

2015 RATE DESIGN APPLICATION (RDA) WORKSHOP 12

APPENDIX: GENERAL SERVICE DEMAND CHARGE COST RECOVERY – MODEL RUNS

1. LGS: 53% (Status Quo(SQ)) to 65% Demand Charge Cost Recovery – Flat Energy & Flat Demand
2. LGS: 53% (SQ) to 65% Demand Charge Cost Recovery – Flat Energy & 2-Step Inclining Demand
3. MGS: 15% (SQ) to 35% Demand Charge Cost Recovery – Flat Energy & Flat Demand
4. MGS: 15% (SQ) to 35% Demand Charge Cost Recovery – Flat Energy & 2-Step Inclining Demand



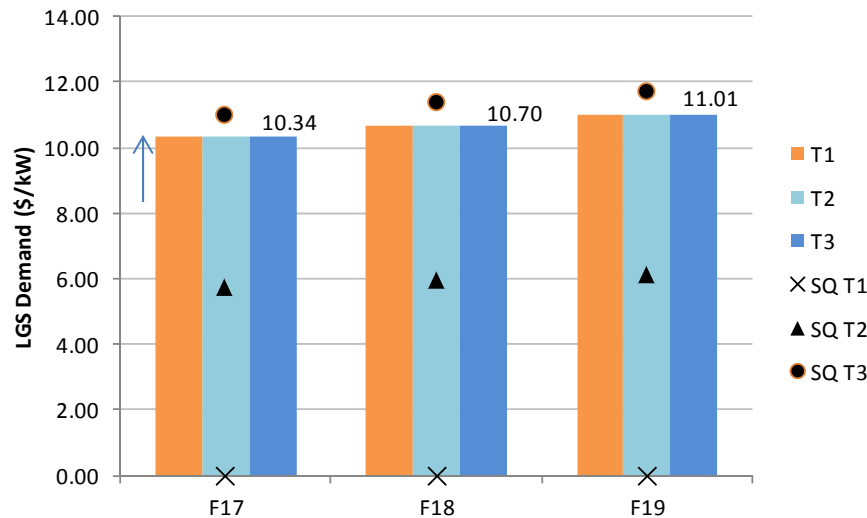
FOR GENERATIONS

30 July 2015

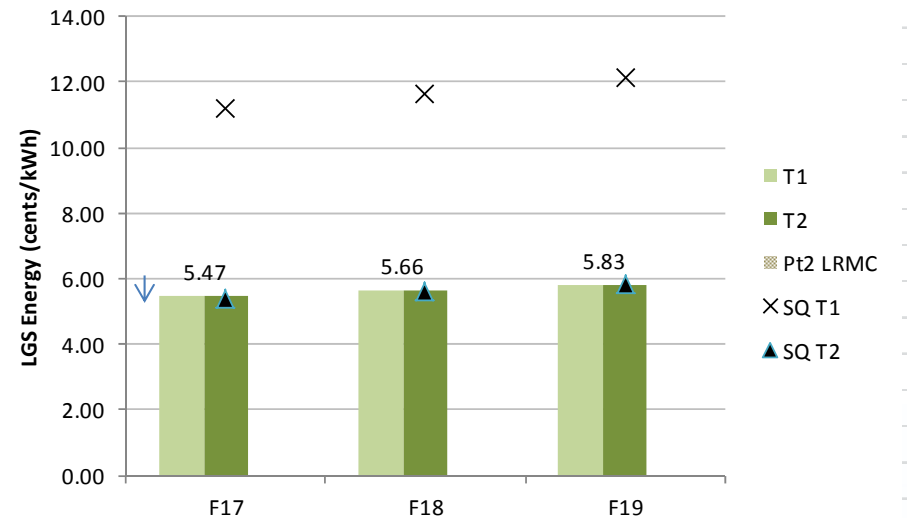
LGS, 53% (SQ) TO 65% COST RECOVERY

- Flat Energy for all rates shown
- Demand alternatives:
 - Flatten Demand Charge
 - Two-Step Demand Charge

LGS FLAT DEMAND CHARGE, LGS FLAT ENERGY RATE, 65% DEMAND COST RECOVERY



Demand Charges



Energy Charges

Illustrative Customer Bill (F2017)

Load Factor of 46%, Baseline Consumption = 744,240 kWh per year, Billed kW = 185 kW each month

Customer Scenario	Demand Charge	Energy Charge	Basic Charge	Total Bill	SQ Bill	Variance
Consume at baseline	\$22,948	\$40,696	\$86	\$63,730	\$63,112	\$618 (1%)
+ 5% from baseline	\$22,948	\$42,731	\$86	\$65,764	\$66,870	-\$1,106 (-2%)
- 5% from baseline	\$22,948	\$38,662	\$86	\$61,695	\$59,354	\$2,341 (4%)

Note: Illustrative bill computation excludes rate rider, discounts, ratchets, and other provisions



Observations:

- Relative to current cost recovery (53%), Energy charges are Lower and Demand charges are Higher.
- Low load factor customers have less benefit
- More aggressive offsetting
- Most adverse impacts on low consuming, low load factor customers.
- F17 equivalent rate structure at current cost recovery:
Demand: \$8.43/kW
Energy: 5.94c/kWh

LGS FLAT DEMAND CHARGE, LGS FLAT ENERGY RATE, 65% DEMAND COST RECOVERY

F17 ILLUSTRATIVE SENSITIVITY ANALYSIS OF BILL IMPACT FLAT DEMAND, FLAT ENERGY CHARGE

65% Demand Cost Recovery

Annual Consumption kWh

Highest kw

Load Factor	*	200,000	400,000	600,000	800,000	1,000,000	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000	2,200,000	2,400,000	2,600,000	2,800,000	3,000,000	3,200,000	3,400,000
	10%		4.5%	2.3%	1.6%	1.3%	1.1%	0.9%	0.8%	0.8%	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	0.5%	0.5%
20%		-0.8%	4.9%	3.8%	3.2%	2.9%	2.7%	2.5%	2.4%	2.3%	2.2%	2.2%	2.1%	2.1%	2.1%	2.0%	2.0%	2.0%
30%		-10.5%	6.7%	5.2%	4.5%	4.1%	3.8%	3.6%	3.5%	3.4%	3.3%	3.2%	3.1%	3.1%	3.0%	3.0%	3.0%	2.9%
40%		-16.2%	1.4%	6.3%	5.4%	5.0%	4.6%	4.4%	4.2%	4.1%	4.0%	3.9%	3.8%	3.8%	3.7%	3.7%	3.7%	3.6%
50%		-20.0%	-2.5%	5.2%	6.1%	5.6%	5.2%	5.0%	4.8%	4.7%	4.6%	4.5%	4.4%	4.3%	4.3%	4.2%	4.2%	4.1%
60%		-22.7%	-5.2%	2.3%	6.7%	6.1%	5.7%	5.5%	5.3%	5.1%	5.0%	4.9%	4.8%	4.7%	4.7%	4.6%	4.6%	4.5%
70%		-25.2%	-7.3%	0.5%	4.9%	6.3%	6.1%	5.8%	5.6%	5.4%	5.3%	5.2%	5.1%	5.0%	5.0%	4.9%	4.9%	4.8%
80%		-27.8%	-8.9%	-1.1%	3.3%	6.1%	6.4%	6.1%	5.9%	5.7%	5.6%	5.5%	5.4%	5.3%	5.2%	5.2%	5.1%	5.1%
90%		-29.7%	-10.2%	-2.4%	2.0%	4.8%	6.7%	6.4%	6.1%	6.0%	5.8%	5.7%	5.6%	5.5%	5.5%	5.4%	5.3%	5.3%

