

**Cost Allocation Model
Sensitivity to Changes in Inputs
Unmetered Loads**



Overview

- Background
- Key Inputs in the as-filed model
- Key Outputs in the as-filed model
- Scenarios

Background

- Costs are Functionalized at the Trial Balance level
 - Within this assets are functionalized as providing bulk, primary or secondary service
- Each Trial Balance account has been assigned an allocator or pair of allocators
 - Coincident Peak (CP)
 - Non-Coincident Peak (NCP)
 - Customer Count
 - Connection Count
 - Weighted Connection Count
 - Composite Allocators
 - Operating and Maintenance (O&M)
 - Net Fixed Assets (NFA)

Input – Connection Counts

	Primary	Secondary
Residential	280,901	280,901
GS < 50	23,636	23,636
Large Use	12	0
Street Light	3,703 (55,546 devices)	3,703 (55,546 devices)
USL	3,093	3,093
Total	314,809	311,415

Input – Weighting Factors

	Services	Billing and Collecting
Residential	1	1
GS < 50	2	2
Large Use	30	15
Street Light	1	1
USL	1	5

Input – Demand

	4NCP	4CP
Residential	2,109,703	1,901,782
GS < 50	636,235	600,259
Large Use	430,176	345,558
Street Light	54,445	9,539
USL	8,447	6,686
Total	6,054,862	5,449,865

Output

	Revenue Requirement	Revenue To Cost Ratio
Residential	\$ 94,436,258	97.07%
GS < 50	19,093,962	114.37%
Large Use	5,754,313	106.80%
Street Light	1,183,502	74.82%
USL	470,639	123.30%
Total	168,173,609	100.00%

Scenario 1 - 55,546 SL connections (no daisy chain)

	Revenue Requirement	Revenue To Cost Ratio
Residential	\$ 89,700,122 ↓	101.96% ↑
GS < 50	18,638,133 ↓	117.06% ↑
Large Use	5,793,229 ↑	106.10% ↓
Street Light	6,123,039 ↑	18.15% ↓
USL	416,561 ↓	138.73% ↑
Total	168,173,609	100.00%

Scenario 2 – Zero SL services weighting factor

	Revenue Requirement	Revenue To Cost Ratio
Residential	\$ 94,552,376 ↑	96.96% ↓
GS < 50	19,113,503 ↑	114.25% ↓
Large Use	5,754,313	106.80%
Street Light	1,046,531 ↓	84.36% ↑
USL	471,917 ↑	123.33% ↓
Total	168,173,609	100.00%

Scenario 3 – Zero SL billing and collecting weighting factor

	Revenue Requirement	Revenue To Cost Ratio
Residential	\$ 94,437,329 ↑	97.07%
GS < 50	19,094,141 ↑	114.36% ↓
Large Use	5,754,314 ↑	106.80%
Street Light	1,182,072 ↓	74.89% ↑
USL	470,639	123.30%
Total	168,173,609	100.00%

Scenario 4 – 50% SL Demand Reduction

	Revenue Requirement	Revenue : Cost
Residential	\$ 94,569,736 ↑	97.08% ↑
GS < 50	19,141,244 ↑	114.25% ↓
Large Use	5,778,675 ↑	106.52% ↓
Street Light	789,254 ↓	80.91% ↑
USL	470,949 ↑	123.40% ↑
Total	168,173,609	100.00%

Scenario 5 – 55,546 SL connections (no daisy chain) and; 50% SL Demand Reduction

	Revenue Requirement	Revenue : Cost
Residential	\$ 89,712,637 ↑	102.09% ↑
GS < 50	18,641,815 ↑	117.21% ↑
Large Use	5,795,781 ↑	106.21% ↑
Street Light	6,086,351 ↓	14.35% ↓
USL	416,616 ↑	138.92% ↑
Total	168,173,609	100.00%

Revenue Requirement allocated to Street Lighting (Total \$168,173,609)

	Revenue Requirement \$	Allocator
Load Dispatching (Demand 12 CP and 4 NCP)	21,627	1815-1855D
Load Dispatching (Cust. Primary and Sec.)	15,046	1815-1855C
Overhead Lines – ROW (Demand 4 NCP)	17,272	1830 & 1835 D
Overhead Lines – ROW (Cust. Pri. and Sec.)	11,240	1830 & 1835 C
Administration (O&M)	161,378	O&M
Administration (NFA)	20,062	NFA ECC / NFA
Depreciation	380,686	By assets
PILS	68,859	NFA
Interest	167,621	NFA
Net Income	206,084	NFA
Other	<u>113,627</u>	Various
Total	1,183,502	

Distribution Plant Gross Assets allocated to Street Lighting (Total \$1,121,693,636)

	Revenue Requirement	Allocator
Distribution Station Equipment	\$ 688,087	PNCP4
Primary Polls, towers (Demand)	529,101	PNCP4
Primary Polls, towers (Customer)	383,411	CCP
Primary UG Conduit (Demand)	747,839	PNCP4
Primary UG Conduit (Customer)	541,918	CCP
Primary UG Conductors (Demand)	1,012,370	PNCP4
Primary UG Conductors (Customer)	733,609	CCP
Line Transformers (Demand Related)	921,504	LTNCP4
Line Transformers (Customer Related)	455,185	CCLT
Services	1,275,362	CWCS
Other	<u>2,481,185</u>	Various
Distribution Plant	9,769,572	