

**TRACKING OF DECISION D-2014-004
ADDITIONAL EVIDENCE**

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**Note: The totals in the document’s tables
are calculated from un-rounded data.**

In its procedural decision D-2014-004 (paragraph 33) of January 15, 2014, the Authority asked the Distributor to update the tables, and also add the necessary explanations to them and consider the fact that the installation of new generation meters started in 2013 and not in 2012 as planned in case R-3770-2011. More specifically, it required to Distributor to file the following tables:

- economic comparison of the scenarios (M\$ actualized to 2011), but only the data relative to the AMI scenario (D-2012-127 [254], table 2);
- Tariff impact of the AMI scenario (D-2012-127 [370], Table 7);
- Depreciation, write-off and number of apparatuses written off (D-2012-127 [374], Table 8);
- Expected efficiency savings (D-2012-127 [349 and 350], Tables 5 and 6);
- AMI functionalities planned for embedding by the Distributor.

In the following tables, the Distributor produces the requested information. The tracking of the AMI functionalities planned for embedding by the Distributor is included in the LAD Project phase 1 quarterly tracking report for December 31, 2013, filed in the present case in the document HQD-1, document 3.

1. REMOTE READING PROJECT ECONOMIC STUDY

In the case R-3770-2011, the Distributor compared two meter reading scenarios: the reference scenario, in which the reading is done manually using a handheld microcomputer, and the remote reading project (AMI scenario), which deploys an advanced measurement infrastructure that allows the replacement of 3.8 million meters in order to do the remote reading. The economic analysis consisted of comparing the future cash flows of these two scenarios over a 20-year analysis period and determining that the AMI solution was lower cost.

As for the financial analysis, it evaluated the marginal impact of the project on the Distributor's tariffs. Through this analysis it was possible to determine at what point the LAD project impacts on the required revenue are greater, and at what horizon the projects expected advantages show up by exerting a downward pressure on the required revenue. This analysis is done starting from the assumptions selected for preparing the reference scenario and the AMI scenario.

The expected cost for phases 1, 2 and 3 of the project and also the discounted savings are base inputs to these analyses.

The results of the economic analysis are reproduced in Table 1

TABLE 1: ECONOMIC COMPARISON OF THE SCENARIOS (R-3770-2011)

M\$ (actualized to 2011) analysis period: 2011-2031				
	AMI Scenario	Reference Scenario	Difference	
Investments	807.9	500.4	307.5	
Operating charges	365.3	871.8	(506.5)	
Tax on public services	1.5	-	1.5	
Residual values	(85.6)	(81.2)	(4.4)	
Total	1,089.1	1,291.0	(201.9)	

Thus, as Table 1 shows, the lower-cost scenario for the distributor is the AMI scenario, which constitutes an advantage for its clients.

Aside from this analysis, the Distributor did two sensitivity analyses and two hypothetical scenarios. The purpose of these scenarios was to confirm the Distributor's assumptions and demonstrate that the project would remain more advantageous than the reference scenario. None of the results of the scenarios thus analyzed were able to modify the result of the initial analysis showing that the LAD project is more advantageous than the reference scenario, as recognized by the Authority in decision D-2012-127, paragraph 525.

Since the authorization of LAD project phase 1, the various tracking reports done by the Distributor to date and the assumptions retained for 2014 and following years, both for the project costs and discounted savings, serve to confirm that the LAD project as a whole is more advantageous than the reference scenario because the costs already incurred are less than those anticipated and the expected savings are at least the same as those forecast in 2011.

2. REQUEST FROM THE AUTHORITY

2.1. Comparison of Scenarios

In keeping with the decision D-2014-004 (paragraph 33), the Distributor shows the comparison of the scenarios in Table 2, by updating just the data concerning the AMI scenario and considering the fact that the new generation meter installation started in 2013, and not in 2012.

More specifically, the exercise considers the following data:

- Forecast costs for phases 2 and 3, as presented in Table 3 of document HQD-1, document 1 (B-0004);
- Preliminary actual costs and forecast costs for phase 1, as presented in Table 3 of document HQD-1, document 3;
- Maintain re-investments from case R-3770-2011;
- Economic and financial parameters from case R-3770-2011, unchanged.

TABLE 2: RESULTS OBTAINED

M\$ (actualized to 2011) analysis period: 2011-2031			
	AMI Scenario	Reference Scenario	Difference
Investments	777.4	500.4	277.0
Operating charges	361.6	871.8	(510.2)
Tax on public services	0.7	-	0.7
Residual values	(80.1)	(81.2)	1.1
Total	1,059.6	1,291.0	(231.4)

Note: Update of Table 2 from decision D-2012-127, paragraph 254.

As already demonstrated by the economic analysis done in case R-3770-2011, the exercise again demonstrates that the LAD project is more advantageous than the reference scenario.

2.2. Expected Efficiency Savings

As already indicated in document HQD-1, document 1 (B-0004), the essential part of the benefits expected from the LAD project, and included in the economic analysis, rest on efficiency savings in the activities related to meter reading, client service cut-offs and restoration, and bringing the meters into compliance. These savings result principally from a reduction of the salary base.

