when YECL was managing YEC. The closure of the Faro Mine resulted in diesel not being on the margin on the WAF since that time. Rate Schedule 42, Primary Wholesale has included:

- A single energy-only rate for all primary power supplied by YEC to YECL;
- When diesel is on the margin, the ERA was established to ensure that
    - YECL receives a full pass through of YEC's incremental costs or savings due to variances in wholesale volumes driven by YECL sales;

Load growth on the WAF system has required diesel generation on the margin to meet demand. YEC has proposed that YECL should be invoiced for the ERA balance in the $1.2M range.

Principles

The mechanisms for the ERA and the DCF should have the following attributes:

- Simple
- Transparent
- Easily explainable
- Should only collect the actual cost of running additional diesel from that of forecast, or conversely refund any actual diesel savings from or to customers.
- The ERA and DCF should be netted before being passed onto customers.

Yukon Electrical Diesel Variance Proposal (Confidential and Without Prejudice Draft for discussion Purposes)

1.0 Introduction

As part of its 2012-2013 General Rate Application ("GRA") filed in April 2013, Yukon Energy applied to update and reactivate the Diesel Contingency Fund (DCF) and the Energy Reconciliation Adjustment (ERA) provisions of Rate Schedule 42 as of January 1, 2012. Yukon Electrical was opposed to both the DCF and ERA mechanisms proposed by Yukon Energy and suggested that, as an alternative, Yukon Energy could file for a deferral account as part of its Compliance Filing to address increased or decreased diesel costs from forecast, to be administered by Yukon Energy and dispensed amongst all ratepayers by Yukon Energy.

As outlined in Yukon Electrical's Final Argument and summarized by the Yukon Utilities Board (the "Board") in Board Order 2013-01, Yukon Electrical's concerns with the proposed mechanism were as follows:

a. Yukon Electrical was not consulted regarding the proposed changes;
b. the ERA as proposed by Yukon Energy may not allow Yukon Electrical to recover its prudently incurred costs;
c. the ERA charges may have a material impact on Yukon Electrical and its customers;
d. Yukon Electrical has to carry a forecast risk based largely on a forecast prepared by Yukon Energy;
e. Yukon Electrical does not accept Yukon Energy's wholesale forecast, which could result in erroneous ERA charges;
f. the proposed ERA has no mechanism to account for system growth; and
g. the designed ERA process is administratively inefficient.

In Board Order 2013-01, the Board did not approve Yukon Energy's proposed DCF and ERA mechanisms and ordered Yukon Energy to revise the DCF with consideration of the following comments:

- "…the DCF has never been fully tested (it was the product of a negotiated settlement)" (p. 53)
- "…is concerned that the DCF masks market signals and that, in times of a drought, consumers will be removed from the signal to reduce consumption. The problem with smoothing rates is that it mutes market signals and hence consumer behavior." (p. 54)
- "….the use of the fund in the past has been sporadic as evidenced by the fact that the fund has not been active since 1999. Such periods of infrequent use raise issues of intergenerational inequity in that a consumer contributing to a fund today may benefit another consumer several years later." (p. 54)
- "…Yukon Energy is to work with Yukon Electrical, and the two utilities will provide a joint recommendation on how the DCF will affect the Energy Reconciliation Account in Rate Schedule 42 and any proposed wording changes to that rate schedule. The Board will leave it to the discretion of Yukon Energy and Yukon Electrical as to when the revised DCF proposal is to be filed with the Board." (p. 54)

As part of Yukon Energy's 2012-2013 GRA Compliance Filing filed in May 2013, Yukon Energy submitted a revised DCF proposal. Yukon Electrical continued to express its concerns in its comments to the Board dated May 10, 2013, recommending that the Board reject the DCF and ERA proposals and suggesting that the utilities develop a joint proposal. Subsequently, the Board issued Board Order 2013-03, noting that the revised DCF proposal was not filed jointly by Yukon Energy and Yukon Electrical and that there

Yukon Electrical Diesel Variance Proposal (Confidential and Without Prejudice Draft for discussion Purposes)

was not a joint recommendation by the utilities on how to amend the wording regarding the ERA in Rate Schedule 42. Thus, the Board again did not approve the revised DCF proposal and, consequently, the Board did not allow any changes regarding 2012 and the effects of Yukon Energy's DCF proposal. In addition, the Board ordered a joint filing from Yukon Energy and Yukon Electrical. However, if agreement could not be reached, a filing in which the utilities state which aspects of the revised DCF proposal and ERA amendment they agree upon, the aspects they disagree upon, and the position of each utility on those aspects they disagree would be acceptable.

Since the Board's issuance of Board Order 2013-03, the two utilities have met to present and discuss each other's proposed approaches to handle the DCF and the ERA. Yukon Electrical does not believe the concerns it raised during Yukon Energy's GRA proceeding or the comments made by the Board in Board Order 2013-01 are being addressed by Yukon Energy. Yukon Energy continues to rely heavily on past practices and methods even when they do not make sense in today's environment. Thus, the two utilities have agreed to disagree and are correspondingly making separate filings to the Board regarding this matter.

2.0 Background

Beginning in the early to mid-1990s, there were two mechanisms in place for Yukon Energy to address the cost impact of diesel fuel volume variances:

- The Diesel Contingency Fund (DCF) was to address diesel energy volume shortfalls/surpluses due to water availability. The theory was to allow rates to be based on long-term forecast hydro generation versus short-term hydro generation, and shield rates from volatility due to hydro generation variances based on fluctuating water levels.

- The Energy Reconciliation Account (ERA) was to address diesel energy volume differences from GRA-approved wholesale sales forecast.

Even though these mechanisms originated in the early to mid-1990s, they have operated sporadically since 1997 and have been completely dormant since 1999 due to the fact that diesel generation has not been on the margin.

2.1 History of the Diesel Contingency Fund (DCF)

The Diesel Contingency Fund (DCF) was created as part of the Negotiated Settlement regarding Yukon Energy and Yukon Electrical's joint 1996-97 GRA, when the Faro mine was operating and the DCF only pertained to the Whitehorse-Aishihik-Faro (WAF) system. The fund was established to ensure that ratepayers and the utilities where kept whole from changes in grid diesel generation due to fluctuations in hydro availability from long term averages resulting from factors outside of the utility's control (e.g. drought or high water conditions outside the utilities' control)).

- Pursuant to the 1996/97 Negotiated Settlement Agreement, the cap was set to the initial contribution to the DCF of $4,040,046. The same amount was used to set the "negative cap" with the reverse sign (-$4,040,046). All DCF terms and conditions were to be reviewed at the time of the next GRA.

Yukon Electrical Diesel Variance Proposal (Confidential and Without Prejudice Draft for discussion Purposes)

- Between 1996 and 1999, approximately $3.4M of net withdrawals from the DCF occurred for both non-water (such as general rate relief) and water related purposes. The DCF has had no activity since 1999 with only interest/service fee transactions occurring. (Source: YEC 2012/13 GRA, Undertaking #23)

2.2 History of the Energy Reconciliation Account (ERA)

The Energy Reconciliation Account (ERA) was originally proposed as part of Yukon Energy and Yukon Electrical's joint 1993-1994 GRA and was first approved for use in Board Order 1993-7 [Source: YEC's submission, Attachment 2.1: Background for the ERA Mechanism]. Since that point in time, the ERA has been a source of significant disagreement between Yukon Electrical and Yukon Energy in how the ERA was to be interpreted and applied.

This disagreement was evident when Yukon Energy filed its April 28, 1998 Revised Application requesting that certain amendments be approved with respect to the wholesale rate applicable during 1996 and 1997. In Board Order 1998-5, the Board agreed that the matter should be dealt with in a separate process after the public hearing. By letter on February 5, 1999, the Board agreed that the outstanding issues be resolved between the utilities utilizing the British Columbia Utilities Commission (BCUC) negotiated settlement process guidelines.

The negotiated settlement process, facilitated by the BCUC, highlighted the two utilities had very different views on the ERA and how it was to be interpreted and applied from its beginnings in 1993. Regardless of this situation, a settlement was reached between the two utilities that stated the following with respect to the ERA:

- ERA +10% issue: On an ongoing basis from January 1, 1999, and until such time as the Board approves an amended wholesale rate, Yukon Energy and Yukon Electrical agree the ERA applies without any +10% limit.

- ERA Diesel on the Margin Issue: Yukon Energy and Yukon Electrical agree the companies will not adjust payments made January 1, 1993 through to December 31, 1998 with respect to the ERA Diesel on the Margin issue under the Wholesale Rate Schedule 42. On an ongoing basis from January 1, 1999 and until such time as the Board approves an amended wholesale rate, Yukon Energy and Yukon Electrical agree that the ERA mechanism will apply only during months when diesel is on the margin for the WAF system. This treatment recognizes the fact that this principle is not explicitly set out in the currently approved wording of Rate Schedule 42.

Since the above-noted settlement, approved in Board Order 1999-4, the ERA has remained dormant and there have been no wholesale rate schedule issues between Yukon Electrical and Yukon Energy; that is until Yukon Energy's 2012-2013 GRA and the submission of its proposed changes to the ERA and DCF.

2.3 What Has Changed Since the Creation of the DCF and ERA

- The final closure of the Faro Mine in 1998 resulted in diesel no longer being 'on the margin.' The issue of if or how the ERA should operate and its interrelationship with the DCF have, therefore, not been addressed since diesel generation was not an issue. However, recently diesel has again been 'on the margin' (at least in some months) which has driven the need to update the methodology and provisions prior to the reactivation of the DCF and ERA or, conversely, create

another easier to understand and/or test mechanism to address the forecast risk associated with diesel generation in the Yukon.

- The DCF and ERA mechanisms were created at a time when Yukon Electrical and Yukon Energy were jointly managed by Yukon Electrical and shared GRA test periods and forecasts. Assumptions were vetted jointly by the two utilities before being presented to the Board. In 1997, the joint management of the two utilities was dissolved, allowing the utilities to operate independently. Each utility's management is now responsible for determining if and or when a GRA for their respective utility is required. This is evidenced by Yukon Energy filing a GRA for the test period 2012-2013 and Yukon Electrical filing a GRA for a test period of 2013-2015.

- Significant changes to the Yukon Interconnected System have occurred since the inception of the DCF and the ERA in the early 1990s, including the connection of the WAF and Mayo Dawson grids and the introduction of new hydro facilities (Mayo B and the Aishihik Third turbine). The system is more complex and the forecasting of diesel has become more complex it is no longer a case of diesel on or off the margin throughout the year as a result of the Faro mine being on or off the system.

- Forecasting the impact of changing loads has become more complex as there is no longer a single customer (the Faro mine) that determines whether the Yukon grid is on or off diesel on the margin. Changes in load (up or down) will be met with a mix of changes in hydro and diesel generation.

- Retail rates in the 1996 – 1997 GRA were linked to the wholesale rate structure. This is no longer the case.

2.4 Summary of Yukon Energy's Current Proposal

2.4.1 Diesel Contingency Fund

In Yukon Energy's 2012-2013 GRA, Yukon Energy sought updates or changes to the methods of operation of the DCF required to consider the effects of the connection of the WAF and Mayo Dawson grids and the introduction of new hydro facilities (Mayo B and the Aishihik Third turbine). Yukon Energy sought approval to adjust the terms of the DCF and reactivate it in consideration of Yukon Energy diesel generation costs effective January 1, 2012. Yukon Energy requested that the DCF be switched on permanently on using a "formulaic approach" rather than a "fixed value" approach; as a result, there would no longer be a diesel on the margin test for activating the DCF. The formulaic approach included a table (Table 3.2-2: Expected Diesel Generation Based on Long-term Average Hydro Generation) that would provide the expected diesel at various grid generation levels based on polynomial equations derived from the untested "YECSIM" model. The expected diesel based on actual grid generation would be used in comparison to actual diesel to determine the amount deposited or withdrawn from the DCF.