Lowest kw Red means higher than CARC of 4% for F17

53% Demand Cost Recovery

Annual Consumption kWh

Highest kw

Load Factor	*	200,000	400,000	600,000	800,000	1,000,000	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000	2,200,000	2,400,000	2,600,000	2,800,000	3,000,000	3,200,000	3,400,000
	10%		-6.9%	-8.8%	-9.5%	-9.8%	-10.0%	-10.1%	-10.2%	-10.2%	-10.3%	-10.3%	-10.4%	-10.4%	-10.4%	-10.4%	-10.5%	-10.5%
20%		-7.4%	-2.1%	-3.1%	-5.7%	4.0%	-4.2%	-4.3%	-4.4%	-4.5%	-4.6%	-4.6%	-4.7%	-4.7%	-4.8%	-4.8%	-4.8%	-4.8%
30%		-14.0%	2.5%	1.1%	0.4%	0.0%	-0.3%	-0.5%	-0.6%	-0.7%	-0.8%	-0.9%	-0.9%	-1.0%	-1.0%	-1.1%	-1.1%	-1.1%
40%		-18.0%	-0.7%	4.1%	3.3%	2.8%	2.5%	2.3%	2.1%	2.0%	1.9%	1.8%	1.7%	1.7%	1.6%	1.6%	1.5%	1.5%
50%		-20.5%	-3.1%	4.6%	5.5%	4.9%	4.6%	4.3%	4.1%	4.0%	3.9%	3.8%	3.7%	3.6%	3.6%	3.5%	3.5%	3.5%
60%		-22.3%	-4.8%	3.0%	7.1%	6.6%	6.2%	5.9%	5.7%	5.6%	5.4%	5.3%	5.2%	5.2%	5.1%	5.1%	5.0%	5.0%
70%		-24.3%	-6.1%	1.8%	6.2%	7.9%	7.5%	7.2%	7.0%	6.8%	6.7%	6.6%	6.5%	6.4%	6.3%	6.3%	6.2%	6.2%
80%		-26.3%	-7.1%	0.8%	5.3%	8.2%	8.5%	8.2%	8.0%	7.8%	7.7%	7.6%	7.5%	7.4%	7.3%	7.3%	7.2%	7.2%
90%		-27.9%	-7.9%	0.1%	4.6%	7.5%	9.4%	9.1%	8.8%	8.6%	8.5%	8.4%	8.3%	8.2%	8.1%	8.1%	8.0%	8.0%

Lowest kw Red means higher than CARC of 4% for F17

*Note: Very high sensitivity on low load factor, lower consumption customers due to T2 kW much higher than SQ, even though T1 is free .

LGS FLAT DEMAND CHARGE, LGS FLAT ENERGY RATE, 65% DEMAND COST RECOVERY

F17 ILLUSTRATIVE SENSITIVITY ANALYSIS OF BILL DIFFERENCE LESS RRA FLAT DEMAND, FLAT ENERGY CHARGE

65% Demand Cost Recovery

Annual Consumption kWh

Highest kw

Load Factor	*	200,000	400,000	600,000	800,000	1,000,000	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000	2,200,000	2,400,000	2,600,000	2,800,000	3,000,000	3,200,000	3,400,000
	10%		0.5%	-1.7%	-2.4%	-2.7%	-2.9%	-3.1%	-3.2%	-3.2%	-3.3%	-3.3%	-3.4%	-3.4%	-3.4%	-3.4%	-3.5%	-3.5%
20%		-4.8%	0.9%	-0.2%	-0.8%	-1.1%	-1.3%	-1.5%	-1.6%	-1.7%	-1.8%	-1.8%	-1.9%	-1.9%	-1.9%	-2.0%	-2.0%	-2.0%
30%		-14.5%	2.7%	1.2%	0.5%	0.1%	-0.2%	-0.4%	-0.5%	-0.6%	-0.7%	-0.8%	-0.9%	-0.9%	-1.0%	-1.0%	-1.0%	-1.1%
40%		-20.2%	-2.6%	2.3%	1.4%	1.0%	0.6%	0.4%	0.2%	0.1%	0.0%	-0.1%	-0.2%	-0.2%	-0.3%	-0.3%	-0.3%	-0.4%
50%		-24.0%	-6.5%	1.2%	2.1%	1.6%	1.2%	1.0%	0.8%	0.7%	0.6%	0.5%	0.4%	0.3%	0.3%	0.2%	0.2%	0.1%
60%		-26.7%	-9.2%	-1.5%	2.7%	2.1%	1.7%	1.5%	1.3%	1.1%	1.0%	0.9%	0.8%	0.7%	0.7%	0.6%	0.6%	0.5%
70%		-29.2%	-11.3%	-3.5%	0.9%	2.5%	2.1%	1.8%	1.6%	1.4%	1.3%	1.2%	1.1%	1.0%	1.0%	0.9%	0.9%	0.8%
80%		-31.8%	-12.9%	-5.1%	-0.7%	2.1%	2.4%	2.1%	1.9%	1.7%	1.6%	1.5%	1.4%	1.3%	1.2%	1.2%	1.1%	1.1%
90%		-33.7%	-14.2%	-6.4%	-2.0%	0.8%	2.7%	2.4%	2.1%	2.0%	1.8%	1.7%	1.6%	1.5%	1.5%	1.4%	1.3%	1.3%

