



London Hydro

Exhibit 8 Interrogatories
Response to Interrogatories
EB-2016-0091

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Exh 8 Board Staff Interrogatories



1 **8-Staff-53**

2

3 **Rate design for microFIT and FIT customers**

4 **Ref: E8/T1/S1, p.5-8**

5 London Hydro is proposing to allocate microFIT and FIT customers to the GS < 50 kW
6 and GS > 50 kW based on the generator's nameplate capacity.

7 a) Please explain whether the costs of serving the microFIT customers are being
8 allocated to the GS < 50 kW class.

9

10 LH Response:

11 London Hydro has not attempted to construct any cost allocation methodology for microFIT
12 customers to incorporate into the GS<50 kW class. Rather London Hydro is assuming that the
13 microFIT customer is similar in nature to existing GS<50 kW class customers.

14

15 b) Please explain whether the costs of serving the FIT customers are being removed
16 from the GS < 50 kW class and added to the GS > 50 kW class.

17

18 LH Response:

19 London Hydro has not attempted to construct any cost allocation methodology for FIT
20 customers to incorporate into the GS>50 kW class and remove from the GS<50 kW Class.
21 Rather London Hydro is assuming that the FIT customer is similar in nature to existing GS>50
22 kW class customers.

23

24 c) Do microFIT and FIT generation on London Hydro's system reduce costs, such as
25 reducing peak demand and therefore RTSR costs? Please detail any calculations.

26

27 LH Response:

28 London Hydro would suggest that the impact of microFIT and FIT generation at the time of
29 monthly peak demand is immaterial to the overall system costs of wholesale power.

30



Date	System Peak MW	FIT kW	Count FIT	mFIT KW	Count mFIT	Total Gen	% On system Peak
1/8/2015 19:00	9,897.12	0.00	18	0.00	182	0.00	0.00%
2/19/2015 20:00	9,870.13	0.00	20	0.00	184	0.00	0.00%
3/3/2015 20:00	9,659.56	-	20	0.00	186	0.00	0.00%
4/8/2015 11:00	8,717.64	341.56	23	116.06	185	457.62	0.01%
5/26/2015 16:00	11,345.43	2,529.00	24	803.52	194	3,332.51	0.03%
6/15/2015 16:00	12,203.70	1,650.58	27	453.43	197	2,104.01	0.02%
7/29/2015 15:00	14,426.71	4,479.63	32	1,007.78	204	5,487.41	0.04%
8/17/2015 16:00	15,205.10	3,281.42	34	736.78	213	4,018.20	0.03%
9/8/2015 16:00	15,622.79	3,531.37	35	700.36	216	4,231.73	0.03%
10/28/2015 19:00	10,593.41	-	36	0.00	222	0.00	0.00%
11/18/2015 18:00	12,444.90	-	36	1.66	226	1.66	0.00%
12/7/2015 18:00	12,064.84	0.02	36	0.68	230	0.70	0.00%
1/18/2016 19:00	13,315.96	0.02	37	0.00	235	0.02	0.00%
2/11/2016 19:00	13,127.97	0.00	38	0.00	238	0.01	0.00%
3/1/2016 19:00	12,751.32	-	38	0.00	240	0.00	0.00%
4/4/2016 20:00	11,861.24	-	38	0.01	235	0.01	0.00%
5/27/2016 16:00	16,668.73	4,325.78	41	982.06	261	5,307.83	0.03%
6/20/2016 16:00	19,576.27	3,726.66	42	1,023.89	272	4,750.54	0.02%
7/13/2016 16:00	19,978.79	4,796.94	43	1,070.12	274	5,867.06	0.03%
8/12/2016 16:00	20,303.67	3,682.20	43	844.83	275	4,527.03	0.02%
9/7/2016 16:00	21,178.41	3,172.57	44	665.51	275	3,838.08	0.02%
10/6/2016 16:00	14,243.26	3,329.55	44	728.95	275	4,058.50	0.03%
11/21/2016 18:00	14,450.35	-	47	0.01	273	0.01	0.00%
12/14/2016 18:00	14,663.14	0.00	45	0.00	265	0.00	0.00%

1
 2 d) Did London Hydro discuss these proposals with its microFIT and FIT customers? If
 3 so, please provide a summary of feedback received.

4
 5 LH Response:

6 London Hydro has not discussed this proposal with its microFIT and FIT customers.

7
 8 e) Please provide a breakdown of the costs composing the estimated \$200k to serve
 9 both microFIT and FIT customers.