Based on information filed in Yukon Energy's 2012-2013 GRA, the balance of the DCF was $0.9M as of December 31, 2011 and, based on Yukon Energy's letter to the Board dated July 5, 2013, Yukon Energy's calculations of the DCF additions for 2012 using the applied-for methodology would grow the DCF by $3.7M, to a balance of $4.6M by December 31, 2012. It is presently unclear as to what is forecast to happen in 2013. Yukon Electrical notes, however, as part of Yukon Energy's 2012-2013 GRA

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Compliance Filing, Yukon Energy submitted a revised DCF which also included increasing the DCF dispersal "trigger" from ±$4M to ±$8M.

2.4.2 Energy Reconciliation Adjustment

To correspond with the fact that diesel is forecast to be 'on the margin' from 2012 onward, Yukon Energy's 2012-2013 GRA included changes to the ERA provisions in Rate Schedule 42 to correspond with the changes proposed to the DCF. The ERA is proposed to be triggered based on a comparison of expected diesel and actual diesel generation related to Yukon Electrical's wholesale purchases. Yukon Energy's wholesale sales forecast for 2012 was substantially lower than the actual wholesale sales for 2012. This leads to a lower base-line starting point for the ERA mechanism.

3.0 Yukon Electrical's Position on Yukon Energy's Proposal

Yukon Energy's proposed methodology for operating the DCF and ERA has not changed substantially from that presented to the Board as part of the 2012-2013 GRA proceeding. Based on Yukon Energy's, letter to the Board dated July 5, 2013, the proposed method would result in Yukon Electrical being billed $1.176M and $3.7M of revenue collected from rate payers being allocated to the DCF. Yukon Energy has recently provided Yukon Electrical with a revised calculation of the ERA to include the effects of Yukon Energy's incremental revenue caused by actual wholesale sales being greater than forecast resulting in Yukon Electrical's invoiced ERA balance changing to $0.438M. Yukon Energy has also suggested in the latest proposal that Yukon Electrical should not be permitted to pass on the additional $0.438M in costs to customers, despite Yukon Electrical having an approved Purchase Power flow-through deferral, and instead is suggesting that Yukon Electrical should net any incremental sales it experienced in 2012 (above the sales included in its last test year of 2009) against the ERA charges.

Below is a summary of issues that Yukon Electrical has with Yukon Energy's current proposal:

- Yukon Energy;'s proposal is extremely complicated and difficult if not impossible to test.
- Yukon Energy proposes that the ERA invoiced to Yukon Electrical should be based on the variance between Yukon Energy's wholesale sales forecasts and actual wholesale sales to Yukon Electrical. Yukon Electrical was not consulted for a detailed, GRA-quality forecast for Yukon Energy's 2012-2013 GRA. As 2012 was not a test year for Yukon Electrical, it did not internally prepare a detailed, GRA-quality sales forecast.
- Yukon Energy's proposal bases the ERA on what Yukon Energy expects the amount of diesel to be utilized at certain grid loads. Forecast diesel requirements are based on Yukon Energy hydro unit efficiencies, Yukon Energy diesel unit efficiencies, and expected water supply levels at Yukon Energy facilities. The expected amounts come from the YECSIM model which has not been tested. It is unclear as to whether Yukon Electrical has the expertise to test the model and it is uncertain if it would possible to test the assumptions used by Yukon Energy to forecast the expected diesel to be used at different grid loads. A thorough testing of these numbers would require significant in-depth experience and access to all of Yukon Energy's forecast generation data and associated assumptions.
- For 2012, Yukon Energy utilized less diesel generation than was forecast and included in Yukon Energy's 2012 rates; yet, despite the fact that Yukon Energy had substantial savings over the

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forecast on diesel costs, they are proposing that Yukon Electrical receive an addition charge for diesel costs. Yukon Electrical does not agree with Yukon Energy's derivation of the $0.438M ERA balance. It is based on an expected diesel of 15.6 GWh, whereas actual diesel used was only 2.683 GWh

- The current basic mechanics of the proposed ERA mechanism would allow diesel costs to be invoiced to Yukon Electrical if there was (A) system growth and (B) wholesale growth. Because Yukon Energy's proposed ERA mechanism is based on Yukon Energy's last GRA-approved forecast, this would invariably result in Yukon Electrical being invoiced diesel costs. (ie. Consider a future year, say 2017, compared with 2013 and all positive variances being invoiced at a diesel rate.)

- 2012 was a non-test year for Yukon Electrical. Yukon Energy's latest proposal, which suggests that Yukon Electrical should be required to incur an additional $0.438M in ERA costs and not have an opportunity to flow it through to customers, results in a situation where Yukon Electrical is not recovering prudently incurred costs

- Yukon Electrical has an approved deferral account for Purchase Power charges flowed through but does not have an approved mechanism (such as Rider D) to recover the cost that Yukon Energy wants to pass on to Yukon Electrical. Despite having an approved deferral, Yukon Energy has proposed that Yukon Electrical should not be permitted to collect the additional ERA charges from customers.

4.0 Yukon Electrical Proposal

Yukon Electrical continues to propose that diesel variances could be addressed through the use of a simple deferral account for Yukon Energy. As noted in Board Order 2009-2, "the typical criteria used in determining whether to approve the use of a deferral account are the level of uncertainty regarding the accuracy of the forecast and the utility's ability to control the factors influencing the forecast." It is Yukon Electrical's view that the forecasting of diesel generation by Yukon Energy has a high level of uncertainty with respect to diesel generation costs being materially higher or lower than forecast. The table below summarizes the factors that affect Yukon Energy's forecast as well as actual diesel generation requirements and identifies which utility has the ability to forecast, or not be able to forecast, these factors in Yukon Energy's GRAs:

Factors That Affect Diesel Generation Requirements	Yukon Energy	Yukon Electrical
1) Availability of water and/or wind	✓	
2) Quantum of interconnected grid sales	✓	(1)
3) Location of load (line losses)	✓	
4) Operation of the system	✓	
5) Unexpected event/loss (RID event)		

(1) Yukon Electrical has the ability to forecast its sales and associated purchase power but does not prepare a GRA -quality forecast on an annual basis for the purposes of a Yukon Energy GRA.

Yukon Electrical Diesel Variance Proposal (Confidential and Without Prejudice Draft for discussion Purposes)

This deferral account concept is similar to that approved and used by Northland Utilities (NWT) Limited for its hydro rate zone, except that in Northland's case diesel generation is not used to supplement hydro supply but to replace it when it is not available. In the NWT hydro rate zone, most supply comes from NTPC's Taltson Dam; however, at times hydro energy is not available due to maintenance or forced outage of the hydro supply tie-line. When NTPC is unable to supply Hay River from the Taltson Dam, Northland's Hay River diesel plant is required to be run. It is very difficult for Northland to accurately forecast the availability of hydro supply as the factors that can influence the availability are not within Northland's control. As a result, the NWTPUB has approved a deferral account to allow Northland to collect the additional costs from customers or refund any savings back to customers when diesel is required or not required to replace the hydro.

4.1 The Principles

In consideration of Yukon Electrical's concerns with Yukon Energy's proposal above and to resolve the Board's concerns as stated in Board Order 2013-01, Yukon Electrical believes the mechanism to address diesel volume variances must adhere to the following principles:

1) Simple, transparent, easily explainable and easily testable
2) Allow a utility to recover its prudently-incurred costs
3) Based on actual data and relates to all fuel volume variances on the interconnected system
4) Dispersed in a timely manner, so as to not mask market signals in times of a drought or flood and to avoid intergenerational inequity
5) The deferral account balance thresholds that trigger the disposal should be set at a reasonable level so as to not cause undue rate changes or rate impacts to customers.

4.2 Mechanism

To address these principles, Yukon Electrical proposes that Yukon Energy determine fuel volume variances based on the following. Please refer to the attached Schedule 1 for a detailed calculation based on the 2012 data that Yukon Energy used in their proposal.

Step 1) Using the Actual Diesel Generation (kWh) determine the share (%) of diesel recovered through rates (Diesel Recovered) based on the ratio of forecast diesel and forecast grid sales;

Step 2) Calculate the Diesel Variance to be recovered or refunded as the difference between the Diesel Recovered through rates based on the actual grid sales less Actual Diesel;

Step 3) The Diesel Variance Cost is determined based on the GRA approved diesel fuel price (eg. $0.2871 per kWh)

Actual diesel usage for 2012 is 5,546 MWh lower than the actual diesel recovered through rates resulting in a $1.612M refund to customers, which is contrary to Yukon Energy's method that uses expected diesel values resulting in $3.7M of Yukon Energy's revenue collected from ratepayers through existing rates being allocated to the DCF and a $0.438M charge being invoiced to Yukon Electrical through the ERA.

Yukon Electrical Diesel Variance Proposal (Confidential and Without Prejudice Draft for discussion Purposes)

5.0 Comparison of Yukon Energy and Yukon Electrical Proposals

It is Yukon Electrical's view that Yukon Energy's proposal does not meet the principles nor does it address the Board's concerns. The table below provides a side-by-side comparison on how well the respective utilities methodologies meet those principles.

Principle	Yukon Energy's Proposal		Yukon Electrical's Proposal
	DCF	**ERA**	
1) Simple, transparent, easily explainable and easily testable	No. Yukon Energy's proposed DCF mechanism is complex and heavily relies on expected diesel based on results from the YECSIM hydro/diesel generation simulation model that has not been tested. Yukon Electrical is unsure how testable this model is.	No. Expected diesel is based on results from the YECSIM hydro/diesel generation simulation model that has not been tested. Yukon Electrical is unsure how testable this model is.	Yes. The variance, in consideration of the above stated factors that affect diesel generation, is simply the difference between forecast and actual diesel cost
2) Allow a utility to recover its prudently-incurred costs	No. The $3.7M cost is derived based on the variance between expected diesel costs and actual diesel. The expected diesel cost is not what wholesale rates are collecting.	No. The $0.438M charge being proposed to Yukon Electrical is derived based on the variance between expected diesel costs and actual diesel. The expected diesel cost is not what wholesale rates are collecting.	Yes. Costs are derived based on the variance from the 'true' forecast cost of diesel and the actual cost. The 'true' forecast cost of diesel should be proportionate to the cost of diesel forecast in the GRA.
3) Based on actual data and relate to all fuel volume variances on the interconnected system	Yes. However, the variance is calculated using 'expected' diesel at actual grid load levels.	No. However, there are elements of actual wholesale sales and grid load utilized, these values are only used to derived an 'expected' variance.	Yes. Actual diesel generation is directly used in the determination of the variance.
4) Dispersed in a timely manner, so as to not mask market signals in times of a drought and to avoid intergenerational inequity	No. Yukon Energy has proposed to increase the DCF threshold caps from +/- $4M to +/-$8M	Yes. Yukon Energy's derived 2012 ERA balance of $0.438M, which is offset by the incremental sales related to the additional wholesale sales to Yukon Electrical, is being proposed to be charged to Yukon Electrical	Yes. So that proper price signals are provided to customers and the issue of intergenerational inequity is minimized, Yukon Electrical proposes that the deferral account balance be calculated and disposed of as frequently as annually.

