

Data Required for Cost Benchmarking

InnPower

Select LDC from Dropdown Box:

InnPower

History Bridge Year Test Year Additional Years for Custom IR Filings

Required Item

2015 2016 2017 2018 2019 2020 2021

COMMENTS

Gross Capital Cost Additions Data

1	Total Gross Capital Additions	19,803,244	8,472,869	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:

<input checked="" type="radio"/>	Use Method 1 [1A - 1B + 1C]	5,396,319	5,650,747	6,214,285	-	-	-	-	-	Formula
<input type="radio"/>	Use Method 2 [2A - 2B + 2C]	5,396,319	5,925,747	6,214,285						Formula
11	OM&A Values Transferred to Calculations Worksheet	5,396,319	5,650,747	6,214,285	-	-	-	-	-	Formula

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	5,538,082	6,101,620						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	174,400	226,363						Enter Values
5010	Load Dispatching	14,948	19,100	19,700						Enter Values
5012	Station Buildings and Fixtures	48,576	53,000	54,800						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	9,900	10,200						Enter Values
5017	Distribution Station Equipment - Operation Supplies and Expenses	5,228	3,700	3,825						Enter Values
5020	Overhead Distribution Lines and Feeders - Operation Labor	136,301	141,000	152,661						Enter Values
5025	Overhead Distribution Lines and Feeders - Operation Supplies and Expenses	7,484	7,700	7,950						Enter Values
5035/5030	Overhead Distribution Transformers - Operation	246	3,075	3,225						Enter Values
5040	Underground Distribution Lines and Feeders - Operation Labor	18,961	27,800	28,863						Enter Values
5045	Underground Distribution Lines and Feeders - Operation Supplies and Expenses	98,966	107,750	112,000						Enter Values
5055	Overhead Distribution Lines and Feeders	189	-	-						Enter Values
5065	Meter Expense	241,353	253,245	270,856						Enter Values
5070	Customer Premises - Operation Labor	55,089	61,400	63,463						Enter Values
5075	Customer Premises - Operation Materials and Supplies	101,904	111,900	115,100						Enter Values
5085	Miscellaneous Distribution Expense	405,527	470,310	478,478						Enter Values
5090	Underground Distribution Lines and Feeders - Rental Paid	-								Enter Values
5095	Overhead Distribution Lines and Feeders - Rental Paid	11,199	11,000	11,000						Enter Values