10
 11 LH Response:

	Annual Costs	% Spent	Amount
Engineering Staff Support (3)	\$ 425,000.00	33%	\$ 140,250.00
Metering Billing Clerk (1)	\$ 100,000.00	15%	\$ 15,000.00
Finance/AP Clerk (1)	\$ 100,000.00	10%	\$ 10,000.00
Mailing/Banking Material	\$ 32,850.00	100%	\$ 32,850.00
Total			\$ 198,100.00



- 1 f) Please provide an estimate of the revenue from microFIT and FIT customers in
 2 2017 both with and without the proposed customer re-allocation. Assume that the
 3 microFIT rate would have been unchanged.

4

5 [LH Response:](#)

	Proposed						Current				
	Count	Class	Rate	Months	Amount		Count		Rate	Months/kWh	Amount
microFIT	300	GS<50 kW	\$ 32.88	12	\$ 118,368		300	microFIT	\$ 5.40	12	\$ 19,440
FIT	50	GS>50 kW	\$ 162.32	12	\$ 97,392		50	GS<50 kW	\$ 33.52	12	\$ 20,112
					<u>\$ 215,760</u>		50	GS<50 kW	\$ 0.0108	3600	\$ 1,944
											<u>\$ 39,552</u>

6



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Exh 8 LPMA Interrogatories



1 **8-LPMA-58**

2

3 **Ref: Exhibit 8, Tab 1, Schedule 1**

4

5 **Please provide versions of Tables 8.14.1.3 through 8.14.1.6 for the levels of consumption**
 6 **shown for residential customers only, if the monthly fixed charge were set at the ceiling of**
 7 **\$17.02, as shown in Table 8.1.1.6.**

8

9 [LH Response:](#)

Table 8.1.1.3 Current Fixed/Variable Proportions

Rate Class	Metric	Monthly Service Charge Revenue	Distribution Volumetric Charge Revenue	Total Revenue
Residential	kWh	68.5%	31.5%	63.3%
General Service Less Than 50 kW	kWh	56.1%	43.9%	13.6%
General Service 50 to 4,999 kW	kW	22.9%	77.1%	18.9%
General Service 1,000 To 4,999 kW (co-generation)	kW	29.4%	70.6%	0.6%
Standby Power	kW	0.0%	100.0%	0.6%
Large Use	kW	40.9%	59.1%	0.9%
Street Lighting	kW	60.3%	39.7%	1.8%
Sentinel Lighting	kW	53.3%	46.7%	0.1%
Unmetered Scattered Load	kWh	28.1%	71.9%	0.2%
				100.0%

10

11 [Replacement Table 8.1.1.4 Proposed Fixed/Variable Proportions Residential \\$17.02](#)

Rate Class	Metric	Monthly Service Charge Revenue	Distribution Volumetric Charge Revenue	Total Revenue
Residential	kWh	67.4%	32.6%	63.3%
General Service Less Than 50 kW	kWh	55.9%	44.1%	13.4%
General Service 50 to 4,999 kW	kW	22.9%	77.1%	19.1%
General Service 1,000 To 4,999 kW (co-generation)	kW	29.4%	70.6%	0.6%
Standby Power	kW	0.0%	100.0%	0.6%
Large Use	kW	40.9%	59.1%	0.9%
Street Lighting	kW	60.5%	39.5%	1.8%
Sentinel Lighting	kW	53.3%	46.7%	0.1%
Unmetered Scattered Load	kWh	28.0%	72.0%	0.2%
				100.0%

12



Table 8.1.1.5 Proposed Rates From Cost Allocation

Rate Class	Proposed Base	Proposed Base	Proposed Base
	Service Charge G = A / D / 12	Distribution Volumetric Rate kWh H = B / E	Distribution Volumetric Rate kW I = C / F
Residential	17.29	0.0127	-
General Service Less Than 50 kW	33.52	0.0108	-
General Service 50 to 4,999 kW	167.52	-	2.7963
General Service 1,000 To 4,999 kW (co-gen)	2,657.69	-	4.6428
Standby Power	-	-	3.2101
Large Use	21,361.28	-	2.3169
Street Lighting	1.70	-	8.8279
Sentinel Lighting	3.77	-	12.4297
Unmetered Scattered Load	2.25	0.0194	-