Yukon Electrical Diesel Variance Proposal (Confidential and Without Prejudice Draft for discussion Purposes)

Principle	Yukon Energy's Proposal		Yukon Electrical's Proposal
	DCF	**ERA**	
5) The deferral account balance thresholds that trigger the disposal should be set at a reasonable level so as to not cause undue rate changes or rate impacts to customers.	Yukon Energy has proposed to increase the DCF threshold caps from +/-$4M to +/-$8M.	There is no threshold cap in place for the ERA. The ERA balance is disposed of when incurred.	So as to not cause undue rate changes or impacts to customers Yukon Electrical recommends a modest threshold cap of +/-$2M be established to trigger the disposal of funds greater than the cap.

Schedule 1

Yukon Electrical's Proposed Diesel Deferral Account Mechanism

			Units	Notes
	YEC's GRA Approved Forecast Fuel Price	0.2871	$/kWh	
	% Fuel Included In Rates			
[1]	Forecast Fuel	7,926	MWh	
[2]	Forecast Total Grid Sales	373,094	MWh	
[3]	% Fuel Included In Rates	2.1%		% Fuel Included in Rates = Forecast Fuel / Forecast Grid Load
	Actual Fuel Recovered from Rates			
	Actual Grid Sales			
[4]	YEC Retail Sales	80,063	MWh	Obtained from YEC Actuals
[5]	Wholesale Sales to YECL	310,264	MWh	Obtained from YEC Actuals
[6]	Total Grid Sales	390,327	MWh	Obtained from YEC Actuals
[7]	Actual Fuel Recovered from Rates	8,292	MWh	Actual Fuel Recoverd from Rates = % Fuel included in Rates * Actual Grid Sales
	Fuel Variance			
[6]	Actual Fuel	2,683	MWh	
[7]	Actual Fuel Recovered from Rates	8,292	MWh	
[8]	Fuel Variance	(5,609)	MWh	Fuel Variance = Actual Fuel - Fuel Recovered through Rates **Note: The actual fuel variance needs to be adjusted to consider forecast diesel heat rates and transmission line losses**
[9]	Cost Variance - Withdraw / (Deposit)	(1,610)	k$	Cost Variance = Volume Variance * Price

YEC-YECL-3

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YECL states that "the mechanism to address diesel volume variance must adhere to certain principles", including that it be "based on actual data and relates to all fuel volume variances on the interconnected system".

Requests:

(a) Is YECL proposing that YEC have a deferral account that addresses all actual fuel volume variances from GRA forecast regardless of the reason for the variance, including forecast variances related to weather, outages and load growth?

(b) If YECL's proposal were accepted by the Board, would YECL propose that this concept also be applied to off-grid diesel communities?

(c) Please confirm that, if accepted, this concept would result in transfer of risk from the utilities to ratepayers.

(d) Please identify all situations today in Yukon where ratepayers bear the cost impact of variances in diesel fuel volume from GRA approved forecast?

Responses:

(a) Yes. Please refer to YUB-YECL-10(a).

(b) No, ATCO Electric Yukon is not requesting a diesel volume deferral for its off-grid communities. Such a deferral would not meet the basic criteria for a deferral account at this time, as:

- An error in forecasting diesel volumes in any of the off-grid communities would not produce a material gain or loss for ATCO Electric Yukon;
- The operations of the off-grid diesel plants are controlled by ATCO Electric Yukon; and
- Diesel volumes in the off-grid communities are reasonably forecastable.

(c) & (d) ATCO Electric Yukon's proposal does pass some risk from YEC to ratepayers. Moreover, however, the risks ratepayers would bear under ATCO Electric's proposal are more appropriately borne by them as compared to the risks they bear as a result of the use of the YECSIM as proposed by YEC. Please refer to YUB-YECL-4 Attachment 1 for a discussion of the appropriate allocation of risks in the circumstances.

YEC-YECL-4

Expected diesel generation

Requests:

(a) Please provide, as filed in YECL's 2013-15 GRA, YEC-YECL-3 (h) Attachment 1 and YEC-YECL-4 (f) Attachment 1.

(b) Please confirm regarding the documents provided in (a) above that about 72% of commercial and 66% of residential load growth for the Hydro zone in 2012 over 2011 was for the six colder months of the year (November through April).

Responses:

(a) Please refer to YEC-YECL-4(a) Attachment 1 for a copy of YEC-YECL-3(h) Attachment 1 as filed in the 2013-2015 GRA.

Please refer to YEC-YECL-4(a) Attachment 2 for a copy of YEC-YECL-4(f) Attachment 1 as filed in the 2013-2015 GRA.

(b) Confirmed. However, as indicated in YEC-YECL-4(b) Attachment 1, the abnormally cold temperature in December 2012 relative to December 2011 — December 2012 was on average 14 degrees Celsius colder than December 2011 — was the main contributor to the 2012 load growth in the months November through April as compared to 2011.

The Yukon Electrical Company Limited
Residential Sales (MWh) by Rate Zone

Hydro Rate Zone - Billed Sales

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Billed	Total Earned
2008	14,196	13,316	11,120	10,219	8,680	7,654	7,456	7,799	7,809	8,251	11,001	11,466	118,968	119,640
2009	17,006	12,669	12,236	10,597	8,732	7,877	7,939	7,105	8,121	8,857	10,838	11,666	123,642	121,938
2010	15,357	11,603	10,761	10,802	9,097	8,170	7,947	7,262	8,338	9,550	10,574	12,450	121,911	122,732
2011	16,897	13,265	14,626	11,210	10,426	8,653	8,025	7,693	8,787	9,858	11,406	13,655	134,500	132,820
2012	16,437	14,137	13,323	11,090	10,060	9,326	8,544	8,309	8,557	9,883	12,686	15,764	138,117	141,284
2013 F	16,936	15,348	13,909	11,867	10,255	9,294	8,688	8,534	9,001	9,612	11,870	14,500	139,815	143,018
2014 F	17,225	15,609	14,147	12,069	10,430	9,453	8,837	8,680	9,154	9,776	12,073	14,748	142,201	145,460
2015 F	17,522	15,877	14,389	12,273	10,607	9,617	8,989	8,828	9,311	9,944	12,276	14,999	144,632	147,947

Large Diesel Rate Zone - Billed Sales

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Billed	Total Earned
2008	793	718	576	549	473	402	416	420	419	474	578	638	6,456	6,493
2009	826	660	619	568	479	409	424	390	444	476	557	683	6,535	6,445
2010	788	614	558	548	464	418	401	379	432	518	533	652	6,305	6,352
2011	820	624	692	574	490	434	386	405	462	476	559	653	6,577	6,496
2012	808	658	618	549	501	434	413	404	384	486	544	690	6,488	6,617
2013 F	792	604	589	536	474	419	394	388	421	474	502	627	6,222	6,345
2014 F	806	614	599	545	482	426	401	395	428	482	511	637	6,328	6,454
2015 F	820	625	609	555	491	434	408	402	436	491	520	649	6,439	6,567

Small Diesel Rate Zone - Billed Sales

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Billed	Total Earned
2008	138	125	110	110	95	92	81	88	79	82	109	126	1,235	1,242
2009	141	127	118	115	90	78	87	79	87	90	107	111	1,229	1,212
2010	153	116	103	108	98	80	84	72	83	93	103	111	1,206	1,210
2011	148	130	122	114	91	83	83	83	88	97	117	147	1,303	1,290
2012	162	133	131	99	87	99	83	89	86	99	121	153	1,341	1,373
2013 F	161	132	122	110	93	88	84	82	87	98	112	137	1,306	1,337
2014 F	163	135	125	112	95	89	85	84	89	99	114	139	1,328	1,360
2015 F	166	137	127	114	97	91	86	85	90	101	116	141	1,351	1,383

Old Crow Rate Zone - Billed Sales

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Billed	Total Earned
2008	91	104	75	77	76	78	57	76	64	57	89	78	922	928
2009	120	88	90	91	84	71	75	57	60	84	88	80	989	975
2010	112	94	87	104	67	62	71	58	67	84	81	89	975	979
2011	147	106	94	121	96	64	76	64	73	72	80	114	1,108	1,089
2012	110	104	119	94	80	81	61	83	49	72	92	112	1,058	1,076
2013 F	128	107	104	110	84	71	71	70	64	77	84	105	1,075	1,092
2014 F	130	108	105	112	85	72	72	71	65	78	85	107	1,090	1,107
2015 F	132	110	107	114	86	73	73	72	67	79	87	109	1,108	1,126

Total - Billed Sales

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Billed	Total Earned
2008	15,218	14,264	11,882	10,954	9,324	8,226	8,010	8,384	8,371	8,865	11,777	12,307	127,581	128,302
2009	18,093	13,543	13,062	11,371	9,384	8,435	8,525	7,631	8,712	9,507	11,590	12,542	132,394	130,569
2010	16,409	12,427	11,511	11,562	9,726	8,730	8,503	7,770	8,920	10,246	11,292	13,303	130,397	131,273
2011	18,012	14,125	15,534	12,018	11,103	9,234	8,570	8,246	9,411	10,503	12,162	14,569	143,488	141,696
2012	17,518	15,032	14,189	11,833	10,729	9,940	9,100	8,885	9,076	10,541	13,443	16,719	147,005	150,350
2013 F	18,017	16,191	14,724	12,623	10,906	9,872	9,237	9,075	9,574	10,261	12,568	15,369	148,417	151,793
2014 F	18,325	16,467	14,975	12,838	11,092	10,040	9,395	9,229	9,737	10,436	12,783	15,631	150,947	154,381
2015 F	18,640	16,748	15,232	13,055	11,281	10,214	9,557	9,387	9,905	10,616	12,999	15,898	153,530	157,023

The Yukon Electrical Company Limited
Commercial Sales (MWh) by Rate Zone

Hydro Rate Zone - Billed Sales

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Billed	Total Earned
2008	13,392	12,880	11,297	11,722	9,798	9,904	9,341	10,749	9,755	9,835	11,687	11,359	131,719	132,077
2009	14,786	11,791	12,440	11,488	10,082	9,653	10,555	10,021	9,513	9,958	11,427	11,340	133,054	132,623
2010	14,052	11,787	11,604	11,971	10,395	10,468	10,089	10,026	9,787	10,573	12,084	12,272	135,110	136,223
2011	15,259	12,317	13,877	11,825	11,360	10,549	10,410	10,269	10,712	11,075	12,068	13,033	142,755	141,006
2012	15,677	13,178	13,063	12,764	11,533	10,991	10,836	10,520	10,157	11,438	12,490	13,993	146,641	149,182
2013 F	16,004	13,804	13,413	13,209	11,728	11,111	10,901	10,807	10,590	11,566	12,298	13,683	149,115	151,698
2014 F	16,341	14,121	13,728	13,498	12,008	11,384	11,173	10,924	10,712	11,816	12,580	13,991	152,277	154,915
2015 F	16,688	14,435	14,037	13,804	12,293	11,660	11,446	11,189	10,969	11,969	12,789	14,243	155,521	158,215

Large Diesel Rate Zone - Billed Sales

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Billed	Total Earned
2008	621	641	583	544	526	497	535	555	473	466	568	570	6,579	6,597
2009	670	591	566	540	496	481	531	503	480	542	685	499	6,583	6,562
2010	681	640	571	579	473	474	519	489	414	596	574	609	6,619	6,681
2011	703	575	646	538	512	494	477	406	494	527	599	641	6,611	6,537
2012	782	633	666	587	565	558	494	533	607	374	661	707	7,165	7,287
2013 F	740	633	649	582	497	470	494	475	527	514	639	694	6,913	7,030
2014 F	776	670	687	620	535	509	498	479	533	520	647	704	7,179	7,300
2015 F	787	680	697	629	543	517	505	486	540	528	657	714	7,284	7,408

