

DE 17-058 Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities

Attachment A

Energy Service Accrual Accounting

The purpose of accrual accounting is to match revenues and expenses with the period in which they were earned and incurred, rather than recording when revenues were physically received and expenses were actually paid, which is “cash” accounting. This matching is accomplished by recognizing, through accrual entries: a) the amount of current consumption by customers (i.e., revenue) not yet billed for a particular month; and b) the amount of expense incurred in providing energy service to customers in a particular month for which the Company has not yet been billed by a supplier. The unbilled revenue accrual increases revenue for the current month, and the expense accrual increases expense for the current month. The following month, when the remainder of the consumption is billed and the associated revenue is recorded, the prior month’s accrual is reversed to recognize the fact that the revenue was already recorded in the prior month. Likewise, the expense accrual is reversed in the following month when the bill for the current month is received and paid.

In the DE 16-383 Energy Service proceeding, the Commission authorized the Company to switch its reconciliation report from the cash basis to the accrual basis, and subsequently approved the change in DE 17-058. A switch from the cash basis to accrual basis results in a one-time impact to the items being reconciled—in this case, Energy Service costs and revenues. That one-time impact is only due to timing differences in the recognition of revenues and expenses for purposes of the reconciliation and reflection in the Energy Service rate calculation, and does not result in any difference in the revenues and expenses included in the reconciliation process over time. In fact, the particular circumstances of switching from the cash to the accrual basis in this case caused a one-year delay in the Company being able to begin recovering Energy Service costs that were incurred in July 2016. That will be explained in further detail below.

In Order No. 26,030, the Commission highlighted two amounts for which it requested further explanation: an unbilled revenue accrual of \$1,563,102 and a power purchase expense accrual of \$2,624,187. Discussion at the June 19, 2017, hearing revealed a concern of the Commission and Commission Staff regarding the approximate \$1 million difference between the revenue and expense accrual amounts, with the general thought being that the two numbers should be approximately equal. While it is true that Energy Service revenues and expenses should be roughly equivalent on a monthly basis, it is not necessarily true for purposes of revenue and expense accrual calculations due to the inherent differences in the timing of how Energy Service costs are incurred and billed to the Company (expenses) versus how the Company in turn bills its customers (revenues).

Thus, the key to understanding the accrual amounts is to understand: a) the process by which customers are billed and the revenue recognized; and b) the process by which Liberty is billed by and pays the supplier of Energy Service.

Liberty reads meters throughout the course of each month, and also bills its customers through the course of each month for consumption taken between two meter readings – the reading from the prior month and the reading in the current month. By the end of each calendar month, then, approximately half of the current month's usage would have been billed during the month, leaving the remaining half as "unbilled." For example, a customer whose meter is read on July 15 will receive a bill in late July which bill will include usage for part of June and part of July. Likewise, in August that customer will receive a bill that includes usage for part of July as well as part of August. Thus, at the end of July roughly half of July's usage had been billed in that month and the remaining "unbilled" July usage would be included in the August bill. Each month, Liberty estimates the amount of usage for that current month that remains unbilled and, using the current Energy Service rates, calculates the amount of unbilled revenue. The \$1,563,102 of unbilled revenue reported on line 2 of Exhibit 2, at 72, represents the estimated amount of Energy Service revenue to be received from customers for usage that occurred during the second half of July 2017 but had not yet been billed. The revenue associated with usage during the first half of July 2017 had been billed during the month and, therefore, was already recorded. In August 2017, the entry to record the \$1,563,102 of unbilled revenue will be reversed, and a new unbilled entry will be made (for the August usage that will not be billed until September).

On the expense side, Liberty does not receive an invoice from a supplier for Energy Service costs incurred during, for example, July until the following month, August. In this case, at the end of July an expense accrual must be recorded to recognize 100% of the Energy Service cost that has been incurred but not yet invoiced or paid. In the DE 17-058 reconciliation report, that estimated expense was reported to be \$2,624,187.¹ Similar to the discussion above, the entry to record the \$2,624,187 expense accrual will be reversed in August 2017 and a new expense accrual will be made (for Energy Service expense incurred in August that will not be invoiced until September).

The approximate \$1 million excess of the expense accrual versus the revenue accrual discussed at hearing was only the result of the timing differences between the Energy Service revenue and expense processes. The same type of difference occurs each month and then reverses the following month. When the reversals are recorded, the opposite effect takes place. That is, if the reversal of the expense accrual is greater than the reversal of the unbilled revenue accrual, the net impact in any given month is that the reduction to expenses exceeds the reduction to revenues.

In order to demonstrate the workings of the revenue and expense processes and how the accounting works on a month-to-month basis, page 4 of this attachment includes two illustrative simplified examples using a hypothetical three-month accounting process. Example A demonstrates how accrual accounting works on a month-to-month basis assuming the accrual method was used for the entire period. As shown in Example A, although the revenue and expense accrual amounts recorded for each month are different (the expense accrual is twice as large as the unbilled revenue accrual), the revenue

¹ In preparing this explanation, it was discovered that the \$2,624,187 was actually the estimated expense accrual for the month of August 2017 (calculated using the currently effective supplier contract rates) rather than for the month of July. The July 2017 expense accrual estimate was \$3,000,063, a difference of approximately \$376,000. Consistent with Order No. 26,030, this correction will be reconciled in the next Energy Service reconciliation proceeding.

and expense amounts that result from the normal accounting process each month are equal. Example B demonstrates how switching to the accrual process following the start of the accounting period will result in a one-time accounting impact due solely to timing. Example B represents the scenario at play in the DE 17-058 reconciliation process as the accrual basis was not in use at the beginning of the period. The difference between Example B and Example A is shown on lines 42 and 49 where the reversal of the initial revenue and expenses accruals is not included. The resulting difference in the revenue and expense totals for the three-month period is, again, solely due to timing. That timing difference means that the Company needed to wait until the end of the period to be able to recover the difference between the revenue and expense that existed at the beginning of the three-month accounting period due to the use of the cash basis rather than the accrual basis.