Lowest kw Red means higher than RRA

53% Demand Cost Recovery

Annual Consumption kWh

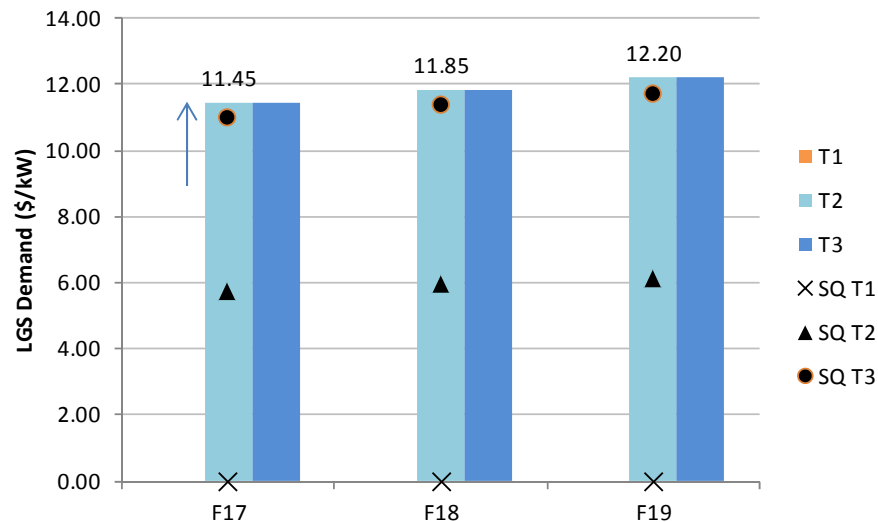
Highest kw

Load Factor	*	200,000	400,000	600,000	800,000	1,000,000	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000	2,200,000	2,400,000	2,600,000	2,800,000	3,000,000	3,200,000	3,400,000
	10%		-10.9%	-12.8%	-13.5%	-13.8%	-14.0%	-14.1%	-14.2%	-14.2%	-14.3%	-14.3%	-14.4%	-14.4%	-14.4%	-14.4%	-14.5%	-14.5%
20%		-11.4%	-6.1%	-7.1%	-7.7%	-8.0%	-8.2%	-8.3%	-8.4%	-8.5%	-8.6%	-8.6%	-8.7%	-8.7%	-8.8%	-8.8%	-8.8%	-8.8%
30%		-18.0%	-1.5%	-2.9%	-3.6%	-4.0%	-4.3%	-4.5%	-4.6%	-4.7%	-4.8%	-4.9%	-4.9%	-5.0%	-5.0%	-5.1%	-5.1%	-5.1%
40%		-22.0%	-4.7%	0.1%	-0.7%	-1.2%	-1.5%	-1.7%	-1.9%	-2.0%	-2.1%	-2.2%	-2.3%	-2.3%	-2.4%	-2.4%	-2.5%	-2.5%
50%		-24.5%	-7.1%	0.6%	1.5%	0.9%	0.6%	0.1%	0.1%	0.0%	-0.1%	-0.2%	-0.3%	-0.4%	-0.4%	-0.5%	-0.5%	-0.5%
60%		-26.3%	-8.8%	-1.0%	3.1%	2.6%	2.2%	1.9%	1.7%	1.6%	1.4%	1.3%	1.2%	1.2%	1.1%	1.1%	1.0%	1.0%
70%		-28.3%	-10.1%	-2.2%	2.2%	3.3%	3.5%	3.2%	3.0%	2.8%	2.7%	2.6%	2.5%	2.4%	2.3%	2.3%	2.2%	2.2%
80%		-30.3%	-11.1%	-3.2%	1.3%	4.2%	4.5%	4.2%	4.0%	3.8%	3.7%	3.6%	3.5%	3.4%	3.3%	3.3%	3.2%	3.2%
90%		-31.9%	-11.9%	-3.9%	0.6%	3.5%	5.4%	5.1%	4.8%	4.6%	4.5%	4.4%	4.3%	4.2%	4.1%	4.1%	4.0%	4.0%

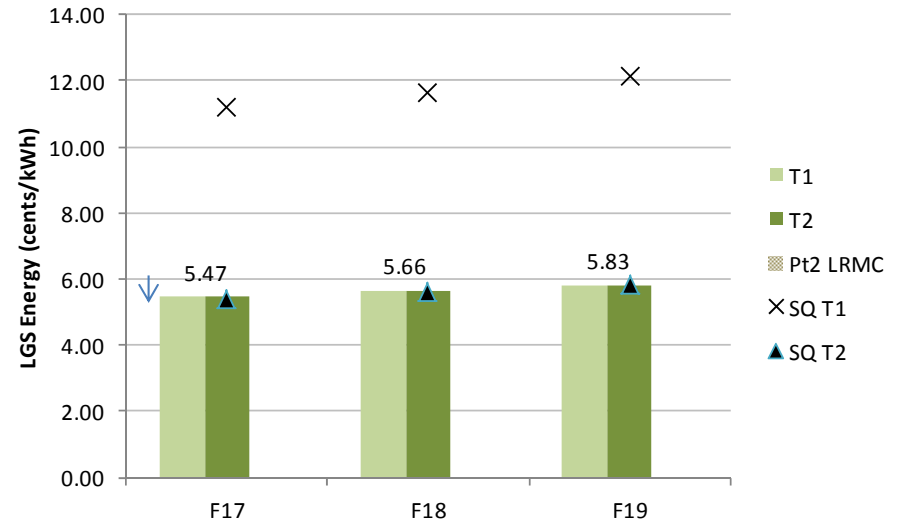
Lowest kw Red means higher than RRA

*Note: Very high sensitivity on low load factor, lower consumption customers due to T2 kW much higher than SQ, even though T1 is free .

LGS TWO STEP DEMAND CHARGE, LGS FLAT ENERGY RATE, 65% DEMAND COST RECOVERY



Demand Charges



Energy Charges

Illustrative Customer Bill (F2017)

Load Factor of 46%, Baseline Consumption = 744,240 kWh per year, Billed kW = 185 kW each month

Customer Scenario	Demand Charge	Energy Charge	Basic Charge	Total Bill	SQ Bill	Variance
Consume at baseline	\$20,603	\$40,696	\$86	\$61,385	\$63,112	-\$1727 (-3%)
+ 5% from baseline	\$20,603	\$42,731	\$86	\$63,420	\$66,870	-\$3450 (-5%)
- 5% from baseline	\$20,603	\$38,662	\$86	\$59,350	\$59,354	\$-3 (0%)

Note: Illustrative bill computation excludes rate rider, discounts, ratchets, and other provisions



Observations:

- Relative to current cost recovery (53%), Energy charges are Lower and Demand charges are Higher
- Low load factor customers have higher bill impacts
- More aggressive offsetting
- **High consuming, low load factor customers gets adverse impacts**
- F17 equivalent rate structure at current cost recovery:
Demand: \$9.33/kW
Energy: 5.94c/kWh