Small Diesel Rate Zone - Billed Sales

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Billed	Total Earned
2008	214	242	142	183	205	174	192	225	173	144	185	181	2,260	2,266
2009	222	201	176	184	144	168	205	180	181	177	123	165	2,126	2,119
2010	216	173	162	168	161	180	200	195	172	164	167	166	2,123	2,135
2011	224	175	193	184	212	176	181	197	192	163	168	184	2,250	2,222
2012	231	179	184	164	152	195	170	202	175	161	172	174	2,157	2,191
2013 F	215	168	172	153	145	149	149	159	151	140	155	170	1,926	1,956
2014 F	218	171	175	155	148	152	152	161	153	142	157	173	1,956	1,987
2015 F	222	174	178	158	150	154	154	164	156	145	160	176	1,989	2,020

Old Crow Rate Zone - Billed Sales

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Billed	Total Earned
2008	67	83	67	61	64	65	46	63	51	46	78	71	763	765
2009	86	64	77	74	69	53	66	46	45	67	59	69	775	772
2010	82	65	65	80	54	54	48	46	47	60	66	66	734	737
2011	87	80	73	73	73	62	62	55	61	59	69	83	838	826
2012	82	74	96	81	65	74	52	71	50	65	65	111	887	903
2013 F	90	78	84	84	68	68	57	59	55	63	69	90	866	881
2014 F	91	79	85	86	69	69	58	60	56	64	70	91	878	893
2015 F	93	80	86	87	70	70	59	61	56	65	71	92	891	906

Total - Billed Sales

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Billed	Total Earned
2008	14,295	13,845	12,090	12,510	10,593	10,640	10,114	11,592	10,451	10,492	12,517	12,181	141,320	141,704
2009	15,764	12,647	13,260	12,285	10,791	10,355	11,358	10,749	10,218	10,744	12,294	12,073	142,538	142,076
2010	15,031	12,664	12,402	12,799	11,083	11,176	10,856	10,756	10,421	11,393	12,891	13,114	144,586	145,776
2011	16,274	13,146	14,790	12,621	12,156	11,282	11,130	10,928	11,460	11,824	12,904	13,942	152,454	150,591
2012	16,772	14,064	14,009	13,595	12,315	11,817	11,552	11,327	10,989	12,038	13,389	14,985	156,851	159,562
2013 F	17,049	14,683	14,317	14,028	12,438	11,799	11,602	11,500	11,323	12,284	13,160	14,637	158,819	161,564
2014 F	17,426	15,041	14,674	14,359	12,760	12,114	11,882	11,626	11,453	12,543	13,453	14,959	162,290	165,095
2015 F	17,789	15,370	14,998	14,677	13,056	12,400	12,165	11,900	11,721	12,707	13,676	15,225	165,685	168,549

The Yukon Electrical Company Limited
Residential and Commercial Sales (MWh) for Hydro Rate Zone

Residential - Billed Sales

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Billed
2011	16,897	13,265	14,626	11,210	10,426	8,653	8,025	7,693	8,787	9,858	11,406	13,655	134,500
2012	16,437	14,137	13,323	11,090	10,060	9,326	8,544	8,309	8,557	9,883	12,686	15,764	138,117
2012-2011 Change	(460)	872	(1,303)	(119)	(365)	673	519	616	(230)	26	1,281	2,109	3,617
2012-2011 (Nov-Apr) Change													2,380
													66%

Commercial - Billed Sales

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Billed
2011	15,259	12,317	13,877	11,825	11,360	10,549	10,410	10,269	10,712	11,075	12,068	13,033	142,755
2012	15,677	13,178	13,063	12,764	11,533	10,991	10,836	10,520	10,157	11,438	12,490	13,993	146,641
2012-2011 Change	418	861	(814)	939	174	442	426	251	(555)	364	422	959	3,886
2012-2011 (Nov-Apr) Change													2,785
													72%

Average Temperature (Degree CC)	Dec
2011	-6.8
2012	-20.6
Variance	-13.8

YEC-YECL-5

Energy Reconciliation Adjustment (ERA), page 8 and page 2 of cover letter

On page 8 of its January 31, 2014 submission YECL notes that "if it is ultimately determined that an ERA amount should be charged to Yukon Electrical, then Yukon Electrical respectfully submits this amount would be flowed through to all Yukon ratepayers" and the ERA is "better served being administered by YEC." On page 2 of YECL's cover letter, YECL states as follows regarding the basis for the ERA as jointly proposed by the utilities, and ultimately approved by the YUB in the 1990s: "The ERA allowed YEC to flow-through its incremental diesel generation costs – as determined by the DCF – to YECL when actual wholesale sales varied from the companies' joint Board-approved forecast."

Requests:

(a) Please confirm that:

i. no ERA amount actually charged to YECL by YEC during the history of the DCF has ever "flowed through to all Yukon ratepayers"; and

ii. all ERA amounts actually charged to YECL by YEC in the past were in fact "administered by YEC".

(b) Please confirm that the ERA as applied in the past to increased wholesales (i.e. wholesales above GRA approved forecasts) assumed that any added expense to YECL from the ERA charge was fully mitigated by added YECL revenues related to the same increased YECL sales derived from the increased retail sales responsible for the increased wholesales.

(c) Please confirm that Purchase Power Flow Through Deferral Account approved in Decision 2010-13 was approved only for YECL costs related to ERA charges.

(d) Please confirm that no amounts have been charged to the Purchase Power Flow Through Deferral Account.

(e) Please confirm that without an ERA mechanism there is no further need for the Purchase Power Flow Through Deferral Account and that, without an ERA mechanism, this account can be terminated.

Responses:

(a) i. Confirmed. However, as has been previously explained and as outlined in YUB-YECL-4 Attachment 1, the ERA has been dormant since the late 1990s and the circumstances under which the ERA was designed then are significantly different than today.

ii. Confirmed. Though YECL and YEC were jointly managed at the time the ERA was initially designed and implemented, YEC can be considered to have "administered" such charges. More importantly, however, ATCO Electric Yukon's intent with the phrase "administered by YEC" is to point out that regulatory efficiency is best served for YEC to deal directly with the settlement of any balances resulting from its diesel consumption variances, rather than passing them through ATCO Electric Yukon and having ATCO Electric Yukon, in turn, pass them through to ratepayers.

(b) Confirmed. As outlined in the illustrative example in response to YUB-YECL-21(b), the run-out rate in 1997 (the additional cost to YEC to generate an additional kWh when diesel was 'on the margin') was 10.45 cents/kWh. From the YEC-YECL 1996-97 GRA filing, YECL's revenue was approximately 11.57 cents/kWh for residential and 15.51 cents/kWh for commercial. This meant that, for the period the ERA mechanism was being used in the 1990s, the added expense from the ERA charge was fully mitigated by increased sales. Since turning the ERA off in the 1990s, however, there have been no ERA charges and any incremental margin derived from increased retail sales has been available to ATCO Electric Yukon to offset inflationary and system growth costs, which has benefitted ratepayers by reducing costly rate proceedings.

(c) Not confirmed. The Purchase Power Flow Through Deferral Account is intended to flow through increases or decreases to the rates being charged by Yukon Energy. This includes the primary Wholesale Energy Charge and any proposed ERA charge.

(d) Confirmed. ATCO Electric Yukon has not yet been required to make use of the Purchase Power Flow Through Deferral Account

(e) Not confirmed. The Purchase Power Flow Through Deferral Account would still be required in order to address any potential future Wholesale Rate changes that did not coincide with an ATCO Electric Yukon rate application.

UCG-YECL-1

Reference: YEC DCF-ERA Filing

YECL Revised Proposals on the DCF and Rate Schedule 42 ERA

Request to YEC and YECL:

(a) In YEC's and YECL's views, what are the specific purposes of the Diesel Contingency Fund, the Energy Reconciliation Adjustment and the Fuel Adjustment Rider?

(b) Does YEC and YECL believe that the current electricity cost paid by ratepayers is affordable in the short and long term?

(c) If stable and affordable electricity rates are a long term goal, what do these three mechanisms accomplish toward implementing a plan to ultimately reach that goal?

Response:

(a) The purpose of the DCF, as it was designed, was to mitigate the impact of water level fluctuations on diesel generation volumes and to smooth changes in customer rates resulting from diesel generation cost fluctuations.

The purpose of the ERA was to share the forecast risk of changes in sales volume and associated fluctuations in diesel consumption between the two utilities, so that one utility would not benefit to the detriment of the other in circumstances when the two utilities were jointly managed and shared common forecasts.

The Fuel Adjustment Rider allows YEC and ATCO Electric Yukon to adjust their rates to retail customers, major industrial customers, and isolated industrial customers so as to reflect fluctuations in the fuel prices each utility pays.

Please refer to YUB-YECL-4 Attachment 1 for a further discussion of the purposes of the DCF and ERA.

(b) The rates charged for electricity in the Yukon are subject to Board approval, and the Board is required to set rates at just and reasonable levels. In general terms,

ATCO Electric Yukon believes that the presence of some load growth and the ongoing payment of utility bills by its customers suggest that the rates charged by it are affordable, but ATCO Electric Yukon is unclear on what measure of affordability the UCG was speaking to with its question.

(c) Please refer to YUB-YECL-5(d).

UCG-YECL-3

Reference: Board Order 2013-03, Page 2, Paragraph 5

> "In future, YEC must file Excel versions, with formulae intact of all schedules and tables used to support its filings."

Request to YEC and YECL:

(b) While the direction in Board Order 2013-03 regarding the provision of Excel spreadsheets was specifically directed to YEC, does YECL not think that Board's direction to one utility in this regard should not apply to the other?

(d) Please provide Excel versions of all tables contained within YECL's application, including Tables 3.1 and support schedules

Response:

(b) While the above noted Board Order was directed to YEC, ATCO Electric Yukon's practice has been, and continues to be, to provide actual excel spreadsheets along with its filings (as is evident from ATCO Electric Yukon's January 31, 2014 filing in this proceeding).

(d) Please refer to UCG-YECL-3(d) Attachment 1 for the excel file that was filed with the Board on January 31, 2014.

The Yukon Electrical Company Limited

Table 3-1

Line		Approved Forecast (ties to Table 1.3 from YEC Compliance filing) MWh	Approved Forecast (ties to Table 1.3 from YEC Compliance filing) $000s	Approved Forecast Adjusted for Actual Wholesale Sales MWh	Approved Forecast Adjusted for Actual Wholesale Sales $000s	Variance MWh	Variance $000s
	WHOLESALE FORECAST						
1	Wholesale	296,000	24,562	310,264	25,746	14,264	1,184
2	Forecast Expected Diesel Due to Wholesale (derived from *YECSIM* model, net of Fish Lake variance)	6,288	1,805	12,136	3,484	5,848	1,679
3 = 2 - 1	Diesel Shortfall for Wholesale Variance only						**495**
	REVENUES AT EXISTING RATES						
4	Consolidated Revenues of Non-Industrial		51,188		52,372		1,184
5	Consolidated Revenues of Industrial		4,955		4,955		-
6 = 4 + 5	Total Consolidated Revenues		**56,143**		**57,327**		**1,184**
	YUKON ENERGY REVENUE REQUIREMENT						
7	Revenue Requirement		59,815		61,494		1,679
8 = 7 - 6	Total Shortfall		**3,672**		**4,167**		**495**
	RIDER CALCULATIONS						
Formula	Rider J - Non-Industrial		6.85%		7.58%		0.72%
Formula	Rider J - Industrial		3.34%		4.04%		0.70%
	RIDER RECOVERIES						
9 = 4 * Rider J	Recovery of Shortfall from Non-Industrial		3,507		3,967		461
10 = 5 * Rider J	Recovery of Shortfall from Industrial		165		200		35
11	**Total Shortfall Recovery (matches Line 8)**		**3,672**		**4,167**		**495**

