

Data Required for Cost Benchmarking

InnPower

Select LDC from Dropdown Box:

History	Bridge Year	Test Year	Additional Years for Custom IR Filings			
2015	2016	2017	2018	2019	2020	2021

Required Item

COMMENTS

Gross Capital Cost Additions Data

1	Total Gross Capital Additions	19,803,244	6,882,669	8,558,202					Enter Values
2	HV Gross Capital Additions	-	-	-					Enter Values

Data source Rev Requirement Model (Rebase), includes additions and contributions

Output and Other Business Conditions

3	Number of Customers	16,157	16,517	17,054					Enter Values
4	Delivery Volume	237,763,329	238,940,858	239,587,667					Enter Values
5	Annual Peak Demand	50,975	51,992	52,992					Enter Values
6	Distribution Circuit-km	833	862	892					Enter Values
7	Ten Year Customer Growth Percentage	17.14%	19.41%	20.75%					Enter Values

Number of customers reflected for 2015 only include Res, and GS classes, load forecast Load Forecast, Billed kWh

Inflation Measures

8	Wage Growth	2.56%	2.56%	2.56%					Optional: Default Values Provided
9	Growth in Economy-wide Inflation	1.57%	1.57%	1.57%					Optional: Default Values Provided
10	Rate of Return (WACC)	6.51%	5.63%	5.71%					Enter Values

Assumed the same as 2015

OM&A Expenses Included In Cost Benchmarking

Choose a Method:

Use Method 1 [1A - 1B + 1C]

5,396,319	5,522,533	5,975,943	-	-	-	-		Formula
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Use Method 2 [2A - 2B + 2C]

5,396,319	5,797,533	5,975,943						Formula
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11	OM&A Values Transferred to Calculations Worksheet	5,396,319	5,797,533	5,975,943					Formula
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Method 1: Enter Values Calculated Elsewhere

Enter Values Supported by Separate Calculations

1A	Total OM&A Consistent with accounts included in [2B]	5,283,654	5,409,868	5,863,278					Enter Values
1B	HV Cost (Accounts 5014, 5015, and 5112) if included in total	-							Enter Values
1C	LV Adjustment	112,665	112,665	112,665					Enter Values

COMMENTS

Method 2: Enter Detailed Data

OM&A Data

5005	Operation Supervision and Engineering	220,454	202,730	219,572					Enter Values
5010	Load Dispatching	14,948	15,632	19,109					Enter Values
5012	Station Buildings and Fixtures	48,576	56,786	53,156					Enter Values
5014	Transformer Station Equipment - Operation Labor	-							Enter Values
5015	Transformer Station Equipment - Operation Supplies and Expenses	-							Enter Values
5016	Distribution Station Equipment - Operation Labor	9,718	8,018	9,894					Enter Values
5017	Distribution Station Equipment - Operation Supplies and Expenses	5,228	1,860	3,710					Enter Values
5020	Overhead Distribution Lines and Feeders - Operation Labor	136,301	131,123	148,081					Enter Values
5025	Overhead Distribution Lines and Feeders - Operation Supplies and Expenses	7,484	2,871	7,712					Enter Values
5035/5030	Overhead Distribution Transformers - Operation	246	894	3,128					Enter Values
5040	Underground Distribution Lines and Feeders - Operation Labor	18,961	13,716	27,997					Enter Values
5045	Underground Distribution Lines and Feeders - Operation Supplies and Expenses	98,966	97,857	108,640					Enter Values
5055	Overhead Distribution Lines and Feeders	189	-	-					Enter Values
5065	Meter Expense	241,353	239,835	262,730					Enter Values
5070	Customer Premises - Operation Labor	55,089	44,838	61,559					Enter Values
5075	Customer Premises - Operation Materials and Supplies	101,904	96,647	111,647					Enter Values
5085	Miscellaneous Distribution Expense	405,527	428,989	478,478					Enter Values
5090	Underground Distribution Lines and Feeders - Rental Paid	-							Enter Values
5095	Overhead Distribution Lines and Feeders - Rental Paid	11,199	10,295	10,670					Enter Values
5096	Other Rent (Distribution)	-							Enter Values
Subtotal: Operation		1,376,142	1,352,091	1,526,083	-	-	-	-	Formula