LGS TWO STEP DEMAND CHARGE, LGS FLAT ENERGY RATE, 65% DEMAND COST RECOVERY

F17 ILLUSTRATIVE SENSITIVITY ANALYSIS OF BILL IMPACT TWO STEP DEMAND, FLAT ENERGY CHARGE

65% Demand Cost Recovery

Annual Consumption kWh

Highest kw

* Load Factor	Annual Consumption kWh																
	200,000	400,000	600,000	800,000	1,000,000	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000	2,200,000	2,400,000	2,600,000	2,800,000	3,000,000	3,200,000	3,400,000
10%	-0.2%	4.0%	5.4%	6.0%	6.4%	6.7%	6.9%	7.0%	7.1%	7.2%	7.3%	7.4%	7.4%	7.5%	7.5%	7.5%	7.6%
20%	-13.7%	1.2%	3.5%	4.5%	5.2%	5.6%	5.9%	6.2%	6.3%	6.5%	6.6%	6.7%	6.8%	6.8%	6.9%	7.0%	7.0%
30%	-27.1%	-0.6%	2.2%	3.6%	4.4%	4.9%	5.3%	5.6%	5.8%	6.0%	6.1%	6.2%	6.3%	6.4%	6.5%	6.6%	6.6%
40%	-35.0%	-7.9%	1.3%	2.9%	3.8%	4.4%	4.8%	5.2%	5.4%	5.6%	5.8%	5.9%	6.0%	6.1%	6.2%	6.3%	6.4%
50%	-40.1%	-13.0%	-1.0%	2.3%	3.4%	4.0%	4.5%	4.9%	5.1%	5.4%	5.5%	5.7%	5.8%	5.9%	6.0%	6.1%	6.2%
60%	-43.8%	-16.7%	-4.6%	1.9%	3.0%	3.7%	4.2%	4.6%	4.9%	5.1%	5.3%	5.5%	5.6%	5.7%	5.8%	5.9%	6.0%
70%	-45.3%	-19.4%	-7.3%	-0.5%	2.7%	3.5%	4.0%	4.4%	4.7%	5.0%	5.2%	5.4%	5.5%	5.6%	5.7%	5.8%	5.9%
80%	-45.3%	-21.6%	-9.5%	-2.6%	1.9%	3.3%	3.9%	4.3%	4.6%	4.8%	5.1%	5.2%	5.4%	5.5%	5.6%	5.7%	5.8%
90%	-45.3%	-23.3%	-11.2%	-4.3%	0.2%	3.1%	3.7%	4.1%	4.5%	4.7%	5.0%	5.1%	5.3%	5.4%	5.5%	5.6%	5.7%

Lowest kw Red means higher than CARC of 4% for F17

53% Demand Cost Recovery

Annual Consumption kWh

Highest kw

* Load Factor	Annual Consumption kWh																
	200,000	400,000	600,000	800,000	1,000,000	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000	2,200,000	2,400,000	2,600,000	2,800,000	3,000,000	3,200,000	3,400,000
10%	-10.8%	-7.5%	-6.5%	-5.9%	-5.6%	-5.4%	-5.3%	-5.2%	-5.1%	-5.0%	-5.0%	-4.9%	-4.9%	-4.8%	-4.8%	-4.8%	-4.8%
20%	-18.0%	-5.1%	-3.4%	-2.6%	-2.1%	-1.8%	-1.6%	-1.4%	-1.3%	-1.2%	-1.1%	-1.0%	-0.9%	-0.9%	-0.8%	-0.8%	-0.8%
30%	-27.6%	-3.5%	-1.4%	-0.4%	0.2%	0.6%	0.9%	1.1%	1.2%	1.4%	1.5%	1.6%	1.6%	1.7%	1.8%	1.8%	1.9%
40%	-33.2%	-8.2%	0.0%	1.2%	1.8%	2.3%	2.6%	2.8%	3.0%	3.2%	3.3%	3.4%	3.5%	3.6%	3.6%	3.7%	3.7%
50%	-36.9%	-11.7%	-0.6%	2.3%	3.1%	3.6%	3.9%	4.2%	4.4%	4.5%	4.6%	4.8%	4.8%	4.9%	5.0%	5.1%	5.1%
60%	-39.6%	-14.2%	-2.9%	3.3%	4.0%	4.5%	4.9%	5.2%	5.4%	5.6%	5.7%	5.8%	5.9%	6.0%	6.1%	6.1%	6.2%
70%	-40.7%	-16.0%	-4.6%	1.8%	4.8%	5.3%	5.7%	6.0%	6.2%	6.4%	6.5%	6.6%	6.7%	6.8%	6.9%	7.0%	7.0%
80%	-40.7%	-17.5%	-6.0%	0.5%	4.7%	6.0%	6.4%	6.7%	6.9%	7.1%	7.2%	7.3%	7.4%	7.5%	7.6%	7.7%	7.7%
90%	-40.7%	-18.6%	-7.1%	-0.5%	3.7%	6.5%	6.9%	7.2%	7.4%	7.6%	7.8%	7.9%	8.0%	8.1%	8.2%	8.2%	8.3%

Lowest kw Red means higher than CARC of 4% for F17

*Note: Very high sensitivity on low load factor, lower consumption customers due to T2 kW much higher than SQ, even though T1 is free .

F17 ILLUSTRATIVE SENSITIVITY ANALYSIS OF BILL DIFFERENCE LESS RRA TWO STEP DEMAND, FLAT ENERGY CHARGE

65% Demand Cost Recovery

Annual Consumption kWh

Highest kw

Load Factor	*	200,000	400,000	600,000	800,000	1,000,000	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000	2,200,000	2,400,000	2,600,000	2,800,000	3,000,000	3,200,000	3,400,000
	10%	-4.2%	0.0%	1.4%	2.0%	2.4%	2.7%	2.9%	3.0%	3.1%	3.2%	3.3%	3.4%	3.4%	3.5%	3.5%	3.5%	3.5%
20%	-17.7%	-2.8%	-0.5%	0.5%	1.2%	1.6%	1.9%	2.2%	2.3%	2.5%	2.6%	2.7%	2.8%	2.8%	2.9%	3.0%	3.0%	3.0%
30%	-31.1%	-4.6%	-1.8%	-0.4%	0.4%	0.9%	1.3%	1.6%	1.8%	2.0%	2.1%	2.2%	2.3%	2.4%	2.5%	2.6%	2.6%	2.6%
40%	-39.0%	-11.9%	-2.7%	-1.1%	-0.2%	0.4%	0.8%	1.2%	1.4%	1.6%	1.8%	1.9%	2.0%	2.1%	2.2%	2.3%	2.4%	2.4%
50%	-44.1%	-17.0%	-5.0%	-1.7%	-0.6%	0.0%	0.5%	0.9%	1.1%	1.4%	1.5%	1.7%	1.8%	1.9%	2.0%	2.1%	2.2%	2.2%
60%	-47.8%	-20.7%	-8.6%	-2.1%	-1.0%	-0.3%	0.2%	0.6%	0.9%	1.1%	1.3%	1.5%	1.6%	1.7%	1.8%	1.9%	2.0%	2.0%
70%	-49.3%	-23.4%	-11.3%	-4.5%	-1.3%	-0.5%	0.0%	0.4%	0.7%	1.0%	1.2%	1.4%	1.5%	1.6%	1.7%	1.8%	1.9%	1.9%
80%	-49.3%	-25.6%	-13.5%	-6.6%	-2.1%	-0.7%	-0.1%	0.3%	0.6%	0.8%	1.1%	1.2%	1.4%	1.5%	1.6%	1.7%	1.8%	1.8%
90%	-49.3%	-27.3%	-15.2%	-8.3%	-3.8%	-0.9%	-0.3%	0.1%	0.5%	0.7%	1.0%	1.1%	1.3%	1.4%	1.5%	1.6%	1.7%	1.7%