1
2
3

Replacement Table 8.1.1.6 Proposed Fixed Charge before Adjustments

Rate Class	Current Monthly Service Charge	Cost Allocation		Status Quo Adjustment	Proposed Monthly Service Charge Before Adjustments
		Floor	Ceiling		
Residential	16.42	3.47	17.02	17.29	17.02
General Service Less Than 50 kW	32.25	2.93	20.63	33.52	33.52
General Service 50 to 4,999 kW	157.55	11.54	40.84	167.52	167.52
General Service 1,000 To 4,999 kW (co-generation)	2,523.99	415.22	600.35	2,657.69	2,650.00
Standby Power	0.00	0.00	0.00	0.00	0.00
Large Use	20,286.64	315.58	833.49	21,361.28	21,350.00
Street Lighting	1.64	(0.00)	3.97	1.70	1.70
Sentinel Lighting	3.48	0.21	11.73	3.77	3.77
Unmetered Scattered Load	2.08	0.03	8.77	2.25	2.25

4



1 **8-LPMA-59**

2

3 **Ref: Exhibit 8, Tab 1, Schedule 1**

4

5 **a) Please explain why London Hydro is proposing to put microFIT and FIT customers in**
6 **the GS<50 and GS>50 rate classes, rather than maintaining the existing rate classes as they**
7 **are and directly allocating the \$200,000 in costs associated with the microFIT and FIT**
8 **customers to them?**

9

10 [LH Response:](#)

11

12 [Please reference 8-Staff-53.](#)

13

14 **b) Has London Hydro engaged any of the microFIT and FIT customers to get their**
15 **feedback on the proposed changes to their rates?**

16

17 [LH Response:](#)

18

19 [Please reference 8-Staff-53.](#)



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Exh 8 SEC Interrogatories



1 **8-SEC-21**

2

3 [8/1/1, p. 5] With respect to the proposed change to the microFIT and FIT distribution rates
4 classes and charges:

5

6 (a) Please advise how many of the affected customers in each of microFIT and FIT are also
7 distribution customers receiving power from the Applicant.

8

9 LH Response:

10 microFIT customers are fully autonomous from distribution customers. For purposes of the
11 IESO contract the owners must be the legal titled owners of the property, but the generation
12 is measured separately from the consumption on the property.

13

14 FIT customers are charged for consumption of power, mostly used for the articulation
15 equipment which adjusts the direction and slope of the solar panels for efficiency of
16 generation, normally 300 kWh per month on average.

17

18 (b) Please explain why the Applicant is proposing a change in rate classification that has an
19 impact that is less than its materiality threshold.

20

21 LH Response:

22 London Hydro is of the opinion that the rate reclassification proposed is in fairness to all
23 London Hydro customers. London Hydro feels that the consuming customers are unfairly
24 cross subsidizing the generation customers. In reference to materiality threshold London
25 Hydro believes that because the microFIT and FIT contracts have a life span of 20 years the
26 value proposition of the reclassification will far exceed the materiality threshold.

27

28 (c) Please provide details on all customer engagement that has taken place with respect to
29 this proposed change.

30

31 LH Response:

32 Please reference 8-Staff-53



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1
2 (d) Please provide further details of the change to boilerplate capacity for microFIT and FIT
3 customers, including the expected impact on those customers of this part of the proposal.
4

5 LH Response:

6 London Hydro is only proposing to use the boilerplate capacity as a measure for rate
7 classification only. As microFIT by design are less than or equal to 10 kW they would be
8 deemed as classified as GS<50 kW. As FIT are normally above 50 kW they would be
9 deemed as classified as GS>50 kW.

10
11 Please reference 8-Staff-51 f) for expected impact.



1 8-SEC-22

2

3 [8/7/2, p. 4] Rather than add an additional OEB-approved charge, why does London Hydro not
4 simply require the customer that wants to choose the second option to make cellular
5 arrangements with the authorized APN (or another cellular provider that can adhere to London
6 Hydro's specs) and pay them directly? What part of this option makes it necessary, or
7 advantageous to the customer, that London Hydro act as a middleman?
8

9

10

10 LH Response:

11 The advantages London Hydro gains by managing and deploying a private APN service would
12 include all and/or a combination of the following benefits, but not limited to:

13

14 1. Security - Standard cellular plans are public domain that require advance security options to
15 protect London Hydro assets and customer data. The private APN established isolates, and
16 encrypts, data from the public domain, thereby, it is inherently more secure to intrusion and/or
17 penetration risks as compared to a public domain network(s).

18 2. Cost - Typical cellular data plans available to customers would be greater than what we may
19 offer due to volume and negotiated data rates we have secured.

20 3. Customer simplicity - Not all customers are technically savvy and appreciate we take on the
21 account creation, hardware supply, installation, configuration and life-cycle maintenance, at a
22 reasonable rate as compared to what they may secure such service.

