

SCHEDULE 3.4
2021 Budget Assumptions

2021 Budget Assumptions

The following assumptions were used by Liberty in the development of its 2021 Budget:

Budget Item	Assumption
Major Assumptions	
Cost of Capital	ROE of 10.9%, as approved by the Board in Cost of Capital proceeding (NBEUB 2010-003). 55/45 debt/equity ratio. Cost of debt of 3.315% based on 30 year promissory note.
Inflation	Cost of living increase of 3.0% applied to salaries.
Property, Plant & Equipment	
Computer Hardware	Detailed review of requirements, scheduled replacements and upgrades.
Computer Software	Detailed review of requirements and upgrades.
Tools and Work Equipment	Detailed review of requirements, scheduled replacements and improvements.
Office Furniture and Equipment	Detailed review of requirements and scheduled equipment replacements.
Transportation Equipment	Detailed review of requirements and scheduled replacements.
Communications Equipment	Detailed review of requirements and scheduled replacements.
Leasehold Improvements	Detailed review of requirements, scheduled replacements and improvements.
Land	Addition of the purchase of land for the station related to the community expansion to Havelock is included as an addition for 2021
Distribution Mains	Based on anticipated new mains to support attachments not on main in the communities currently served. (Includes addition of the community of Havelock) at forecast costs, with allowance for main relocations and sewer conflict resolution. In-house construction model with Liberty crews and local contractors.
Street Services	Based on anticipated attachments at forecast unit rates.
Meters and Regulators	Based on anticipated attachments at forecast unit rates.
Stations	Based on historic station costs and anticipated station(s). (Includes the addition of the community of Havelock)

Review of the 2019 Regulatory Financial Statements/2021 Rate Application

1	Budget Item	Assumption
2	Accumulated Amortization	Based on Board approved amortization rates.
3	Net Book Value	Cost less Accumulated Amortization.
4	Construction Work in Progress	The value of work in progress open at the end of 2021 is expected to be lower than the value at the end of 2020.
6	Deferred Charges	
7	Deferred Development Costs - Net	Deferred Development Costs less amortization at Board approved rate. Intangible software has been reclassified
8		from Property, Plant and Equipment to Deferred Costs.
9	Development O&M	There are no new forecast additions to Development O&M in 2021. Net change to Development O&M
10	Capitalized Costs - Net	resulting from amortization at Board approved rate.
11	Regulatory Deferral	Regulatory Deferral account in 2021 has been set at \$128.4 million as per the Gas Distribution Act amendments
12		dated December 16, 2016 (2016 balance of \$144.5 million less 2017, 2018 and 2019 adjusting entries and the legislated amortization amount of
13		\$3.8M/year of the \$100M balance.)
14		The Regulatory Deferral Account has been excluded from rate base for purposes of calculating return.
15	Short Term Investments	Maritimes & Northeast Pipeline Firm Service Agreement security deposit remains constant.
16	Non-Rate base Assets	
17	Cash, & Short Term	Estimated cash requirements based on an assessment of cash flow items.
18	Investments	
19	Accounts Receivable	30 days to receive cash for Distribution Revenue, Gas Sales and ABC, monthly forecast data relied upon.
20	Inventory	No significant changes in level of inventory forecasted.
21	Partners Equity	Assumed equity levels are forecasted to average approximately 45% for the year.
22	Long-term Advances from Affiliates	30 year promissory note obtained in 2020.
25	Non-Rate base Liabilities	
26	Short Term Indebtedness	No estimated short term borrowing required during 2021 to manage cash flow.

Review of the 2019 Regulatory Financial Statements/2021 Rate Application

1	Budget Item	Assumption
2	Accounts Payable	30 days for payment on obligations related to: - 78% of O&M expenses excluding salary and benefits - property tax - firm service agreement - natural gas costs - installation and service activities - 100% of salary and benefits 60 days for payment on obligations related to: - 22% of O&M expenses excluding salaries and benefits - services, meters and stations - work in progress from property, plant and equipment - general plant
14	Long Term Deferred Post Employment Liabilities	Forecast year-end balance for 2020 assumed to remain constant in 2021.
16	Average Rate Base	Forecast timing of additions for 2021 and the exclusion of the Regulatory Deferral Account as part of the regulated assets.
18	Capital Structure	Managing of debt/equity ratio to Board approved 55/45 structure during 2021.