Lowest kw Red means higher than RRA

53% Demand Cost Recovery

Annual Consumption kWh

Highest kw

Load Factor	*	200,000	400,000	600,000	800,000	1,000,000	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000	2,200,000	2,400,000	2,600,000	2,800,000	3,000,000	3,200,000	3,400,000
	10%	-14.8%	-11.5%	-10.5%	-9.9%	-9.6%	-9.4%	-9.3%	-9.2%	-9.2%	-9.1%	-9.0%	-9.0%	-8.9%	-8.9%	-8.8%	-8.8%	-8.8%
20%	-22.0%	-9.1%	-7.4%	-6.6%	-6.1%	-5.8%	-5.6%	-5.4%	-5.4%	-5.3%	-5.2%	-5.1%	-5.0%	-4.9%	-4.9%	-4.8%	-4.8%	-4.8%
30%	-31.6%	-7.5%	-5.4%	-4.4%	-3.8%	-3.4%	-3.1%	-2.9%	-2.8%	-2.6%	-2.5%	-2.4%	-2.4%	-2.4%	-2.3%	-2.2%	-2.2%	-2.1%
40%	-37.2%	-12.2%	-4.0%	-2.8%	-2.2%	-1.7%	-1.4%	-1.2%	-1.0%	-0.8%	-0.7%	-0.6%	-0.5%	-0.4%	-0.4%	-0.3%	-0.3%	-0.3%
50%	-40.9%	-15.7%	-4.6%	-1.7%	-0.9%	-0.4%	-0.1%	0.2%	0.4%	0.5%	0.6%	0.8%	0.8%	0.9%	1.0%	1.1%	1.1%	1.1%
60%	-43.6%	-18.2%	-6.9%	-0.7%	0.0%	0.5%	0.9%	1.2%	1.4%	1.6%	1.7%	1.8%	1.9%	2.0%	2.1%	2.1%	2.2%	2.2%
70%	-44.7%	-20.0%	-8.6%	-2.2%	0.8%	1.3%	1.7%	2.0%	2.2%	2.4%	2.5%	2.6%	2.7%	2.8%	2.9%	3.0%	3.0%	3.0%
80%	-44.7%	-21.5%	-10.0%	-3.5%	0.7%	2.0%	2.4%	2.7%	2.9%	3.1%	3.2%	3.3%	3.4%	3.5%	3.6%	3.7%	3.7%	3.7%
90%	-44.7%	-22.6%	-11.1%	-4.5%	-0.3%	2.5%	2.9%	3.2%	3.4%	3.6%	3.8%	3.9%	4.0%	4.1%	4.2%	4.2%	4.2%	4.3%

Lowest kw Red means higher than RRA

*Note: Very high sensitivity on low load factor, lower consumption customers due to T2 kW much higher than SQ, even though T1 is free .

LGS F17 ILLUSTRATIVE SENSITIVITY ANALYSIS OF BILL IMPACT FLAT ENERGY, 65% DEMAND COST RECOVERY, COMPARISON OF DEMAND STRUCTURES

Flat Demand Charge

		Annual Consumption kWh															Highest kw	
Load Factor	*	200,000	400,000	600,000	800,000	1,000,000	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000	2,200,000	2,400,000	2,600,000	2,800,000	3,000,000	3,200,000	3,400,000
	10%		4.5%	2.3%	1.6%	1.3%	1.1%	0.9%	0.8%	0.8%	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	0.5%	0.5%
20%		-0.8%	4.9%	3.8%	3.2%	2.9%	2.7%	2.5%	2.4%	2.3%	2.2%	2.2%	2.1%	2.1%	2.1%	2.0%	2.0%	2.0%
30%		-10.5%	6.7%	5.2%	4.5%	4.1%	3.8%	3.6%	3.5%	3.4%	3.3%	3.2%	3.1%	3.1%	3.0%	3.0%	3.0%	2.9%
40%		-16.2%	1.4%	6.3%	5.4%	5.0%	4.6%	4.4%	4.2%	4.1%	4.0%	3.9%	3.8%	3.8%	3.7%	3.7%	3.7%	3.6%
50%		-20.0%	-2.5%	5.2%	6.1%	5.6%	5.2%	5.0%	4.8%	4.7%	4.6%	4.5%	4.4%	4.3%	4.3%	4.2%	4.2%	4.1%
60%		-22.7%	-5.2%	2.3%	6.7%	6.1%	5.7%	5.5%	5.3%	5.1%	5.0%	4.9%	4.8%	4.7%	4.7%	4.6%	4.6%	4.5%
70%		-25.2%	-7.3%	0.5%	4.9%	6.3%	6.1%	5.8%	5.6%	5.4%	5.3%	5.2%	5.1%	5.0%	5.0%	4.9%	4.9%	4.8%
80%		-27.8%	-8.9%	-1.1%	3.3%	6.1%	6.4%	6.1%	5.9%	5.7%	5.6%	5.5%	5.4%	5.3%	5.2%	5.2%	5.1%	5.1%
90%		-29.7%	-10.2%	-2.4%	2.0%	4.8%	6.7%	6.4%	6.1%	6.0%	5.8%	5.7%	5.6%	5.5%	5.5%	5.4%	5.3%	5.3%