2016 & 2017 values taken from Revenue Requirement - BB

5096	Other Rent (Distribution)	-	-	-	-	-	-	Enter Values
	Subtotal: Operation	1,376,142	1,455,280	1,558,483	-	-	-	Formula
5105	Maintenance Supervision and Engineering	8,489	14,050	14,475				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	49,750	51,775				Enter Values
5120	Maintenance of Poles, Towers and Fixtures	10,632	6,200	20,115				Enter Values
5125	Maintenance of Overhead Conductors and Devices	49,140	65,100	130,975				Enter Values
5130	Maintenance of Overhead Services	64,767	59,300	61,325				Enter Values
5135	Overhead Distribution Lines and Feeders - Right of Way	119,801	153,800	159,175				Enter Values
5145	Maintenance of Underground Conduit	-						Enter Values
5150	Maintenance of Underground Conductors and Devices	24,178	11,200	11,850				Enter Values
5155	Maintenance of Underground Services	76,614	117,050	121,200				Enter Values
5160	Maintenance of Line Transformers	17,208	25,050	75,905				Enter Values
5175	Maintenance of Meters	23,319	28,750	28,750				Enter Values
	Subtotal: Maintenance	427,525	530,250	675,545				Formula
5305	Supervision (Billing and Collection)	-	131,059	134,664				Enter Values
5310	Meter Reading Expense	-	20,331	19,365				Enter Values
5315	Customer Billing	388,248	460,409	476,446				Enter Values
5320	Collecting	345,165	371,340	380,146				Enter Values
5325	Collecting - Cash Over and Short	148	-	-				Enter Values
5330	Collection Charges	-	-	-				Enter Values
5340	Miscellaneous Customer Account Expenses	162,718	145,828	94,204				Enter Values
	Subtotal: Billing and Collections	896,279	1,128,967	1,104,825				Formula
5405	Supervision (Community Relations)	-						Enter Values
5410	Community Relations - Sundry	5,268	7,500	9,000				Enter Values
5420	Community Safety Program	350	750	1,000				Enter Values
5425	Miscellaneous Customer Service and Informational Expense	2,448	2,000	2,000				Enter Values
	Subtotal: Community Relations	8,066	10,250	12,000				Formula
5605	Executive Salaries and Expenses	262,073	253,317	258,383				Enter Values
5610	Management Salaries and Expenses	329,473	356,934	364,073				Enter Values
5615	General Administrative Salaries and Expenses	923,300	959,276	978,462				Enter Values
5620	Office Supplies	216,791	195,250	207,750				Enter Values
5625	Administrative Expense Transferred - Credit	-	-	-				Enter Values
5630	Outside Services Employed	199,342	186,000	181,100				Enter Values
5640	Injuries and Damages	49,896	46,350	50,000				Enter Values
5645	OMERS Pensions and Benefits	15,753	57,680	60,000				Enter Values
5646	Employee Pensions and OPEB	-	17,978	18,520				Enter Values
5647	Employee Sick Leave	-						Enter Values
5650	Franchise Requirements	-						Enter Values
5655	Regulatory Expenses	111,126	95,800	90,000				Enter Values
5665	Miscellaneous General Expenses	131,055	125,800	136,000				Enter Values
5670	Rent (Administrative and General)	1,530	800	800				Enter Values
5672	Lease Payment Expense	-						Enter Values
5675	Maintenance of General Plant	282,148	333,500	345,679				Enter Values
5680	Electrical Safety Authority Fees	9,212	9,650	10,000				Enter Values
	Subtotal: A&G Expenses	2,531,699	2,638,335	2,700,767				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	5,813,082	6,101,620	-	-	-	Formula
Adjustments to OM&A for Benchmarking								
5014		-	-	-	-	-	-	Formula
5015		-	-	-	-	-	-	Formula
5112		-	-	-	-	-	-	Formula
2B	Subtotal: HV Adjustment (to subtract from cost)	-	-	-	-	-	-	Formula
2C	LVA 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 Nu	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	5,650,747	6,214,285	-	-	-	-	11
82											
83		Gross Capital Cost Additions Data									
84		Total Gross Capital Additions		19,803,244	8,472,869	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	<u>Actual Cost</u>									
95										
96	OM&A		5,396,319.30	5,650,747.00	6,214,284.54	-	-	-		
97										
98	Capital									
99	Rate of Return		6.51%	5.63%	5.71%	0.00%	0.00%	0.00%	0.00%	10
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	9
102	Capital Price		17.93	16.79	17.19	7.73	7.73	7.73	7.73	
103	Gross Plant Additions		19,803,244	8,472,869	8,558,202	-	-	-	-	1
104	HV Capital Additions		-	-	-	-	-	-	-	2
105	Quantity of Capital Additions		121,404	51,132	50,840	-	-	-	-	
106	Quantity of Capital Removed		17,959	22,707	24,012	25,243	24,085	22,979	21,924	
107	Capital Quantity		494,710	523,134	549,962	524,719	500,634	477,655	455,731	
108	Capital Cost		8,869,333	8,783,164	9,453,031	4,054,319	3,868,225	3,690,674	3,521,272	
109										
110	Total Actual Cost		14,265,653	14,433,911	15,667,316	4,054,319	3,868,225	3,690,674	3,521,272	