Conclusion: If YEC's Wholesale Sales forecast had been equal to actuals, 100% of the cost would be recovered from Ratepayers through Rider J

The Yukon Electrical Company Limited

Table 3-1: Support
2012 YEC Schedule 9 w. Actuals

	Compliance Filing	2012 Actual Wholesale	Variance
Residential			
Customers	1,526	1,526	-
Sales in MWh	12,325	12,325	-
MWh Sales per customer	8.1	8.1	-
Revenue ($000s)	1,803	1,803	-
Cents per KWh	14.6	14.6	-
General Service			
Customers	460	460	-
Sales in MWh	21,693	21,693	-
MWh Sales per customer	47.1	47.1	-
Revenue ($000s)	3,582	3,582	-
Cents per KWh	16.5	16.5	-
Industrial			
Sales in MWh	42,783	42,783	-
Revenue ($000s)	4,955	4,955	-
Cents per KWh	11.8	11.8	-
Street lights			
Sales in MWh	279	279	-
Revenue ($000s)	88	88	-
Cents per KWh	31.6	31.6	-
Space lights			
Sales in MWh	15	15	-
Revenue ($000s)	4	4	-
Cents per KWh	26.8	26.8	-
Total Company - Firm Retail & Ind			
Customers	1,986	1,986	-
Sales in MWh	77,095	77,095	-
Revenue ($000s)	10,432	10,432	-
Cents per KWh	13.5	13.5	-
Wholesale sales			
Sales in MWh	296,000	**310,264**	14,264
Revenue ($000s)	24,562	**25,746**	1,184
Cents per KWh	8.30	8.30	-
Total Company - Firm			
Sales in MWh	373,095	387,359	14,264
Revenue ($000s)	34,994	36,178	1,184
Cents per KWh	9.4	9.3	(0)
Secondary sales			
Sales in MWh	-	-	-
Revenue ($000s)	-	-	-
Cents per KWh	-	-	-
Total Company			
Sales in MWh	373,095	387,359	14,264
Revenue ($000s)	**34,994**	**36,178**	1,184
Cents per KWh	9.4	9.3	(0)

The Yukon Electrical Company Limited

Table 3-1
Support

Description		Units	Source
Forecast Fuel at GRA Forecast Load	7,926	MWh	From Table 2, Page 9 of YEC January 17, 2014 Proposal
Forecast Total Grid Sales	373,095	MWh	From Table 2, Page 9 of YEC January 17, 2014 Proposal
% Fuel Included In Base Rates	2.1%		% Fuel Included in wholesale rate at GRA Forecasts = Forecast Fuel at GRA Forecast Load / Forecast Grid Sales
Incremental Diesel in Base Rates	40.5%		From Table 2, Page 9 of YEC January 17, 2014 Proposal
Fish Lake Variance	992	MWh	From Table 2, Page 9 of YEC January 17, 2014 Proposal
Consolidated Revenues of Non-Industrial	51,188	$000s	From Table 1.3, YEC 2012/2013 GRA Compliance Filing
Consolidated Revenues of Industrial	4,955	$000s	From Table 1.3, YEC 2012/2013 GRA Compliance Filing
Revenue Requirement Shortfall	3,672	$000s	From Table 1.3, YEC 2012/2013 GRA Compliance Filing
Losses	8.7%		
Price of Diesel	0.2871	$/kWh	

UCG-YECL-4

Reference: Board Order 2013-03, Appendix A, Paragraph 16

> "YEC may file a future revised DCF proposal and ERA application. The Board prefers a joint filing from YEC and YECL. However, if agreement cannot be reached, a filing in which the companies state which aspects of the revised DCF proposal and ERA amendment they agree upon, the aspects they disagree upon, and the position of each company on those aspects they disagree upon is acceptable. The filing must also address the concerns raised in Board Order 2013-01 Attachment A: Reasons for Decision. This future revised DCF proposal and ERA application will be separate from the compliance filing directed in this order."

Reference: YEC Application to Revise the DCF, Cover Letter, Page 2

> "Unfortunately, despite the additional time provided, and their best efforts, the Companies have not been able to develop a joint recommendation or submission for the Board."

Request to YEC and YECL:

Please provide a summary table of aspects of the revised DCF proposal and ERA amendment that YEC and YECL agree upon, the aspects YEC and YECL disagree upon, and the position of both YEC and YECL on those aspects they disagree upon.

Response:

Please refer to YUB-YECL-9(b).

UCG-YECL-5

Reference: YEC Application to Revise the DCF, Cover Letter, Attachment A

Reference: YECL Revised Proposals on the DCF and Rate Schedule 42 ERA (Page 1)

> "Since the June 2013 issuance of Board Order 2013-03, Yukon Electrical has met with YEC on a number of occasions to develop a joint proposal for both the DCF and the ERA effective January 1, 2012. Unfortunately, the two utilities have been unable to agree on a proposal. YEC has been unwilling to make any substantive changes to the proposals for the DCF and ERA in its May 1, 2013 Compliance Filing, notwithstanding the significant concerns Yukon Electrical has raised with those proposals."

Request to YEC and YECL:

(a) Please provide details on when the utilities met to develop a joint proposal including dates and duration of meetings, who was in attendance, copies of material reviewed and copies of minutes from these meetings.

(b) Please explain why the utilities were developing a proposal effective January 1, 2012 when the YUB had already determined in its Order 2013-03 that it would not allow any changes regarding 2012 and we are now in 2014.

(c) Please confirm that any charges to YECL levied under the ERA are ultimately paid by Yukon ratepayers.

(d) Please explain why Yukon ratepayers should be held responsible for retroactive policy changes when they have made their electricity use choices based on the rates in place at the time the electricity was being used.

(e) Please provide details of the "significant concerns" raised by YECL on YEC's proposals and when during these meetings with YEC these concerns were raised.

Response:

(a) Much of the on-going communication and discussion between the utilities that was held between March 25, 2013 (the date on which the utilities were initially directed to work together to provide a joint proposal in Board Order 2013-01) and January 18, 2014 (the date on which YEC informed ATCO Electric Yukon that YEC was not open to modifying their proposal to address ATCO Electric's concerns and it was agreed that the utilities would be filing separate proposals to the Board) was handled through informal correspondence between representatives of the two utilities.

However, formal meetings/conference calls were held on the following dates:

July 10, 2013 – This meeting outlined the principles which ATCO Electric Yukon considers the DCF and ERA mechanisms should adhere to as well as ATCO Electric Yukon's concerns with YEC's proposal. Attendees on behalf of ATCO Electric Yukon were Dwight Redden (General Manager), Jay Massie (Manager), Ken Koenig (Supervisor, Product Support, ATCO Electric) and Chris Cullingham (Senior Regulatory Analyst, ATCO Electric). A copy of the document discussed at this meeting is included in YEC-YECL-2(a) Attachment 1.

September 19, 2013 – This meeting was to discuss a potential joint submission. Attendees on behalf of ATCO Electric Yukon were Dwight Redden (General Manager), Jay Massie (Manager), James Grattan (Director, Regulatory, ATCO Electric), Ken Koenig (Supervisor, Product Support, ATCO Electric) and Chris Cullingham (Senior Regulatory Analyst, ATCO Electric).

(b) ATCO Electric Yukon assumes that this request is regarding paragraph 15 of Board Order 2013-03 concerning YEC's 2012-13 GRA Compliance Filing, which states the following:

> The Board notes that the revised DCF proposal was not filed jointly by YEC and YECL and that there was not a joint recommendation by the companies on how to amend the wording regarding the ERA in Rate Schedule 42. The Board considers that the revised DCF proposal has not been tested in a proceeding. Given the foregoing, the Board does not approve the revised DCF proposal filed in YEC's 2012-13 GRA compliance filing. Consequently, the Board will not allow any changes regarding 2012 and the effects of any DCF proposal.

ATCO Electric Yukon interprets the direction from the Board to mean that it would not allow any changes regarding the DCF proposal for 2012 as part of YEC's Compliance Filing, not that any future revised DCF proposal would not impact 2012. This interpretation is substantiated by the Board's letter to YEC of July 16, 2013 regarding 2012 DCF and ERA impacts, in which the Board directs YEC to record the impacts of the DCF and ERA for 2012 on an interim basis, subject to further direction by the Board once a new DCF policy is approved.

(c) Not confirmed. The ERA mechanism and how any amounts levied are to be recovered has not yet been determined.

(d) The complexity of the DCF and ERA proposals and the importance of ensuring that the mechanisms approved are fair and reasonable for all parties involved (YEC, ATCO Electric Yukon and ratepayers) has meant that it has taken a significant amount of time and resources to deal with the issues. However, the DCF and ERA mechanisms were initially brought forward by YEC when it filed its 2012-13 GRA in April 2012, so such issues are in no way being brought forward "retroactively." Also, the end result of any approved mechanisms will be no different than any other deferral which is trued up with customers after the time the associated electricity is actually consumed.

(e) Please refer to YUB-YECL-9(b).

UCG-YECL-9

Reference: YECL Revised Proposals on the DCF and Rate Schedule 42 ERA (Page 2)

> "The purpose of the DCF was to ensure that ratepayers, rather than YEC and Yukon Electrical, covered the risk of changes in grid diesel generation due to fluctuations in hydro generation resulting from factors outside of the utilities' control (i.e. drought conditions)."

Request to YECL:

Please provide documentation that confirms that parties to the 1996-1997 Joint Negotiated Settlement agreed that this was the purpose of the original DCF.

Response:

The March 11, 1996 letter recording the Negotiated Settlement, as approved by Board Order 1996-6, is provided as Attachment 1 to this response. As outlined in Section 2 of the letter regarding the DCF,

> "The Fund is only to be used for the purposes of stabilizing customer rates and offsetting diesel generation cost estimates…"

As the DCF is used to offset the utilities' fluctuations in diesel generation costs as a result of variances in actual hydro generation from forecast, the risk related to the changes in grid diesel generation is carried by ratepayers.

VIA FACSIMILE

March 11, 1996

Dear :

Re: Proposed Settlement of Issues
Concerning the Revenue Requirement
and Rate Design Application of YEC and YECL

The purpose of this letter is to record the settlements we have achieved with respect to specific issues in the YEC and YECL ("the Companies") Application. This letter remains confidential until it is submitted to the Yukon Utilities Board for consideration. I, therefore, ask that you provide to me a communication of endorsement for the proposal so that we may forward it to the Board and make it public by Wednesday, March 13, 1996.

I have taken the liberty of reordering issues in our proposed settlement working sheets so that they align better with the subject areas of discussion in the Application. I have also added words to the bullets that we have agreed upon to explain the settlement to those parties who were not present at negotiations.

The settlement participants agree with the content and details of the Application, save for the following adjustments and identification of specific issues to be reviewed by the Board in public hearing. It is recognized by all the parties that the agreement represents a package proposal within which there has been give and take by all parties. No issue is to be severed from the proposed settlement without allowing signatories the opportunity to address other related issues in the package.

The terms of the settlement are as follows:

1. Return on Equity ("ROE")

   It is agreed that the ROE for 1996 and 1997 is to be set at 11.25 percent and that a Diesel Contingency Fund is to be established.

2. Diesel Contingency Fund

   This fund is to replace the proposed rate stabilization fund. The fund will operate to smooth customer rate changes and offset forecast diesel costs. Rates and the fund will be determined using the long-term average water expected to be available for generation (105 + 246 GW.h). The initial funding will be determined based upon the funds available as at December 31, 1995. If additional funding becomes available due to other determinations with respect to diesel costs or other utility costs in 1995, the fund will be adjusted. The fund is only to be used for the purposes of stabilizing customer rates and offsetting diesel generation cost estimates and the fund is not to be accessed for other reasons, including government subsidy of rates.