Lowest kw Red means higher than CARC of 4% for F17

Two Step Demand Charge

		Annual Consumption kWh															Highest kw	
Load Factor	*	200,000	400,000	600,000	800,000	1,000,000	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000	2,200,000	2,400,000	2,600,000	2,800,000	3,000,000	3,200,000	3,400,000
	10%		-0.2%	4.0%	5.4%	6.0%	6.4%	6.7%	6.9%	7.0%	7.1%	7.2%	7.3%	7.4%	7.4%	7.5%	7.5%	7.5%
20%		-13.7%	1.2%	3.5%	4.5%	5.2%	5.6%	5.9%	6.2%	6.3%	6.5%	6.6%	6.7%	6.8%	6.8%	6.9%	7.0%	7.0%
30%		-27.1%	-0.6%	2.2%	3.6%	4.4%	4.9%	5.3%	5.6%	5.8%	6.0%	6.1%	6.2%	6.3%	6.4%	6.5%	6.6%	6.6%
40%		-35.0%	-7.9%	1.3%	2.9%	3.8%	4.4%	4.8%	5.2%	5.4%	5.6%	5.8%	5.9%	6.0%	6.1%	6.2%	6.3%	6.4%
50%		-40.1%	-13.0%	-1.0%	2.3%	3.4%	4.0%	4.5%	4.9%	5.1%	5.4%	5.5%	5.7%	5.8%	5.9%	6.0%	6.1%	6.2%
60%		-43.8%	-16.7%	-4.6%	1.9%	3.0%	3.7%	4.2%	4.6%	4.9%	5.1%	5.3%	5.5%	5.6%	5.7%	5.8%	5.9%	6.0%
70%		-45.3%	-19.4%	-7.3%	-0.5%	2.7%	3.5%	4.0%	4.4%	4.7%	5.0%	5.2%	5.4%	5.5%	5.6%	5.7%	5.8%	5.9%
80%		-45.3%	-21.6%	-9.5%	-2.6%	1.9%	3.3%	3.9%	4.3%	4.6%	4.8%	5.1%	5.2%	5.4%	5.5%	5.6%	5.7%	5.8%
90%		-45.3%	-23.3%	-11.2%	-4.3%	0.2%	3.1%	3.7%	4.1%	4.5%	4.7%	5.0%	5.1%	5.3%	5.4%	5.5%	5.6%	5.7%

Lowest kw Red means higher than CARC of 4% for F17

*Note: Very high sensitivity on low load factor, lower consumption customers due to T2 kW much higher than SQ, even though T1 is free .

LGS F17 ILLUSTRATIVE SENSITIVITY ANALYSIS OF BILL DIFFERENCE VS RRA FLAT ENERGY, 65% DEMAND COST RECOVERY, COMPARISON OF DEMAND STRUCTURES

Flat Demand Charge

Annual Consumption kWh

Highest kw

* Load Factor	Annual Consumption kWh																
	200,000	400,000	600,000	800,000	1,000,000	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000	2,200,000	2,400,000	2,600,000	2,800,000	3,000,000	3,200,000	3,400,000
10%	0.5%	-1.7%	-2.4%	-2.7%	-2.9%	-3.1%	-3.2%	-3.2%	-3.3%	-3.3%	-3.4%	-3.4%	-3.4%	-3.4%	-3.5%	-3.5%	-3.5%
20%	-4.8%	0.9%	-0.2%	-0.8%	-1.1%	-1.3%	-1.5%	-1.6%	-1.7%	-1.8%	-1.8%	-1.9%	-1.9%	-1.9%	-2.0%	-2.0%	-2.0%
30%	-14.5%	2.7%	1.2%	0.5%	0.1%	-0.2%	-0.4%	-0.5%	-0.6%	-0.7%	-0.8%	-0.9%	-0.9%	-1.0%	-1.0%	-1.0%	-1.1%
40%	-20.2%	-2.6%	2.3%	1.4%	1.0%	0.6%	0.4%	0.2%	0.1%	0.0%	-0.1%	-0.2%	-0.2%	-0.3%	-0.3%	-0.3%	-0.4%
50%	-24.0%	-6.5%	1.2%	2.1%	1.6%	1.2%	1.0%	0.8%	0.7%	0.6%	0.5%	0.4%	0.3%	0.3%	0.2%	0.2%	0.1%
60%	-26.7%	-9.2%	-1.5%	2.7%	2.1%	1.7%	1.5%	1.3%	1.1%	1.0%	0.9%	0.8%	0.7%	0.7%	0.6%	0.6%	0.5%
70%	-29.2%	-11.3%	-3.5%	0.9%	2.5%	2.1%	1.8%	1.6%	1.4%	1.3%	1.2%	1.1%	1.0%	1.0%	0.9%	0.9%	0.8%
80%	-31.8%	-12.9%	-5.1%	-0.7%	2.1%	2.4%	2.1%	1.9%	1.7%	1.6%	1.5%	1.4%	1.3%	1.2%	1.2%	1.1%	1.1%
90%	-33.7%	-14.2%	-6.4%	-2.0%	0.8%	2.7%	2.4%	2.1%	2.0%	1.8%	1.7%	1.6%	1.5%	1.5%	1.4%	1.3%	1.3%

Lowest kw Red means higher than RRA

Two Step Demand Charge

Annual Consumption kWh

Highest kw

* Load Factor	Annual Consumption kWh																
	200,000	400,000	600,000	800,000	1,000,000	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000	2,200,000	2,400,000	2,600,000	2,800,000	3,000,000	3,200,000	3,400,000
10%	-4.2%	0.0%	1.4%	2.0%	2.4%	2.7%	2.9%	3.0%	3.1%	3.2%	3.3%	3.4%	3.4%	3.5%	3.5%	3.5%	3.6%
20%	-17.7%	-2.8%	-0.5%	0.5%	1.2%	1.6%	1.9%	2.2%	2.3%	2.5%	2.6%	2.7%	2.8%	2.8%	2.9%	3.0%	3.0%
30%	-31.1%	-4.6%	-1.8%	-0.4%	0.4%	0.9%	1.3%	1.6%	1.8%	2.0%	2.1%	2.2%	2.3%	2.4%	2.5%	2.6%	2.6%
40%	-39.0%	-11.9%	-2.7%	-1.1%	-0.2%	0.4%	0.8%	1.2%	1.4%	1.6%	1.8%	1.9%	2.0%	2.1%	2.2%	2.3%	2.4%
50%	-44.1%	-17.0%	-5.0%	-1.7%	-0.6%	0.0%	0.5%	0.9%	1.1%	1.4%	1.5%	1.7%	1.8%	1.9%	2.0%	2.1%	2.2%
60%	-47.8%	-20.7%	-8.6%	-2.1%	-1.0%	-0.3%	0.2%	0.6%	0.9%	1.1%	1.3%	1.5%	1.6%	1.7%	1.8%	1.9%	2.0%
70%	-49.3%	-23.4%	-11.3%	-4.5%	-1.5%	-0.5%	0.0%	0.4%	0.7%	1.0%	1.2%	1.4%	1.5%	1.6%	1.7%	1.8%	1.9%
80%	-49.3%	-25.6%	-13.5%	-6.6%	-2.1%	-0.7%	-0.1%	0.3%	0.6%	0.8%	1.1%	1.2%	1.4%	1.5%	1.6%	1.7%	1.8%
90%	-49.3%	-27.3%	-15.2%	-8.3%	-3.8%	-0.9%	-0.3%	0.1%	0.5%	0.7%	1.0%	1.1%	1.3%	1.4%	1.5%	1.6%	1.7%