23 4. Administration/Management - LH team has better control of meter communication option(s)
24 and cellular service plan(s) (eg. prematurely cancelled and/or terminated communication plans).
25 It allows better planning of meter installation(s), by not relying on customer(s) to ensure a
26 service has been setup and/or configured properly, inherently minimizing costly repeat site visits
27 and/or troubleshooting. As an APN administrator we have improved insight of data traffic,
28 diagnostic tools, and status of the network as compared to being on the public carrier service,
29 which aids and/or reduces troubleshooting.



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Exh 8 VECC Interrogatories



1 8-VECC-59

2

3 Reference: E8/T1/S1, page 8
4 E8/T2/S1, Attachment 1
5 RRWF, Tab 12
6

7 a) Please explain why the proposed Residential fixed charge set out at page
8 8 is \$20.11 while the final adjusted rate in Attachment 1 is \$20.02?

9 [LH Response:](#)

10 [Between the time of writing and completion of the application Board staff model changes](#)
11 [occurred link errors were not identified.](#)

12

13 b) Please explain why the final adjusted rate in Attachment 1 is \$20.02
14 whereas in the RRWF, Tab 12 it is \$19.94.

15

16 [LH Response:](#)

17 [See response to a\) above.](#)



1 8-VECC-60
2

3 Reference: E8/T1/S1, pages 5-6
4 E8/T12/S1, Attachment 2
5

6 a) Please clarify, under London's proposal, will the microFIT customers
7 continue to also pay the \$5.40 per month as well as the \$32.88?
8

9 LH Response:

10 Under London Hydro's proposal, the microFIT customers will not continue to also pay the
11 \$5.40 per month
12

13 b) If not, how is proposed microFIT adjustment revenue neutral overall?
14

15 LH Response:

16 The proposed change in rates for microFIT is revenue neutral to the GS<50 kW class as
17 a whole by increasing the customer count by the forecasted microFIT customer count and
18 reducing the final customer charge for the GS<50 kW class as a whole.
19

20 c) If yes, why is the microFIT charge not in the Proposed Tariff of Rates and
21 Charges?
22

23 LH Response:

24 See response to a) above.
25

26 d) Does London have any microFIT customers that are currently classified as
27 Residential for their main service? If so, how are they affected by the
28 proposed changes?
29

30 LH Response:

31 Most microFIT customers predominantly by nature are residential customers receiving
32 two London Hydro invoices, one for residential consumption and one for microFIT



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- 1 generation. The proposed change would only affect the microFIT generation bill replacing
- 2 the current microFIT fee with a GS<50 kW customer charge.



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1 8-VECC-61

2

3 Reference: E8/T1/S1, page 10

4 E8/T12/S1, Attachment 2

5

6 a) Please explain why the proposed fixed/variable rates in Table 8.1.1.14
7 don't match the proposed rates in Attachment 2 for: i) GS<50, ii) GS 50-
8 4,999, and iii) Co-generation.

9

10

11 [LH Response:](#)

12 London Hydro was challenged with Board staff changes to models and may have mixed
13 up models for submission purposes.



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1 8-VECC-62

2

3 Reference: E8/T11/S1, pages 1-2

4

5 a) How are the loads for the 5 residential and 3 GS<50 current net metered
6 customers treated in the cost allocation set out in Exhibit 7, i.e., are the
7 values used net or gross absolute values?
8

9

10 [LH Response:](#)

11 The loads for the 5 residential and 3 GS<50 kW current net metered customers were treated in
12 the cost allocation set out in Exhibit 7 as the values used net.



1 8-VECC-63
2

3 Reference: E8/T11/S2, page 1
4 E8/T12/S1, Attachment 2, page 49
5

6 a) Please explain how London determines whether or not Standby Power
7 Service has been provided in a given month.
8

9 LH Response:

10 London Hydro has a contract with the customer for the reserved capacity kilowatts (kW)
11 determined within the connection agreement. The Standby Charge is not calculated
12 monthly based on whether or not Standby Power Service has been provided, instead the
13 contracted reserved capacity amount is charged to the customer every month, as set out
14 in Appendix A of the customer's connection agreement.
15

16
17 b) How is the billing determinant for the Rate Riders charged on a \$/kW
18 determined each month for Standby customers?
19

20 LH Response:

21 The billing determinant kilowatts for the Rate Riders charged on \$/kW are equivalent with
22 the contracted monthly kW of reserved capacity determined within the connection
23 agreement for customers to whom the Standby charge applies.
24
25