Per the decision D-2014-004 (paragraph 33), in Table 3 the Distributor shows the LAD project savings, reflecting actual 2013 data and the seven-month project report.

TABLE 3: SAVINGS ASSOCIATED WITH THE LAD PROJECT

k\$, current							
	2012	2013	2014	2015	2016	2017	2018
Salary base	-	(5,238)	(17,244)	(37,845)	(46,426)	(50,340)	(65,658)
Other savings	-	(608)	(2,687)	(6,077)	(9,804)	(12,130)	(15,642)
Total	-	(5,846)	(19,931)	(43,922)	(56,230)	(62,470)	(81,300)

Note: Update of Table 5 from decision D-2012-127, paragraph 349.

The savings from the reading activity were calculated by differences between scenarios whereas reduced costs for remote service cutoffs and restoration and client service, and savings from bringing into compliance were directly

evaluated. These savings are presented in Table 4, per decision D-2014-004 (paragraph 33).

TABLE 4: DIRECT SAVINGS FROM THE LAD PROJECT

M\$ (actualized to 2011)	
analysis period: 2011-2031	
Remote service cut-off and restoration	(94.8)
Client service	(17.2)
Compliance	(9.3)
Total	(121.4)

Note: Update of Table 5 from decision D-2012-127, paragraph 349.

2.3. Impacts on the Distributor's Required Revenue

As indicated in section 8 of document HQD-1, document 1 (B-0004), the Distributor presented, in case R-3770-2011, an analysis of the LAD Project impact on the required revenue over a 20-year period starting from the beginning of phase 1. The impact is measured by the difference between the required revenues necessary under the reference scenario and those necessary under the AMI scenario, to which is added charges for accelerated depreciation and write-off of 3.8 million in-service meters which are replaced during the LAD project.

In keeping with the decision D-2014-004 (paragraph 33), the Distributor shows the requested update in Table 5 by updating only the data relating to the AMI scenario and including the fact that new generation meter installation started in 2013 and not in 2012. The depreciation charges and the write-off of the devices, together with the number of devices withdrawn are shown in Table 6.

TABLE 5: FINANCIAL ANALYSIS AND IMPACT OF THE LAD PROJECT ON THE REQUIRED REVENUES

In k\$		2012	2013	2014	2015	2016	2017	2018	2021	2025	2031
A	AMI Scenario										
	Charges	60,449	66,811	68,661	58,022	51,679	33,644	11,538	9,738	10,079	10,979
	Depreciation	1,000	5,800	26,059	40,499	48,184	52,284	55,510	50,983	49,955	22,891
	Taxes on public services	0	0	0	0	27	26	80	110	98	80
	Financing costs	1,150	4,599	16,863	27,506	32,109	33,317	33,286	27,734	15,410	13,095
	Required revenue (excluding write-off charges)	62,599	77,210	111,584	126,027	131,999	119,271	100,413	88,565	75,543	47,045
B	Required revenue – Reference scenario	65,974	76,797	87,145	95,856	104,455	111,485	115,880	127,292	143,307	149,238
C=A-B	Required revenue (difference between scenarios)	-3,375	413	24,439	30,171	27,544	7,786	-15,467	-38,727	-67,764	-102,193
D	Depreciation and write-off of in-service apparatuses	24,042	52,895	62,453	34,764	10,694	5,065	1,263			
E=C+D	Required revenue (difference)	20,667	53,308	86,892	64,935	38,239	12,851	-14,204	-38,727	-67,764	102,193

Note: Update of Table 7 from decision D-2012-127, paragraph 370.

Compared to the case R-3770-2011, the maximum impact on the required revenue moves from 2013 2014, corresponding to the effect of delaying the beginning of bulk deployment.

In general, the size of the impacts is substantially the same.

TABLE 6: DEPRECIATION, WRITE-OFF AND NUMBER OF APPARATUSES WITHDRAWN FROM THE LAD PROJECT 2012-2018

	2012	2013	2014	2015	2016	2017	2018	Total
Depreciation of in-service devices	21.2	21.8	21.3	20.7	19.4	18.6	8.5	131.6
Accelerated depreciation	2.6	11.1	4.5	(6.3)	(12.0)	(14.2)	(6.9)	(21.3)
Write-off charges for in-service devices (in M\$) ¹	0.2	20.1	36.6	20.4	3.3	0.6	(0.4)	80.8
Total	23.9	52.9	62.5	34.8	10.7	5.1	1.3	191.1
Number of devices retired (in millions) ²	2	1,022	1,190	1,002	275	204	83	3,778

1 The results for 2012 correspondent to a portion of the meters from the pilot projects which were only withdrawn at the beginning of 2012.

2 The number of apparatuses withdrawn includes meters recovered for subsequent use in undeployed areas.

Note: Update of Table 8 from decision D-2012-127, paragraph 374.