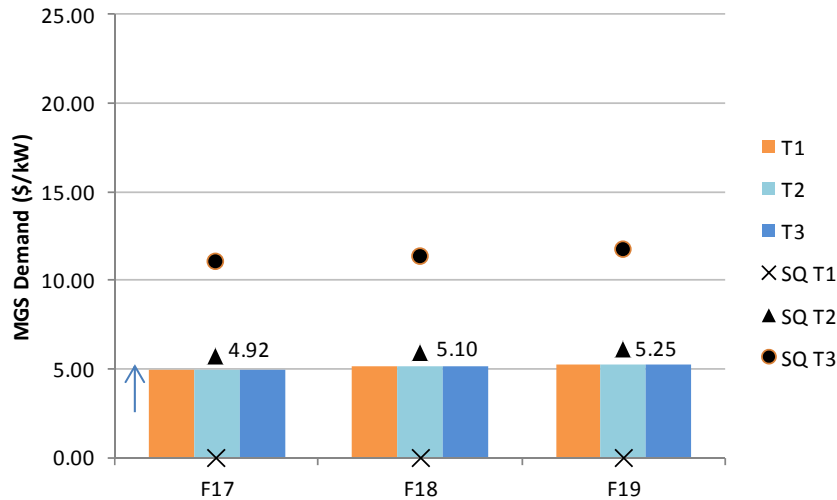
Lowest kw Red means higher than RRA

*Note: Very high sensitivity on low load factor, lower consumption customers due to T2 kW much higher than SQ, even though T1 is free .

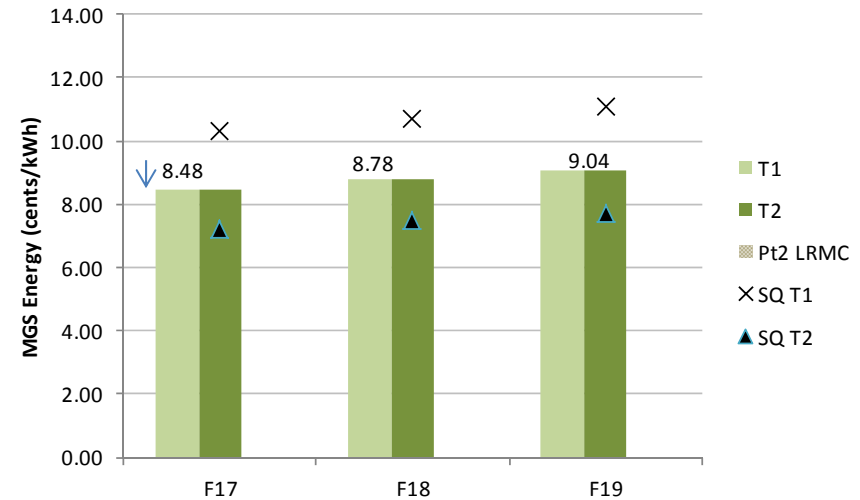
MGS, 15%(SQ) TO 35% COST RECOVERY

- Flat Energy for all rates shown
- Demand alternatives:
 - Flatten Demand Charge
 - Two-Step Demand Charge

MGS: FLAT DEMAND CHARGE, FLAT ENERGY CHARGE, 35% DEMAND COST RECOVERY



Demand Charges



Energy Charges

Illustrative Customer Bill (F2017)

Load Factor of 36%, Baseline Consumption = 153,240kWh per year, Billed kW = 49kW each month

Customer Scenario	Demand Charge	Energy Charge	Basic Charge	Total Bill	SQ Bill	Variance
Consume at baseline	\$2,896	\$12,998	\$86	\$15,979	\$16,876	-\$897 (-5%)
+ 5% from baseline	\$2,896	\$13,647	\$86	\$16,629	\$17,650	-\$1021 (-6%)
- 5% from baseline	\$2,896	\$12,348	\$86	\$15,329	\$16,102	-\$773 (-5%)

Note: Illustrative bill computation excludes rate rider, discounts, ratchets, and other provisions



Observations:

- Lower Energy charges benefit larger consuming customers
- Relative to current cost recovery (15%), Energy charges are Lower and Demand charges are Higher.
- Low load factor, low consumption customers has very high bill impacts.
- F17 equivalent rate structure at current cost recovery:
Demand: \$2.22/kW
Energy: 9.33c/kWh

MGS: FLAT DEMAND CHARGE, FLAT ENERGY CHARGE, 35% DEMAND COST RECOVERY

MGS F17 ILLUSTRATIVE SENSITIVITY ANALYSIS, FLAT ENERGY, FLAT DEMAND

35% cost recovery on demand

Highest kw

Load Factor	Highest kw																	
	10,000	30,000	60,000	90,000	120,000	150,000	180,000	210,000	240,000	270,000	300,000	330,000	360,000	390,000	420,000	450,000	480,000	
10%	50.1%	52.5%	12.0%	2.4%	-1.8%	-9.1%	-15.3%	-17.5%	-19.1%	-20.3%	-21.2%	-21.9%	-22.6%	-23.1%	-23.5%	-23.9%	-24.2%	
20%	18.6%	19.4%	19.6%	6.8%	1.0%	-2.2%	-3.9%	-2.0%	-0.6%	-0.2%	-2.0%	-3.5%	-4.7%	-5.7%	-6.5%	-7.2%	-7.8%	
30%	8.1%	8.3%	8.4%	8.4%	2.4%	-1.2%	-3.1%	1.0%	0.6%	1.9%	3.0%	3.9%	4.7%	5.4%	4.5%	3.5%	2.7%	
40%	2.9%	2.8%	2.8%	2.8%	2.8%	-0.6%	-2.7%	-0.4%	1.3%	2.7%	3.9%	4.9%	5.7%	6.4%	7.0%	7.6%	8.0%	
50%	-0.3%	-0.5%	-0.6%	-0.6%	-0.6%	-0.6%	-2.4%	-0.1%	1.8%	3.3%	4.5%	5.5%	6.4%	7.1%	7.7%	8.3%	8.8%	
60%	-2.4%	-2.7%	-2.8%	-2.8%	-2.9%	-2.9%	-2.5%	0.2%	2.1%	3.6%	4.9%	5.9%	6.8%	7.6%	8.3%	8.8%	9.4%	
70%	-3.9%	-4.3%	-4.4%	-4.4%	-4.5%	-4.5%	-4.1%	0.2%	2.4%	3.9%	5.2%	6.3%	7.2%	8.0%	8.6%	9.2%	9.8%	
80%	-5.0%	-5.5%	-5.6%	-5.6%	-5.7%	-5.7%	-5.3%	-1.1%	2.3%	4.1%	5.4%	6.5%	7.5%	8.3%	8.9%	9.6%	10.1%	
90%	-5.9%	-6.4%	-6.5%	-6.6%	-6.6%	-6.6%	-6.3%	-2.1%	1.3%	4.1%	5.6%	6.7%	7.7%	8.5%	9.2%	9.8%	10.4%	

