

# OATT Rate Calculations

September 22, 2016

## Cost Allocation Study is starting point

- The Cost Allocation Study starts with the Company's annual income statement
- The first step in the Study is to assign the amount in each line item to one or more functions; e.g. Power Supply, Transmission, Distribution, etc.
- For the purpose of the OATT, we are interested in the costs assigned to the Transmission function

# MECL 2014 functionalized costs (\$ x 1,000)

	Power <u>Supply</u>	Trans. <u>Trans.</u>	Distr. <u>Network</u>	Services and <u>Meters</u>	Customr <u>Care</u>	Street & Area <u>Lighting</u>	<u>Total</u>
OM&A expenses	120,312	3,693	9,266	1,577	2,320	46	137,214
Amortization	3,670	1,922	7,334	2,324	61	138	15,450
Financing expense	<u>6,590</u>	<u>3,580</u>	<u>14,807</u>	<u>4,712</u>	<u>124</u>	<u>211</u>	<u>30,023</u>
Totals	130,572	9,195	31,407	8,613	2,505	395	182,687

From Table 3 of MECL's 2014 Cost Allocation Study

Financing expense is interest, income taxes and return on equity

## MECL 2014 Transmission function costs

	<u>\$ x 1,000</u>
OM&A expenses	3,693
Amortization expense	1,922
Interest, income taxes and return	<u>3,580</u>
Total	9,195
Less accrued revenue adjustment	19
Less adjustment to amortization	<u>72</u>
Adjusted total	9,104

# Who uses the transmission system?

Maritime Electric – as part of supplying its customers (90 % of the PEI load)

City of Summerside – to deliver the power supply it purchases from the mainland to the City's distribution system (which supplies 10 % of the PEI load)

West Cape wind farm – to deliver its output to purchasers on the mainland

# Not all Transmission costs are OATT related

	2014	2005
	<u>\$ 1,000</u>	<u>\$ 1,000</u>
MECL related – misc. facilities	54	28
MECL related – contracted wind	1,121	-
Merchant wind related (Sch. 9)	325	-
Trans. service (Schedules 7, 8, H)	7,307	5,772
City of Summerside related	-	5
ECC related (Schedule 1)	<u>298</u>	<u>248</u>
Total	9,104	6,053

## Trans. system usage (firm service or equivalent)

	2014	2005
	<u>MW</u>	<u>MW</u>
Long term firm Point-to-Point	-	-
MECL Network (average 12 CP)	189.0	161.3
S'side Network (average 12 CP)	-	17.6
Summerside short term firm	10.0	-
Summerside non-firm	6.7	-
Merchant wind non-firm	<u>33.7</u>	<u>34.2</u>
Total	239.4	213.1

# Calculation of long term firm service rate (for Point-to-Point and Network service)

	<u>2014</u>	<u>2005</u>
Annual cost (\$ x 1,000 / yr)	7,307	5,772
Firm service or Equiv. (MW)	239.4	213.1
Rate (\$ / MW-year)	30,523	27,086



## Calculation of Schedule 1 rate

	<u>2014</u>	<u>2005</u>
Annual cost (\$ x 1,000 / yr)	298	248
Firm service or Equiv. (MW)	259.0	231.0
Rate (\$ / MW-year)	1,148	1,074

## Appalachian pricing ( 1 )

- Usually the rates for non-firm service are higher during on-peak hours than for off-peak hours
- This reflects the higher usage of the system during on-peak hours
- The methodology normally used for calculating the higher on-peak rate is referred to as Appalachian pricing

## Appalachian pricing ( 2 )

The hourly on-peak rate is the annual \$ / MW-year rate divided by the number of on-peak hours in the year (16 hr / day x 5 days / wk x 52 wk / yr = 4,160 hr )

The hourly off-peak rate is the annual \$ / MW-year rate divided by the total 8,760 hours in the year

$$\text{\$ } 30,523 / \text{ MW } / 4,160 \text{ h } = \text{\$ } 7.34 / \text{ MWh on-peak}$$

$$\text{\$ } 30,523 / \text{ MW } / 8,760 \text{ h } = \text{\$ } 3.48 / \text{ MWh off-peak}$$

## Schedule 9

The purpose of Schedule 9 is to recover the on-going maintenance and administration costs for designated facilities from the users of those facilities.

In MECL's OATT, Schedule 9 recovers only the administration (i.e. General expenses) component of on-going OM&A costs.

Maintenance is charged on a pay-as-you-go basis.

# Calculation of Schedule 9 rate

	2014	2005
	<u>\$1000</u>	<u>\$1000</u>
General expenses (from CAS)	1,324	972
Plus insurance & property taxes	<u>252</u>	incl above
Total general expenses	1,576	972
MECL gross fixed trans. assets	88,094	43,997
Plus direct assign facilities to mid-2007	incl above	<u>6,598</u>
Total gross fixed assets	88,094	50,595
General expenses as % of fixed assets	1.79 %	1.92 %