Review of the 2019 Regulatory Financial Statements/2021 Rate Application

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2	Operating Revenue																																																																																																																	
3	Cumulative Customers	Forecast consists of total forecast customers to the end of 2020 (based on April 2020 actual results and																																																																																																																
4		additions/losses forecast for balance of 2020) plus additions forecast minus lost customers forecast for 2021,																																																																																																																
5		as shown below, based on a review of historic attachment rates and assessment of current market potential.																																																																																																																
6		Forecast includes the addition of a new ICGS customer in the community of Havelock due to a system expansion.																																																																																																																
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1	Budget Item	Assumption
2	Distribution Revenue	Assumed throughput times assumed rates.
3	ABC Revenue	Number of ABC and AB customers plus capture of new additions based on historic data times existing rates with inflationary increase of 2.0%.
4	Other Miscellaneous Revenue	- 0.2% interest on Maritimes & Northeast Pipeline Firm Service Agreement security deposit - Late payment penalties budgeted at \$192K as calculated by average of 2017 and 2018 actuals plus the addition noted in Matter 443 (\$85K). - Transactional services budgeted at \$28K as calculated by average of 2017 and 2018 actuals - Red Lock Fees budgeted at \$15K as calculated by average of 2017 and 2018 actuals - Single End Use Franchise Fees budgeted at \$428K plus 2.0% inflation
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10	Allowance for Funds Used	Based on 15% of CWIP eligible for allowance for funds used during construction (“AFUDC”) times the
11	During Construction	weighted average cost of capital (“WACC”)
12	Service and Inspection	
13	Revenue	Based on anticipated service work to be performed by Liberty.
14	Cost of Goods Sold	Service cost of goods sold (“COGS”) based on the percentage of revenue from historic experience.
15	Operating expenses	
16	Operating and Maintenance	Based on input by department managers for 2021.
17	Expenses	

Review of the 2019 Regulatory Financial Statements/2021 Rate Application

1	Budget Item	Assumption
2	Capitalized to Property,	O&M budget capitalized based on the following percentage assumptions:
3	Plant and Equipment	2021
4		Corporate management 29.7 %
5		Financial reporting 31.9 %
6		Information technology 32.1 %
7		Procurement 26.9 %
8		Regulatory 0.0 %
9		Business Development 56.2 %
10		Sales & Marketing
11		Sales 61.8 %
12		Marketing and Communications 60.9 %
13		Distribution & maintenance
14		Const. & Maint. 2.4 %
15		Metering and Regulation 16.5 %
16		Planning and Operational Reliabilit 50.4 %
17		Technical Training & QA 34.3 %
18		Environmental Health & Safety 30.5 %
19		Trade Ally 100.0 %
20		Service 34.5 %
21		
22		Customer Experience
23		Customer Care 16.8 %
24		Work Mgmt. Center 35.7 %
25		Human resources 31.9 %
26		Gas transportation and related activities 0.0 %
27		
28		
29	Bad debt expense	0.25% of yearly Distribution Revenue, Installation Revenue and Gas Sales Revenue.
30	Municipal and Other Taxes	Existing tax rates applied to existing tax base plus additions.

Review of the 2019 Regulatory Financial Statements/2021 Rate Application

1 Budget Item	Assumption
2 Amortization of Property, Plant 3 and Equipment	Based on Board approved amortization rates.
4 Amortization of Deferred 5 Development Costs	Based on Board approved amortization rate.
6 Corporate Allocations	Liberty corporate allocations methodology is based on the Algonquin Power & Utilities Corporate Allocation Manual 7 Full details available in Schedule 3.7 - Corporate Allocations Report.
8 Corporate Tax	Tax expense has been set at \$0 for 2021. Liberty expects tax of \$945k for 2021. A variance account has been requested to defer the tax amount 9 for inclusion in the 2022 revenue requirement which should be offset by SEUF payments in order to smooth out rate impacts for ratepayers.
10 Pension Variance	\$210K has been included as amortization of the pension amount from 2020 noted in the pension variance account.
11 Regulatory Deferral	Regulatory Deferral account in 2021 has been set at \$128.4 million as per the Gas Distribution Act amendments 12 dated December 16, 2016 (2016 balance of \$144.5 million less 2017, 2018 and 2019 adjusting entries and the legislated amortization amount of 13 \$3.8M/year of the \$100M balance.)
14 Regulated Return on Equity	Average rate base times return on equity times equity proportion of capital structure.