   The cap on the fund is set at the initial contribution level. If the fund accumulates revenues in excess of the cap, the surplus balance at the end of the year is to be refunded by way of a rate-rider to customers over the following two years. If the fund falls below the equivalent negative cap level, a rate-rider increasing customer bills will occur to maintain the fund within the positive and

negative cap levels. The fund is to attract interest based upon the short/intermediate term bond rates in which the Companies may invest the fund and any negative balances would only attract interest at the lowest short-term borrowing rate available to the Companies through a line of credit.

The fund is to operate outside of rate base but an annual report detailing additions and deletions to the fund is to be filed with the Board so that the Board may oversee the fund activities. The Board will direct the Companies on the additions and deletions to the fund. The annual report to the Board will also include a forecast of available water for the following year.

3. Capital Structure

The Companies agreed to back preferred shares out of their capital structure as soon as feasible. As the preferred shares are refunded, the Board is to consider appropriate common equity levels at future GRA hearings, having regard to the most efficient capital structure for the future.

4. Demand-Side Management ("DSM")

The DSM costs identified in the Application are accepted. A working group is to be formed, under terms of reference set by the Board, to make recommendations on energy management, conservation and efficient use programs and rates. The working group will also consider rate methods to encourage industrial self-generation when this will benefit system rates. The working group will also consider joint programs with municipalities. This working group is to be convened within one month following the Decision and a report is to be filed with the Board no later than November 1, 1996.

5. Capital Projects

The proposed capital projects schedule of the Companies is agreed to with the following changes:

- The new diesel plant at Dawson is agreed to.
- The Grum Substation is to be reassessed with ARM and it will only be added if required, and if alternative generation is not feasible. The capital cost of the substation and additional works is to be recovered from ARM so that there will be no impact on other customers.
- Any new transmission, distribution or substation capital requirement for new mines is to be paid for up front by the new mine so that other customers are not burdened with these costs.
- The proposed automatic meter reading program is removed from the 1997 budget and will be reconsidered for inclusion in 1998, or later.

6. Revenue Requirement

The revenue requirement budgets are accepted with the following conditions or changes:

- The sales forecast is to be revised based on the ARM Slurry Pipeline not proceeding.
- The Companies will revise the budgets to reflect the agreed upon long-term average water levels in the Diesel Contingency Fund.
- The Companies are undertaking a revised line loss study which is to be filed before the hearing and will be considered at the hearing.

- The program of additional maintenance for upgradings which is scheduled for completion in 1996 has been reviewed and is agreed to by the parties.

- The escalating charges from YECL's parent company, including potential future customer information system charges, are to be reviewed annually and the company is to seek out least cost alternatives.

- The Companies are to provide actual rate application costs for determination of final rates.

7. Review of Land Transactions

The proposed actions to dispose of certain housing and reconstruct new housing have been reviewed and found to be generally acceptable. The Companies detailed that any revenues from the sale of existing housing has been shown on the books such that it offsets a part of the new housing construction. UCG is to consider this issue further and report back to the Board prior to the hearing if it wishes to pursue further examination of the Companies' land transactions.

8. 1995 Interim Rates

The parties agree that the 1995 Interim Rates should be confirmed as permanent.

9. ARM Interim Rates

The interim rates outstanding for ARM since 1994 are to be confirmed as permanent.

10. Rate Design Issues

The rate design philosophy of the Companies is accepted subject to review at the hearing of Issue No. 11.

YECL and YEC are to commit to provide a preliminary cost assessment of each community in the four zones based upon the same methodology as was used in the 1992 study, updated to use 1995 data. The cost assessment is to be filed with the Board by July 1, 1996.

11. Cost of Service Allocations

The cost of service allocations are to be reviewed at the public hearing along with the appropriate revenue/cost ratios that are to be achieved by various customer classes.

12. Performance Indicators

The Companies have provided performance indicators as required by previous board decisions. Further analysis is to be undertaken to determine meaningful, measurable performance indicators to be used as a tool for management to assess performance in the areas of field generation, transmission, distribution and customer service. A report is to be filed by July 1, 1996. Based on the success of performance indicators during the current test period, the companies may suggest incentives tied to performance indicators for a future GRA.

13. Home Based Businesses

The Companies' policy with respect to home based businesses has been reviewed and found to be acceptable. It is to be filed as an Electric Service Regulation.

14. Electric Service Regulations

The proposed increase in charges for dishonoured cheques and reconnection charges are agreed to as being reasonable.

15. Retention of Monthly Time Sheets for YEC

An annual reporting by March 31 of the following year, is to be filed with the board detailing time spent on YEC versus YDC activities.

16. Filing of Monthly Fuel and Outage Reports

It is agreed that these reports should be replaced by performance indicators as they are developed. Until then quarterly reporting should be adequate for Board and customer reviews.

The companies are to provide an updated filing to the Board showing the revised revenue requirements of this proposed settlement. It may be that the reductions identified will lead to lower rates in 1996. That filing is to be made by Friday, March 15, 1996.

On another matter, the participants considered the UCG complaint with respect to water spillage in 1993 and 1994. The parties were unable to achieve a consensus view to suggest a resolution of the complaint. All intervenors present have agreed that this complaint should be heard at the upcoming public hearing.

In closing, I wish to commend the efforts of the Companies and all intervenors at the workshops and settlement discussions. The extensive efforts made by all parties to understand each issue along with the concerns and interests of other parties has allowed this settlement to come to fruition.

Yours truly,

W.J. Grant

WJG/ssc

UCG-YECL-10

Reference: YECL Revised Proposals on the DCF and Rate Schedule 42 ERA (Page 3)

> "At the time, YEC and Yukon Electrical were jointly managed by Yukon Electrical. All forecasts were prepared by Yukon Electrical and used jointly for both Yukon Electrical and YEC in common test period GRAs."

Request to YECL:

(a) Please provide an explanation of what is meant by "all forecasts".

(b) Please confirm that YECL prepared "all forecasts" for each year for both utilities and not just test periods included within a general rates application.

Response:

(a) "All forecasts" refers to the forecasts for YEC and YECL, which at the time were jointly prepared by YECL.

(b) Confirmed. YECL management would have prepared forecasts for both utilities in both test years and non-test years for the purposes of managing the businesses and for determining whether or not a rate application was required to be filed in the upcoming year. It is also important to note there was only one non-test year (1995) after the utilities started filing joint Phase I and II applications for the 1989/1990 test period.

UCG-YECL-11

Reference: YECL Revised Proposals on the DCF and Rate Schedule 42 ERA (Page 3)

> "Further to the above, the ERA mechanism was only active for a short period of time, and it has long since gone unused. Following the closure of the Faro mine in 1997, the ERA was not used for approximately 15 years. However, in 2012, YEC purported to charge $439,000 to Yukon Electrical based on YEC's unilaterally modified DCF and ERA mechanisms."

Request to YECL:

Please confirm whether YECL was actually invoiced the $439,000 and whether this charge or something different was actually paid to YEC.

Response:

ATCO Electric Yukon has not been invoiced the $439,000 for 2012, nor has it paid this charge to YEC.

UCG-YECL-12

Reference: YECL Revised Proposals on the DCF and Rate Schedule 42 ERA (Page 4)

> "YEC has relied on the historical regulatory approval of the DCF and ERA to justify its attempt to revive the mechanisms now. However, circumstances have changed. The original ERA, and YEC's proposed DCF and ERA, are no longer appropriate."

Request to YEC and YECL:

(a) Why was the DCF and ERA dormant for so long? Did either of the utilities benefit as a result of this dormancy?

(b) Was the DCF de-activated? If not, why was it not incurring benefits for the consumer through all the years of high water levels and little diesel usage?

(c) Why was the DCF not utilized when diesel was required to facilitate/bring on line Mayo B and Aishihik 3 projects? Was not diesel on the margin for these occasions?

(d) Who makes the determination that diesel is on the margin? Is this not the jurisdiction of the regulator? What are the conditions and interpretation of the definition "diesel on the margin"?

(e) Please confirm that the original DCF and ERA as approved by the YUB are still enforceable today as originally approved.

Response:

(a) As ATCO Electric Yukon understands it, surplus hydro has been available on the system since the Faro mine shut down in 1998. Since that time, there has been limited need for YEC to generate using diesel, so the DCF and ERA have remained dormant.

The utilities and ratepayers benefited from the dormancy of the DCF and ERA. ATCO Electric Yukon and YEC each earned additional revenue from sales growth. Both utilities were able to use this additional revenue to offset increases

in costs associated with inflation and system growth, reducing the need for costly and resource-intensive rate proceedings.

(b) Yes, the DCF was deactivated when the Faro mine shut down in 1998 and YEC determined diesel was no longer "on the-margin."

(c) As ATCO Electric Yukon understands it, YEC charged the diesel consumption required to facilitate/bring on line Mayo B and Aishihik 3 to the cost of each capital project (per Table 1 of YEC's January 31, 2014 filing, Line 7b), not to normal grid operations, as these diesel costs could be directly attributable to these capital projects. As a result, diesel was not considered to be "on the margin"' on the grid as a whole, so the DCF was not activated.

(d) "Diesel on the margin" was historically defined as diesel being used to meet long-term firm energy requirements of the WAF system, not just periodic peaking requirements. The distinction between normal "peaking" operation and true baseload diesel was historically set at 250 MWh per month for calculation purposes.

In general, forecast diesel expense should be determined by the utility that needs to incur the diesel generation costs – i.e. YEC. In turn, YEC should forecast its diesel requirement and go to the regulator to have that diesel requirement tested, approved, and included in its rates.

From ATCO Electric Yukon's perspective, the issues with YEC declaring diesel to be on the margin relate to YEC's forecasting methods, YEC's proposed accounting mechanisms (DCF and ERA), water surpluses/shortfalls, and secondary sales.

Please refer to YUB-YECL-1(b) for a further discussion of diesel on the margin.

(e) Confirmed.

UCG-YECL-13

Reference: YECL Revised Proposals on the DCF and Rate Schedule 42 ERA (Page 4)

> "Effective January 1, 1998, YEC moved to direct management. Since then, YEC and Yukon Electrical have prepared their own forecasts and filed separate GRAs. The ERA allowed for the sharing of forecast risk between the two companies, which was appropriate because the companies were under joint management and shared forecasts. This is no longer the case."

Request to YEC and YECL:

Please explain why it is not appropriate for YEC and YECL to share the risks associated with load forecasts that, regardless of who develops them, directly impact the rates charged by each of the utilities.

Response:

Please refer to YUB-YECL-4 Attachment 1.

UCG-YECL-14

Reference: YECL Revised Proposals on the DCF and Rate Schedule 42 ERA (Page 5)

> "A further flaw in YEC's proposals is that it will create a regulatory structure where Yukon Electrical's actual sales revenue will be no greater or no less than what YEC forecasts in a YEC GRA. The YEC proposal appears to provide that all sales margin growth for Yukon Electrical in Yukon Electrical non-test years will flow through to Yukon Energy."

Request to YECL:

Please provide a more detailed explanation of YECL's interpretation of YEC's proposal with reference to actual operating results from non-test years.

Response:

Please refer to UCG-YECL-14 Attachment 1 for a detailed example showing ATCO Electric Yukon's expected returns for 2015 (test year) and 2016 (non-test year) if the ERA is approved as YEC has proposed.

Assumptions:

- For 2015, ATCO Electric Yukon's revenues (both retail and other) and costs (fuel, operations and maintenance, property taxes, depreciation, amortization of contributions, amortization of deferred charges and credits, and incomes taxes) are equal to that approved for 2015 in ATCO Electric Yukon's 2013-2015 GRA. For 2016, these revenues and expenses increase by 2%.