2016 & 2017 values taken from Revenue Requirement - BB

5105	Maintenance Supervision and Engineering	8,489	244	14,041					Enter Values
5110	Maintenance of Buildings and Fixtures	-							Enter Values
5112	Maintenance of Transformer Station Equipment	-							Enter Values
5114	Maintenance of Distribution Station Equipment	33,377	45,915	50,222					Enter Values
5120	Maintenance of Poles, Towers and Fixtures	10,632	6,056	19,512					Enter Values
5125	Maintenance of Overhead Conductors and Devices	49,140	65,100	130,975					Enter Values
5130	Maintenance of Overhead Services	64,767	77,054	59,485					Enter Values
5135	Overhead Distribution Lines and Feeders - Right of Way	119,801	383,563	154,400					Enter Values
5145	Maintenance of Underground Conduit	-							Enter Values
5150	Maintenance of Underground Conductors and Devices	24,178	27,374	11,495					Enter Values
5155	Maintenance of Underground Services	76,614	119,306	117,564					Enter Values
5160	Maintenance of Line Transformers	17,208	15,441	75,905					Enter Values
5175	Maintenance of Meters	23,319	23,216	27,888					Enter Values
	Subtotal: Maintenance	427,525	763,269	661,485					Formula
5305	Supervision (Billing and Collection)	-	101,884	130,624					Enter Values
5310	Meter Reading Expense	-	12,017	18,784					Enter Values
5315	Customer Billing	388,248	358,604	462,153					Enter Values
5320	Collecting	345,165	356,417	368,742					Enter Values
5325	Collecting - Cash Over and Short	148	-	-					Enter Values
5330	Collection Charges	-							Enter Values
5340	Miscellaneous Customer Account Expenses	162,718	136,178	91,378					Enter Values
	Subtotal : Billing and Collections	896,279	965,100	1,071,680					Formula
5405	Supervision (Community Relations)	-							Enter Values
5410	Community Relations - Sundry	5,268	10,189	8,730					Enter Values
5420	Community Safety Program	350	-	970					Enter Values
5425	Miscellaneous Customer Service and Informational Expense	2,448	4,510	1,940					Enter Values
	Subtotal: Community Relations	8,066	14,699	11,640					Formula
5605	Executive Salaries and Expenses	262,073	303,508	309,578					Enter Values
5610	Management Salaries and Expenses	329,473	265,825	271,141					Enter Values
5615	General Administrative Salaries and Expenses	923,300	888,683	906,457					Enter Values
5620	Office Supplies	216,791	193,505	189,878					Enter Values
5625	Administrative Expense Transferred - Credit	-	-	-					Enter Values
5630	Outside Services Employed	199,342	129,454	175,667					Enter Values
5640	Injuries and Damages	49,896	50,003	48,500					Enter Values
5645	OMERS Pensions and Benefits	15,753	60,823	58,200					Enter Values
5646	Employee Pensions and OPEB	-	21,079	17,964					Enter Values
5647	Employee Sick Leave	-							Enter Values
5650	Franchise Requirements	-							Enter Values
5655	Regulatory Expenses	111,126	182,342	87,300					Enter Values
5665	Miscellaneous General Expenses	131,055	115,087	131,920					Enter Values
5670	Rent (Administrative and General)	1,530	712	776					Enter Values
5672	Lease Payment Expense	-							Enter Values
5675	Maintenance of General Plant	282,148	319,264	335,309					Enter Values
5680	Electrical Safety Authority Fees	9,212	9,424	9,700					Enter Values
	Sutotal: A&G Expenses	2,531,699	2,539,709	2,542,390					Formula
5635	Property Insurance	43,943	50,000	50,000					Enter Values
6210	Life Insurance	-							Enter Values
	Subtotal: Insurance	43,943	50,000	50,000					Formula
5515	Advertising	-							Enter Values
	Subtotal Advertising	-	-	-					Formula
2A	Total of Above Accounts Used for Benchmarking	5,283,654	5,684,868	5,863,278	-	-	-	-	Formula
Adjustments to OM&A for Benchmarking									
5014		-	-	-	-	-	-	-	Formula
5015		-	-	-	-	-	-	-	Formula
5112		-	-	-	-	-	-	-	Formula
2B	Subtotal: HV Adjustment (to subtract from cost)	-	-	-	-	-	-	-	Formula
2C	LV Adjustment	112,665	112,665	112,665					Enter Values

Bad debt expense are not included, 5335

2015 Value *3% annually

Benchmarking Calculations for LDC Forecasting

Selected LDC:

InnPower

Line Reference Number	Row Num	Account	Forecasted Values							Data Item Number		
			2014	2015	2016	2017	2018	2019	2020		2021	
Section 1: Source Data and OM&A Calculations												
1		OM&A Data (Detail may be hidden or expanded using the +/- buttons to the left of the row numbers)										
22		Subtotal: Operation		1,376,142								
36		Subtotal: Maintenance		427,525								
44		Subtotal : Billing and Collections		896,279								
49		Subtotal: Community Relations		8,066								
67		Subtotal: A&G Expenses		2,531,699								
70		Subtotal: Insurance		43,943								
72		Subtotal Advertising		-								
73		Total of Above Accounts Used for Benchmarking		5,283,654								
74												
75		Adjustments to OM&A for Benchmarking										
79		Subtotal: HV Adjustment (to subtract from cost)		-								
80		LV Adjustment		112,665								
81		Total Adjusted OM&A Expense		5,396,319		5,797,533	5,975,943				11	
82												
83		Gross Capital Cost Additions Data										
84		Total Gross Capital Additions		19,803,244		6,882,669	8,558,202	-	-	-	-	1
85		HV Gross Capital Additions		-		-	-	-	-	-	-	2
86												
87		Output and Other Business Conditions										
88		Number of Customers		16,157		16,517	17,054	-	-	-	-	3
89		Delivery Volume		237,763,329		238,940,858	239,587,667	-	-	-	-	4
90		Annual Peak Demand		50,975		51,992	52,992	-	-	-	-	5
91		Distribution Circuit km		833		862	892	-	-	-	-	6
92												
93												

Section 2: Actual Cost Calculations

94	Actual Cost							
95								
96	OM&A	5,396,319.30	5,797,532.96	5,975,942.73				
97								
98	Capital							
99	Rate of Return	6.51%	5.63%	5.71%	0.00%	0.00%	0.00%	0.00%
100	Depreciation Rate	4.59%	4.59%	4.59%	4.59%	4.59%	4.59%	4.59%
101	Construction Cost Index	163.12	165.71	168.34	168.34	168.34	168.34	168.34
102	Capital Price	17.93	16.79	17.19	7.73	7.73	7.73	7.73
103	Gross Plant Additions	19,803,244	6,882,669	8,558,202	-	-	-	-
104	HV Capital Additions	-	-	-	-	-	-	-
105	Quantity of Capital Additions	121,404	41,535	50,840	-	-	-	-
106	Quantity of Capital Removed	17,959	22,707	23,571	24,823	23,684	22,597	21,559
107	Capital Quantity	494,710	513,538	540,806	515,983	492,300	469,703	448,144
108	Capital Cost	8,869,333	8,622,044	9,295,653	3,986,821	3,803,826	3,629,230	3,462,648
109								
110	Total Actual Cost	14,265,653	14,419,577	15,271,596	#VALUE!	#VALUE!	#VALUE!	3,462,648

Section 3: Predicted Cost Calculations

111 **Predicted Cost**

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(Details of the predicted cost calculations may be hidden by using the +/- button to the left of row 248)

Company Values for Variables Used in the Prediction Equation

Company-Specific Parameter Estimates*

167	Sample Mean Values								
168									
169	Constant	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
170	Capital Price / OM&A Price (WK)	0.1644	0.1644	0.1644	0.1644	0.1644	0.1644	0.1644	0.1644
171	Customers (Y1)	63,422.3118	63,422.3118	63,422.3118	63,422.3118	63,422.3118	63,422.3118	63,422.3118	63,422.3118
172	Capacity (Y2)	345,129.0146	345,129.0146	345,129.0146	345,129.0146	345,129.0146	345,129.0146	345,129.0146	345,129.0146
173	Deliveries (Y3)	1,630,327,994	1,630,327,994	1,630,327,994	1,630,327,994	1,630,327,994	1,630,327,994	1,630,327,994	1,630,327,994
174	WKWK	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
175	Y1Y1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
176	Y2Y2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
177	Y3Y3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
178	WKY1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
179	WKY2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
180	WKY3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
181	Y1Y2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
182	Y1Y3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
183	Y2Y3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
184	Average Line Length	2,723	2,723	2,723	2,723	2,723	2,723	2,723	2,723
185	Customers Added in last 10 years	0.1286	0.1286	0.1286	0.1286	0.1286	0.1286	0.1286	0.1286
186									
187									
188									
189	2013 Values Logged and Mean Scaled (where applicable)								
190									
191	Constant	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
192	Capital Price / OM&A Price (WK)	(0.1918)	(0.2801)	(0.2793)	(1.0788)	(1.0788)	(1.0788)	(1.0788)	(1.0788)
193	Customers (Y1)	(1.3675)	(1.3455)	(1.3135)	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
194	Capacity (Y2)	(1.6413)	(1.6413)	(1.6413)	(1.6413)	(1.6413)	(1.6413)	(1.6413)	(1.6413)
195	Deliveries (Y3)	(1.9253)	(1.9203)	(1.9176)	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
196	WKWK	0.0184	0.0392	0.0390	0.5819	0.5819	0.5819	0.5819	0.5819
197	Y1Y1	0.9350	0.9051	0.8626	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
198	Y2Y2	1.3469	1.3469	1.3469	1.3469	1.3469	1.3469	1.3469	1.3469
199	Y3Y3	1.8533	1.8438	1.8386	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
200	WKY1	0.2623	0.3769	0.3668	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
201	WKY2	0.3148	0.4597	0.4583	1.7707	1.7707	1.7707	1.7707	1.7707
202	WKY3	0.3693	0.5379	0.5355	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
203	Y1Y2	2.2444	2.2083	2.1558	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
204	Y1Y3	2.6327	2.5837	2.5187	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
205	Y2Y3	3.1599	3.1518	3.1474	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
206	Average Line Length	(1.3633)	(1.3476)	(1.3315)	(1.3921)	(1.4493)	(1.5064)	(1.5636)	(1.5636)
207	Customers Added in last 10 years	133.27%	150.93%	161.35%	0.00%	0.00%	0.00%	0.00%	0.00%
208	Trend	9.0000	10.0000	11.0000	12.0000	13.0000	14.0000	15.0000	15.0000