Section 3: Predicted Cost Calculations

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	Constant	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
169	Capital Price / OM&A Price (WK)	0.1644	0.1644	0.1644	0.1644	0.1644	0.1644	0.1644
170	Customers (Y1)	63,422.3118	63,422.3118	63,422.3118	63,422.3118	63,422.3118	63,422.3118	63,422.3118
171	Capacity (Y2)	345,129.0146	345,129.0146	345,129.0146	345,129.0146	345,129.0146	345,129.0146	345,129.0146
172	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
173	WKWK	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
174	Y1Y1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
175	Y2Y2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
176	Y3Y3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
177	WKY1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
178	WKY2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
179	WKY3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
180	Y1Y2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
181	Y1Y3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
182	Y2Y3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
183	Average Line Length	2.723	2.723	2.723	2.723	2.723	2.723	2.723
184	Customers Added in last 10 years	0.1286	0.1286	0.1286	0.1286	0.1286	0.1286	0.1286
185								
186								
187								
188								

189 **2013 Values Logged and Mean Scaled (where applicable)**

190	Constant	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
191	Capital Price / OM&A Price (WK)	(0.1918)	(0.2801)	(0.2793)	(1.0788)	(1.0788)	(1.0788)	(1.0788)
192	Customers (Y1)	(1.3675)	(1.3455)	(1.3135)	#NUM!	#NUM!	#NUM!	#NUM!
193	Capacity (Y2)	(1.6413)	(1.6413)	(1.6413)	(1.6413)	(1.6413)	(1.6413)	(1.6413)
194	Deliveries (Y3)	(1.9253)	(1.9203)	(1.9176)	#NUM!	#NUM!	#NUM!	#NUM!
195	WKWK	0.0184	0.0392	0.0390	0.5819	0.5819	0.5819	0.5819
196	Y1Y1	0.9350	0.9051	0.8626	#NUM!	#NUM!	#NUM!	#NUM!
197	Y2Y2	1.3469	1.3469	1.3469	1.3469	1.3469	1.3469	1.3469
198	Y3Y3	1.8533	1.8438	1.8386	#NUM!	#NUM!	#NUM!	#NUM!
199	WKY1	0.2623	0.3769	0.3668	#NUM!	#NUM!	#NUM!	#NUM!
200	WKY2	0.3148	0.4597	0.4583	1.7707	1.7707	1.7707	1.7707
201	WKY3	0.3693	0.5379	0.5355	#NUM!	#NUM!	#NUM!	#NUM!
202	Y1Y2	2.2444	2.2083	2.1558	#NUM!	#NUM!	#NUM!	#NUM!
203	Y1Y3	2.6327	2.5837	2.5187	#NUM!	#NUM!	#NUM!	#NUM!
204	Y2Y3	3.1599	3.1518	3.1474	#NUM!	#NUM!	#NUM!	#NUM!
205	Average Line Length	(1.3633)	(1.3476)	(1.3315)	(1.3921)	(1.4493)	(1.5064)	(1.5636)
206	Customers Added in last 10 years	133.27%	150.93%	161.35%	0.00%	0.00%	0.00%	0.00%
207	Trend	9.0000	10.0000	11.0000	12.0000	13.0000	14.0000	15.0000
208								

209									
210	Product or 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	14,433,911	15,667,316	4,054,319	3,868,225	3,690,674	3,521,272
238	Predicted Cost	13,098,824	13,297,653	14,185,462	#NUM!	#NUM!	#NUM!	#NUM!
239	Actual less Predicted Cost	1,166,829	1,136,259	1,481,854	#NUM!	#NUM!	#NUM!	#NUM!
240	Percentage Difference (Arithmetic for Comparison)	8.91%	8.54%	10.45%	#NUM!	#NUM!	#NUM!	#NUM!
241								
242	Percent Difference (Logarithmic)	8.53%	8.20%	9.94%	#NUM!	#NUM!	#NUM!	#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	14,433,911	15,667,316	na	na	na
Predicted Total Cost	13,098,824	13,297,653	14,185,462	na	na	na
Difference	1,166,829	1,136,259	1,481,854	na	na	na
Percentage Difference (Cost Performance)	8.5%	8.2%	9.9%	na	na	na
Three-Year Average Performance			8.9%	na	na	na
Stretch Factor Cohort						
Annual Result	3	3	3	na	na	na
Three Year Average			3			