- For 2015, ATCO Electric Yukon's required power purchases from YEC in MWh are equal to that approved for 2015 in ATCO Electric Yukon's 2013-2015 GRA. For 2016, ATCO Electric Yukon's required power purchases in MWh increase by 2% (correlating to the increase in sales)

- For 2015, ATCO Electric Yukon's issuance of debt, cost of debt and capital expenditures/additions are equal to that approved for 2015 in ATCO Electric Yukon's 2013-2015 GRA. For 2016, ATCO Electric Yukon's capital expenditures

and contributions received increase by 2% over the 2015 approved amounts. ATCO Electric Yukon's cost of debt remains unchanged from 2015 and the growth is rate base is financed 60% from debt and 40% from increased equity as approved for 2015.

- For the ERA calculation, all factors (such as YEC's industrial sales and losses) are equal to that forecast in YEC's 2012-13 GRA. As well, YEC does not file a GRA in 2014, 2015 or 2016.

The following conclusions can be drawn from this example:

- For 2015, if the ERA mechanism as proposed by YEC were to be approved, ATCO Electric Yukon would have no opportunity to make its awarded return on equity, even if its sales, other revenue, and all expenses other than purchased power were to be exactly equal to the forecast approved by the Board as part of the 2013-2015 GRA.

- For 2016, absent the ERA and assuming there is 2% sales growth and 2% growth in other revenue, expenses, and capital additions, ATCO Electric Yukon would be expected to earn less than its awarded return, even if its sales, other revenue, and all expenses other than purchased power were to be exactly equal to the forecast approved by the Board as part of the 2013-2015 GRA.

- For 2016, if the ERA mechanism as proposed by YEC were to be approved and assuming there is 2% sales growth and 2% growth in other revenues, expenses, and capital additions, ATCO Electric Yukon would be expected to earn less than its awarded return, even if its sales, other revenue, and all expenses other than purchased power were to be exactly equal to the forecast approved by the Board as part of the 2013-2015 GRA. ATCO Electric Yukon would therefore have no choice but to file a GRA and incur the significant regulatory costs.

Return on Rate Base (GRA Schedule 8.1)
($000s)

2015 Approved (excluding the ERA)					
Long-Term Debt	56,400	59.73%	56,542	5.74%	3,245
Common Stock	37,600	39.82%	37,695	8.75%	3,300
No Cost Capital	422	0.45%	423	0.00%	-
Total	94,422	100.0%	94,660	6.91%	6,545
2015 Expected (Including the ERA)					
Long-Term Debt	56,400	59.73%	56,542	5.74%	3,245
Common Stock	37,600	39.82%	37,695	6.61%	2,491
No Cost Capital	422	0.45%	423	0.00%	-
Total	94,422	100.0%	94,660	6.06%	5,737
2016 Forecast (2% over 2015 approved, excluding the ERA)					
Long-Term Debt	61,568	59.46%	61,403	5.74%	3,524
Common Stock	41,045	39.64%	40,935	7.66%	3,137
No Cost Capital	936	0.90%	934	0.00%	-
Total	103,549	100.0%	103,272	6.45%	6,661
2016 Expected (Including the ERA)					
Long-Term Debt	58,850	59.43%	61,378	5.74%	3,523
Common Stock	39,233	39.62%	40,918	4.78%	1,957
No Cost Capital	936	0.95%	976	0.00%	-
Total	99,020	100.0%	103,272	5.31%	5,479

ATCO Electric Yukon Utility Revenue Requirement (GRA Schedule 1.1)
($000s)

Description	2015 (Test Year)			2016 (Non-Test Year)		
	Approved	ERA Charge (Change in Purchase Power Rate)	Expected AEY Results (Including the ERA)	Forecast Excluding ERA	ERA Charge (Change in Purchase Power Rate)	Expected AEY Results (Including the ERA)
Revenues	55,183		55,183	56,287		56,287
Retail Revenues	1,275		1,275	1,301		1,301
Other Revenue	56,458	-	56,458	57,587	-	57,587
Total Revenues						
Costs						
Purchase Power	26,634	1,155	27,789	27,181	1,688	28,869
Fuel	6,704		6,704	6,838		6,838
Operations and Maintenance	11,944		11,944	12,183		12,183
Property Taxes	273		273	278		278
Depreciation	5,778		5,778	5,894		5,894
Amortization of Contributions	(1,749)		(1,749)	(1,784)		(1,784)
Amortization of Deferred Charges & Credits	17		17	17		17
Return on Rate Base	6,545	(808)	5,737	6,661	(1,181)	5,479
Income Taxes	313	(346)	(33)	319	(506)	(187)
Total Costs	56,459	-	56,459	57,587	-	57,587

:O Electric Yukon Schedule of Energy Losses (GRA Schedule 3.2)
(MW.h)

Description	Approved 2015	Forecast 2016
Sales and Losses		
Total Energy Sales - MWh	330,612	337,224
Losses and Company Used - MWh	20,498	20,908
Losses -%	6.2%	6.2%
Total Generation and Purchases (MWh)	351,110	358,132
Sources - MWh		
Hydro Generation	8,730	8,730
Hydro Grid Standby Diesel Generation	70	70
Diesel Generation	21,345	21,772
Purchases	320,965	327,560
	351,110	358,132
Sources - %		
Hydro Generation	2.5%	2.4%
Diesel Generation	6.1%	6.1%
Purchases	91.4%	91.5%
	100.0%	100.0%

Computation of Rate Base (GRA Schedule 8.5)
($000s)

Description	Approved 2015	Forecast 2016
Property, Plant and Equipment		
Year End Balance	217,907	231,871
Deduct:		
Accumulated Depreciation	80,177	86,070
Construction-in-Progress	961	961
Total Deductions	81,137	81,137
Net Plant in Service		
Current Year End Balance	136,770	150,734
Previous Year End Balance	128,101	136,770
Total	264,872	287,504
Mid-Year Balance	132,436	143,752
Mid-Year Deferred Charges/Credits	401	401
Working Capital	3,601	3,601
Gross Rate Base	136,438	147,754
Deduct:		
Contributions in Aid of Construction		
Current Year End Balance	43,117	45,847
Previous Year End Balance	40,440	43,117
Total	83,556	88,964
Mid-Year Balance	41,778	44,482
Net Rate Base	94,660	103,272

	2015	2016
ERA Calculations (As understood by AEY)		
YEC Most Recent GRA-Approved Retail & Industrial (MWh)	75,913	75,913
YEC Most Recent GRA-Approved Wholesales (MWh)	307,147	307,147
YEC GRA-Approved Grid Total (MWh)	**383,060**	**383,060**
Approved Losses	8.70%	8.70%
Gen Approved Total	416,387	416,387
Actual YEC Sales (Retail & Industrial) (MWh)	75,913	75,913
Actual AEY Sales (Wholesale) (MWh)	**320,965**	**327,560**
Grid Total (MWh)	**396,878**	**403,473**
Actual Losses	8.70%	8.70%
Actual Gen	431,406	438,575
YEC Retail & Industrial Variance (MWh)	-	-
YEC Wholesale Variance (MWh)	13,818	20,413
Sales Variance (MWh)	**13,818**	**20,413**
Generation Variance (MWh)	**15,020**	**22,189**
Forecast Wind	238	238
Fish Lake Impact	-	-
Forecast Wind & Fish Lake Impact	238	238
Expected Diesel at Actual Load	19,531	23,536
Expected Diesel at GRA-Approved Load	11,005	11,005
Variance (Diesel MWh)	**8,526**	**12,530**
Expected Diesel at Actual Load	19,531	23,536
Actual Diesel	11,005	11,005
Variance (DCF MWh)	**8,526**	**12,530**
Diesel Rate	0.2871	0.2871
Variance (DCF $000s)	**2,448**	**3,597**
ERA Calc		
Incremental Diesel in Base Rates	56.8%	56.5%
Diesel Proportion of Wholesale Variance	8,526	12,530
Added Diesel Cost ($000s)	2,448	3,597
Added Purchases ($000s)	1,293	1,910
ERA ($000s)	**1,155**	**1,688**

Table 1.1-1: Expected YEC Diesel Generation with LTA YEC Hydro Generation
(Assumes only Minto & Alexco Mine Loads for 2012 (Compliance Filing))

	Grid Load [1]	Hydro Generation [2]	Diesel Generation [3]	Increase in Load [4]	Diesel Gen [5]	Diesel as % of increased load [6]
[1]	400	394.0	6.0			36%
[2]	405	397.2	7.8	5	1.8	40%
[3]	410	400.2	9.8	5	2.0	40%
[4]	415	403.2	11.8	5	2.0	46%
[5]	420	405.9	14.1	5	2.3	46%
[6]	425	408.6	16.4	5	2.3	50%
[7]	430	411.1	18.9	5	2.5	54%
[8]	435	413.4	21.6	5	2.7	58%
[9]	440	415.5	24.5	5	2.9	60%
[10]	445	417.5	27.5	5	3.0	62%
[11]	450	419.4	30.6	5	3.1	66%
[12]	455	421.1	33.9	5	3.3	70%
[13]	460	422.6	37.4	5	3.5	72%
[14]	465	424.0	41.0	5	3.6	74%
[15]	470	425.3	44.7	5	3.7	78%
[16]	475	426.4	48.6	5	3.9	

Table 1.1-2: Expected YEC Diesel Generation with LTA YEC Hydro Generation
(Assumes WHCT & Other Industrial Loads for 2013 (Compliance Filing))

	Grid Load [1]	Hydro Generation [2]	Diesel Generation [3]	Increase in Load [4]	Diesel Gen [5]	Diesel as % of increased load [6]
[1]	400	394.9	5.1			32%
[2]	405	398.3	6.7	5	1.6	36%
[3]	410	401.5	8.5	5	1.8	40%
[4]	415	404.5	10.5	5	2	44%
[5]	420	407.3	12.7	5	2.2	48%
[6]	425	409.9	15.1	5	2.4	52%
[7]	430	412.3	17.7	5	2.6	54%
[8]	435	414.6	20.4	5	2.7	58%
[9]	440	416.7	23.3	5	2.9	60%
[10]	445	418.7	26.3	5	3	64%
[11]	450	420.5	29.5	5	3.2	66%
[12]	455	422.2	32.8	5	3.3	66%
[13]	460	423.9	36.1	5	3.3	70%
[14]	465	425.4	39.6	5	3.5	72%
[15]	470	426.8	43.2	5	3.6	74%
[16]	475	428.1	46.9	5	3.7	74%
[17]	480	429.4	50.6	5	3.7	76%
[18]	485	430.6	54.4	5	3.8	76%
[19]	490	431.8	58.2	5	3.8	78%
[20]	495	432.9	62.1	5	3.9	78%
[21]	500	434.0	66.0	5	3.9	

UCG-YECL-15

Reference: YECL Revised Proposals on the DCF and Rate Schedule 42 ERA (Page 5)

> "For example, in 2012, if YEC's original wholesale sales forecast been equal to Actual Wholesale sales (310 GWh instead of 296 GWh), YEC would have forecast $1.2M in additional revenue, and $1.7M in additional expense. In turn, this would have increased YEC's revenue shortfall by $0.5M, which would have been recovered from ratepayers through Rider J. Rider J for non-industrial customers would have increased from 6.85% to 7.58%, and Rider J for industrial customers would have increased from 3.34% to 4.04%."

Request to YECL:

Please provide a table showing similar allowed forecast versus actual wholesale sales calculations / impacts for 2009 through 2013.

Response:

ATCO Electric Yukon is unable to provide the requested calculations for 2009-2011 because diesel was not determined by YEC to be "on the margin" for those years.

For 2012 and 2013, please refer to UCG-YECL-15 Attachment 1.