209									
210	Product of Parameter and 2013 Values								
211									
212	Constant	12.816	12.816	12.816	12.816	12.816	12.816	12.816	12.816
213	Capital Price / OM&A Price (WK)	(0.120)	(0.176)	(0.175)	(0.677)	(0.677)	(0.677)	(0.677)	(0.677)
214	Customers (Y1)	(0.605)	(0.595)	(0.581)	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
215	Capacity (Y2)	(0.264)	(0.264)	(0.264)	(0.264)	(0.264)	(0.264)	(0.264)	(0.264)
216	Deliveries (Y3)	(0.199)	(0.198)	(0.198)	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
217	WKWK	0.002	0.005	0.005	0.073	0.073	0.073	0.073	0.073
218	Y1Y1	(0.355)	(0.343)	(0.327)	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
219	Y2Y2	0.243	0.243	0.243	0.243	0.243	0.243	0.243	0.243
220	Y3Y3	0.311	0.309	0.309	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
221	WKY1	0.013	0.019	0.019	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
222	WKY2	0.003	0.005	0.005	0.019	0.019	0.019	0.019	0.019
223	WKY3	0.001	0.001	0.001	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
224	Y1Y2	0.333	0.327	0.320	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
225	Y1Y3	0.160	0.157	0.153	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
226	Y2Y3	(0.618)	(0.616)	(0.615)	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
227	Average Line Length	(0.392)	(0.387)	(0.383)	(0.400)	(0.416)	(0.433)	(0.449)	(0.449)
228	Customers Added in last 10 years	0.022	0.025	0.027	-	-	-	-	-
229	Trend	0.151	0.168	0.185	0.202	0.219	0.235	0.252	0.252
230									
231	Log of Predicted Total Cost / OM&A Price	11.5044	11.4968	11.5388	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
232	Real Predicted Total Cost / OM&A Price	99,150	98,399	102,619	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
233	OM&A Price	132.11	135.14	138.23	138.23	138.23	138.23	138.23	138.23
234	Predicted Total Cost	13,098,824	13,297,653	14,185,462	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
235									
236									

Section 4: Benchmarking Results

237	Actual Cost	14,265,653	14,419,577	15,271,596	#VALUE!	#VALUE!	#VALUE!	3,462,648
238	Predicted Cost	13,098,824	13,297,653	14,185,462	#NUM!	#NUM!	#NUM!	#NUM!
239	Actual less Predicted Cost	1,166,829	1,121,925	1,086,134	#VALUE!	#VALUE!	#VALUE!	#NUM!
240	Percentage Difference (Arithmetic for Comparison)	8.91%	8.44%	7.66%	#VALUE!	#VALUE!	#VALUE!	#NUM!
241								
242	Percent Difference (Logarithmic)	8.53%	8.10%	7.38%	#VALUE!	#VALUE!	#VALUE!	#NUM!

Summary of Cost Benchmarking Results

InnPower

	2015 (History)	2016 (Bridge)	2017 (Test Year)	2018	2019	2020
Cost Benchmarking Summary						
Actual Total Cost	14,265,653	14,419,577	15,271,596	na	na	na
Predicted Total Cost	13,098,824	13,297,653	14,185,462	na	na	na
Difference	1,166,829	1,121,925	1,086,134	na	na	na
Percentage Difference (Cost Performance)	8.5%	8.1%	7.4%	na	na	na
Three-Year Average Performance			8.0%	na	na	na
Stretch Factor Cohort						
Annual Result	3	3	3	na	na	na
Three Year Average			3			