The use of the cash basis for prior Energy Service reconciliation periods resulted in a delay in the Company being able to recover Energy Service expenses incurred during each respective period. With respect to DE 17-058, the prior reconciliation period ended in July 2016. At the end of that month, the unbilled revenue accrual recorded in the Company's books was \$1,192,727 and the expense accrual was \$2,500,985. Had those amount been allowed to be reflected in the prior reconciliation, the Company would have been able to recover the approximate \$1.3 million difference over the ensuing August 2016 through July 2017 reconciliation period. Further, the reversal of those two accrual amounts in August 2016 would have been reflected in the DE 17-058 reconciliation filing, thus having a net reduction of \$1.3 million to Energy Service costs and the opposite effect of the one-time impact that gave rise to concern in this proceeding.

EXAMPLE A - Using Accrual Basis for the Entire Reconciliation Period

1 Assumptions:				
2 May amount of Energy Service to be billed to customers				\$ (2,000,000)
3 May cost to provide Energy Service				\$ 2,000,000
4 June amount of Energy Service to be billed to customers	(a)	\$ (2,800,000)		
5 June cost to provide Energy Service	(b)	\$ 2,800,000		
6 July amount of Energy Service to be billed to customers	(c)	\$ (3,000,000)		
7 July cost to provide Energy Service	(d)	\$ 3,000,000		
8 August amount of Energy Service to be billed to customers	(e)	\$ (2,700,000)		
9 August cost to provide Energy Service	(f)	\$ 2,700,000		
10 Portion of prior month Energy Service usage billed in current month				50%
11 Portion of current month Energy Service usage billed in current month				50%
12 Portion of current month Energy Service supply cost billed from supplier in current month				0%
13 Portion of current month Energy Service supply cost billed from supplier and paid in following month				100%
14				
15 Revenue		June	July	August
16 Prior month reversal of unbilled revenue (1/2 of prior month)		\$ 1,000,000	\$ 1,400,000	\$ 1,500,000
17 Current month bills to customers (includes 1/2 prior month and 1/2 current month usage)		\$ (2,400,000)	\$ (2,900,000)	\$ (2,850,000)
18 Current month unbilled revenue accrual (1/2 current month)		\$ (1,400,000)	\$ (1,500,000)	\$ (1,350,000)
19	Current month revenue	\$ (2,800,000)	\$ (3,000,000)	\$ (2,700,000)
20		(a)	(b)	(c)
21 Expense				
22 Prior month reversal of accrued supply expense (100% of prior month)		\$ (2,000,000)	\$ (2,800,000)	\$ (3,000,000)
23 Payment of prior month supply invoice received from supplier		\$ 2,000,000	\$ 2,800,000	\$ 3,000,000
24 Current month cost of supply (100% accrued)		\$ 2,800,000	\$ 3,000,000	\$ 2,700,000
25	Current month expense	\$ 2,800,000	\$ 3,000,000	\$ 2,700,000
26		(d)	(e)	(f)

EXAMPLE B - Switching to Accrual Basis After the Beginning of the Reconciliation Period

27 Assumptions:				
28 May amount of Energy Service to be billed to customers				\$ (2,000,000)
29 May cost to provide Energy Service				\$ 2,000,000
30 June amount of Energy Service to be billed to customers		\$ (2,800,000)		
31 June cost to provide Energy Service		\$ 2,800,000		
32 July amount of Energy Service to be billed to customers		\$ (3,000,000)		
33 July cost to provide Energy Service		\$ 3,000,000		
34 August amount of Energy Service to be billed to customers		\$ (2,700,000)		
35 August cost to provide Energy Service		\$ 2,700,000		
36 Portion of July Energy Service usage billed in July				50%
37 Portion of July Energy Service usage billed in August				50%
38 Portion of current month Energy Service supply cost billed from supplier in current month				0%
39 Portion of current month Energy Service supply cost billed from supplier and paid in following month				100%
40				
41 Revenue		June	July	August
42 Prior month reversal of unbilled revenue (1/2 of prior month)			\$ 1,400,000	\$ 1,500,000
43 Current month bills to customers (includes 1/2 prior month and 1/2 current month usage)		\$ (2,400,000)	\$ (2,900,000)	\$ (2,850,000)
44 Current month unbilled revenue accrual (1/2 current month)		\$ (1,400,000)	\$ (1,500,000)	\$ (1,350,000)
45	Current month revenue	\$ (3,800,000)	\$ (3,000,000)	\$ (2,700,000)
46		\$ 2,800,000		
47	One-time impact of switching to accrual basis	\$ (1,000,000)		
48 Expense				
49 Prior month reversal of accrued supply expense (100% of prior month)			\$ (2,800,000)	\$ (3,000,000)
50 Payment of prior month supply invoice received from supplier		\$ 2,000,000	\$ 2,800,000	\$ 3,000,000
51 Current month cost of supply (100% accrued)		\$ 2,800,000	\$ 3,000,000	\$ 2,700,000
52	Current month expense	\$ 4,800,000	\$ 3,000,000	\$ 2,700,000
53		\$ (2,800,000)		
54	One-time impact of switching to accrual basis	\$ 2,000,000		