The Yukon Electrical Company Limited

Table 3-1

Line		Approved Forecast (ties to Table 1.3 from YEC Compliance filing) MWh	Approved Forecast (ties to Table 1.3 from YEC Compliance filing) $000s	Approved Forecast Adjusted for Actual Wholesale Sales MWh	Approved Forecast Adjusted for Actual Wholesale Sales $000s	Variance MWh	Variance $000s
	WHOLESALE FORECAST						
1	Wholesale	296,000	24,562	310,264	25,746	14,264	1,184
2	Forecast Expected Diesel Due to Wholesale (derived from *YECSIM* model, net of Fish Lake variance)	6,288	1,805	12,136	3,484	5,848	1,679
3 = 2 - 1	Diesel Shortfall for Wholesale Variance only						**495**
	REVENUES AT EXISTING RATES						
4	Consolidated Revenues of Non-Industrial		51,188		52,372		1,184
5	Consolidated Revenues of Industrial		4,955		4,955		-
6 = 4 + 5	Total Consolidated Revenues		**56,143**		**57,327**		**1,184**
	YUKON ENERGY REVENUE REQUIREMENT						
7	Revenue Requirement		59,815		61,494		1,679
8 = 7 - 6	Total Shortfall		**3,672**		**4,167**		**495**
	RIDER CALCULATIONS						
Formula	Rider J - Non-Industrial		6.85%		7.58%		0.72%
Formula	Rider J - Industrial		3.34%		4.04%		0.70%
	RIDER RECOVERIES						
9 = 4 * Rider J	Recovery of Shortfall from Non-Industrial		3,507		3,967		461
10 = 5 * Rider J	Recovery of Shortfall from Industrial		165		200		35
11	**Total Shortfall Recovery**		**3,672**		**4,167**		**495**

The Yukon Electrical Company Limited

Table 3-1

Line		Approved Forecast (ties to Table 1.3 from YEC Compliance filing) MWh	Approved Forecast (ties to Table 1.3 from YEC Compliance filing) $000s	Approved Forecast Adjusted for Actual Wholesale Sales MWh	Approved Forecast Adjusted for Actual Wholesale Sales $000s	Variance MWh	Variance $000s
	WHOLESALE FORECAST						
1	Wholesale	307,147	25,487	307,927	25,552	780	65
2	Forecast Expected Diesel Due to Wholesale (derived from *YECSIM* model, net of Fish Lake variance)	8,825	2,534	8,901	2,555	76	22
3 = 2 - 1	Diesel Shortfall for Wholesale Variance only						**(43)**
	REVENUES AT EXISTING RATES (including Rider J)						
4	Consolidated Revenues of Non-Industrial		55,980		56,045		65
5	Consolidated Revenues of Industrial		5,570		5,570		-
6 = 4 + 5	Total Consolidated Revenues		**61,550**		**61,615**		**65**
	YUKON ENERGY REVENUE REQUIREMENT						
7	Revenue Requirement		63,950		63,972		22
8 = 7 - 6	**Total Shortfall**		**2,400**		**2,357**		**(43)**
	RIDER CALCULATIONS						
9 = 8 / 6	Rider R		3.90%		3.83%		-0.07%
	RIDER RECOVERIES						
10 = 4 * 9	Recovery of Shortfall from Non-Industrial		2,183		2,144		(39)
11 = 5 * 9	Recovery of Shortfall from Industrial		217		213		(4)
12 = 10 + 11	**Total Shortfall Recovery (matches Line 3)**		**2,400**		**2,357**		**(43)**

UCG-YECL-16

Reference: YECL Revised Proposals on the DCF and Rate Schedule 42 ERA (Pages 5-6)

> "If YEC's proposal is adopted and Yukon Electrical's actual sales revenue can be no greater (or no less) than what YEC forecasts in a YEC GRA, and all sales margin growth for Yukon Electrical in Yukon Electrical non-test years will flow through to Yukon Energy, Yukon Electrical will be required to vigorously test YEC's wholesale sales forecast and diesel consumption forecasts, as well as the manner in which YEC operates its generation (to ensure that Yukon Electrical has prudently managed those assets in incurring diesel costs that YEC would seek to pass on to Yukon Electrical and its ratepayers). Yukon Electrical also anticipates that it would need to make every future year a test year (since it would have sales margin growth to offset any increases in Yukon Electrical's rate base or operating costs)."

Request to YECL:

(a) Please confirm that YEC's proposal should equate sales revenues to those load / revenue forecasts allowed by the YUB for rate setting purposes and not simply YEC's forecasts.

(b) Does YECL not already vigorously test YEC's wholesale sales forecast and diesel consumption forecasts both as prepared for budgeting purposes and for general rates applications? Why would YECL's efforts be any different going forward?

(c) Please confirm that for the 2012-2013 test year period, YEC was directed by the YUB to consult with YECL regarding the wholesale sales forecast to be used for rate setting, that this consultation took place and that YEC's allowed wholesale sales forecast for 2012 and 2013 was based on these consultations.

(d) Please explain why it would be a bad thing to ensure that every year is a test year within a multi-year general rates application.

Response:

(a) Based on ATCO Electric Yukon's understanding of YEC's proposal, it does equate sales revenues to those load / revenue forecasts allowed by the YUB for YEC rate setting purposes and not simply YEC's forecasts. ATCO Electric Yukon's issue with YEC's proposal is that it calculates ATCO Electric Yukon's sales margin growth based on YEC's own approved forecast, which is not ATCO Electric Yukon's approved forecast and which causes ATCO Electric Yukon to assume risk for YEC's forecasts. Also, in non-test years, the calculation remains fixed at the last YEC GRA approved forecast, which means that ATCO Electric Yukon can have no sales margin growth beyond the last approved YEC forecast against which to offset increases costs in order to avoid filing a GRA (as has happened in 1998-2007 and 2010-2012).

(b) Regarding general rate applications, ATCO Electric Yukon reviews YEC filings and selectively intervenes in those issues on which it deems it can add the most value to the process and which it believes are of the greatest importance to ATCO Electric Yukon and its customers. ATCO Electric Yukon does not have the resources to review in great detail all of YEC's calculations, assumptions, and forecasts. To do so would require additions to ATCO Electric Yukon's complement that would require ratepayers to incur additional costs.

Furthermore, there are many aspects of YEC's system that ATCO Electric Yukon is unfamiliar with and does not possess the expertise to test. For example, ATCO Electric Yukon does not have a large hydro generation engineer on staff and would need to hire a large hydro specialist to vigorously test hydro assumptions (which would be key components of the YECSIM-derived forecasts).

ATCO Electric Yukon also understands that other interveners participate in YEC GRAs (and recover their costs for doing so), and presumes that those interveners are vigorously testing YEC's filings.

Regarding budgeting, ATCO Electric Yukon and YEC are two entirely separate entities and, as such, are managed entirely independently.

(c) Based on a review of YEC's 2012-2013 GRA, ATCO Electric Yukon is not aware of YEC being directed by the YUB to consult with YECL regarding the wholesale sales forecast to be used for rate setting. However, YEC did request, and

ATCO Electric Yukon did provide, an Integrated Grid firm wholesale purchase power forecast reflecting forecast grid firm retail sales less forecast generation from Fish Lake. ATCO Electric Yukon understands that YEC reviewed this material and adjusted it for its own GRA forecast purposes. Please also refer to YUB-YECL-1(c).

(d) ATCO Electric Yukon is unclear of the intent of this request as, by definition, every year within a multi-year rate application is a test year. However, if the request is enquiring as to why it would be a bad thing to ensure that every future year is a test year, there are several reasons:

- Rate proceedings involve significant expense that is primarily borne by ratepayers;
- The rate application process is extremely time-consuming and labour-intensive for the utility, drawing on resources that would be better spent on finding more effective and efficient ways to operate the system; and
- Allowing a utility to avoid filing a general rate application provides a further incentive for the utility to operate more efficiently, as any cost savings realized are to the account of the shareholder until the utility files its next rate application and they are incorporated into customer rates.

UCG-YECL-17

Reference: YECL Revised Proposals on the DCF and Rate Schedule 42 ERA (Page 6)

> "Yukon Electrical respectfully submits the creation of this type of regulatory framework going forward is neither efficient nor in the interest of ratepayers. Ratepayers directly benefit from reduced regulatory costs and increased inefficiency. YEC's proposal will significantly erode the benefits that Yukon Electrical's (and Yukon Energy's) ratepayers currently enjoy in this regard."

Request to YECL:

Please provide a table showing quantifiable benefits that Yukon ratepayers have received for 2009 through 2013 from YECL's alleged reduced regulatory costs and "increased inefficiency" (as is indicated in the YECL submission).

Response:

Per Board Order 2009-11, the total approved costs for ATCO Electric Yukon's 2008-2009 GRA process, including costs incurred by interveners and the Board, totaled $642,153. This is a total regulatory cost per test year of $321,077 ($642,153/2 test years).

Per Board Order 2014-11, the total approved costs for ATCO Electric Yukon's 2013-2015 GRA process, including costs incurred by interveners and the Board, totaled $587,767. This is a total regulatory cost per test year of $195,922 ($587,767/3 test years).

Therefore, the benefit of the reduced regulatory costs Yukon ratepayers experienced as a result of ATCO Electric operating efficiently and not being required to file an application to increase rates in 2010, 2011 or 2012 can be estimated as follows:

Year	Based on Board Order 2009-11	Based on Board Order 2014-11
2010	$321,077	$195,922
2011	$321,077	$195,922
2012	$321,077	$195,922
Total Estimated Savings to Customers	**$963,231**	**$587,766**

UCG-YECL-18

Reference: YECL Revised Proposals on the DCF and Rate Schedule 42 ERA (Page 7)

> "In consideration of Yukon Electrical's concerns with Yukon Energy's proposal above and to resolve the Board's concerns as stated in Board Order 2013-01, Yukon Electrical believes the mechanism to address diesel volume variances must adhere to the following principles:
>
> 1) Simple, transparent, easily explainable and easily testable
>
> 2) Allow a utility to recover its prudently-incurred costs
>
> 3) Based on actual data and relates to all fuel volume variances on the interconnected system
>
> 4) Dispersed in a timely manner, so as to not mask market signals in times of a drought or flood and to avoid intergenerational inequity
>
> 5) The deferral account balance thresholds that trigger the disposal should be set at a reasonable level so as to not cause undue rate changes or rate impacts to customers."

Request to YEC and YECL:

(a) Does YECL believe that the current DCF and Rate Schedule 42 ERA are already subject to these principles? If not, why not?

Response:

(a) There is no "current" DCF. The DCF and ERA have been dormant for more than a decade.

ATCO Electric Yukon has many concerns with YEC's proposals regarding the principles outlined above. Please refer to the response to YUB-YECL-9(b) for a detailed breakdown.

UCG-YECL-19

Reference: YECL Revised Proposals on the DCF and Rate Schedule 42 ERA (Page 8)

> "Based on the above approvals, if it is ultimately determined that an ERA amount should be charged to Yukon Electrical, then Yukon Electrical respectfully submits this amount would be flowed through to all Yukon ratepayers. Further, if 100% of the ERA is to be recovered from all Yukon ratepayers, then, as submitted in Yukon Electrical's argument in YEC's 2012-2013 GRA, and agreed by YEC in its January 17, 2014 proposal, the ultimate recovery of the outstanding deferral is, from a regulatory efficiency perspective, better served being administered by YEC."

Request to YECL:

Please confirm that ERA charges are recovered from all Yukon ratepayers including industrial customers.

Response:

Confirmed. ATCO Electric Yukon is proposing to recover ERA charges from all ratepayers including industrial customers.