Lowest kw Red means higher than CARC of 4% for F17

16% cost recovery on demand

Highest kw

Load Factor	Highest kw																	
	* 10,000	30,000	60,000	90,000	120,000	150,000	180,000	210,000	240,000	270,000	300,000	330,000	360,000	390,000	420,000	450,000	480,000	
10%	23.5%	24.5%	-8.7%	-16.6%	-20.1%	-26.0%	-31.1%	-32.9%	-34.2%	-35.2%	-35.9%	-36.5%	-37.0%	-37.4%	-37.8%	-38.1%	-38.4%	
20%	9.3%	9.6%	9.6%	-2.1%	-7.4%	-10.4%	-12.0%	-10.2%	-8.9%	-8.6%	-10.3%	-11.6%	-12.7%	-13.6%	-14.4%	-15.0%	-15.6%	
30%	4.5%	4.6%	4.6%	4.6%	-1.2%	-4.7%	-6.6%	-4.5%	-3.0%	-1.7%	-0.6%	0.2%	1.0%	1.6%	0.7%	-0.2%	-1.0%	
40%	2.2%	2.1%	2.1%	2.0%	2.0%	-1.4%	-3.4%	-1.2%	0.6%	2.0%	3.1%	4.1%	4.9%	5.6%	6.2%	6.8%	7.2%	
50%	0.8%	0.6%	0.5%	0.5%	0.5%	0.5%	-1.3%	1.1%	2.9%	4.4%	5.6%	6.7%	7.5%	8.3%	8.9%	9.5%	10.0%	
60%	-0.2%	-0.4%	-0.5%	-0.5%	-0.5%	-0.5%	-0.1%	2.6%	4.6%	6.1%	7.4%	8.5%	9.4%	10.2%	10.9%	11.5%	12.0%	
70%	-0.9%	-1.1%	-1.2%	-1.2%	-1.2%	-1.2%	-0.8%	3.6%	5.8%	7.4%	8.8%	9.9%	10.8%	11.6%	12.3%	13.0%	13.5%	
80%	-1.4%	-1.7%	-1.7%	-1.8%	-1.8%	-1.8%	-1.4%	3.0%	6.5%	8.4%	9.8%	10.9%	11.9%	12.7%	13.5%	14.1%	14.7%	
90%	-1.8%	-2.1%	-2.2%	-2.2%	-2.2%	-2.2%	-1.8%	2.5%	6.1%	9.0%	10.6%	11.8%	12.8%	13.6%	14.4%	15.0%	15.6%	

Lowest kw Red means higher than CARC of 4% for F17

More intense green indicates higher bill impact

Most "typical" customers as defined by kWh and Load Factor fall approximately within the blue oval area

Major assumption: customers have the annual max kW for all months

MGS: FLAT DEMAND CHARGE, FLAT ENERGY CHARGE, 35% DEMAND COST RECOVERY

MGS F17 ILLUSTRATIVE SENSITIVITY ANALYSIS OF BILL DIFFERENCE VS RRA FLAT ENERGY, FLAT DEMAND

35% cost recovery on demand

Highest kw

Load Factor	Highest kw																	
	10,000	30,000	60,000	90,000	120,000	150,000	180,000	210,000	240,000	270,000	300,000	330,000	360,000	390,000	420,000	450,000	480,000	
10%	46.1%	48.5%	8.0%	-1.6%	-5.8%	-13.1%	-19.3%	-21.5%	-23.1%	-24.3%	-25.2%	-25.9%	-26.6%	-27.1%	-27.5%	-27.9%	-28.2%	
20%	14.6%	15.4%	15.6%	2.8%	-3.0%	-6.2%	-7.9%	-6.0%	-4.6%	-4.2%	-6.0%	-7.5%	-8.7%	-9.7%	-10.5%	-11.2%	-11.8%	
30%	4.1%	4.3%	4.4%	4.4%	-1.6%	-5.2%	-7.1%	5.0%	-3.4%	-2.1%	-1.0%	-0.1%	0.7%	1.4%	0.5%	-0.5%	-1.3%	
40%	-1.1%	-1.2%	-1.2%	-1.2%	-1.2%	-4.6%	-6.7%	-4.4%	-2.7%	-1.3%	-0.1%	0.9%	1.7%	2.4%	3.0%	3.6%	4.0%	
50%	-4.3%	-4.5%	-4.6%	-4.6%	-4.6%	-4.6%	-6.4%	-4.1%	-2.2%	-0.7%	0.5%	1.5%	2.4%	3.1%	3.7%	4.3%	4.8%	
60%	-6.4%	-6.7%	-6.8%	-6.8%	-6.9%	-6.0%	-6.5%	-3.8%	-1.9%	-0.4%	0.9%	1.9%	2.8%	3.6%	4.3%	4.8%	5.4%	
70%	-7.9%	-8.3%	-8.4%	-8.4%	-8.5%	-8.5%	-8.1%	-3.6%	-1.6%	-0.1%	1.2%	2.3%	3.2%	4.0%	4.6%	5.2%	5.8%	
80%	-9.0%	-9.5%	-9.6%	-9.6%	-9.7%	-9.7%	-9.3%	-5.1%	-1.7%	0.1%	1.4%	2.5%	3.5%	4.3%	4.9%	5.6%	6.1%	
90%	-9.9%	-10.4%	-10.5%	-10.6%	-10.6%	-10.6%	-10.3%	-6.1%	-2.7%	0.1%	1.6%	2.7%	3.7%	4.5%	5.2%	5.8%	6.4%	

Lowest kw Red means higher than RRA

16% cost recovery on demand

Highest kw

Load Factor	Highest kw																	
	* 10,000	30,000	60,000	90,000	120,000	150,000	180,000	210,000	240,000	270,000	300,000	330,000	360,000	390,000	420,000	450,000	480,000	
10%	19.5%	20.5%	-12.7%	-20.6%	-24.1%	-30.0%	-35.1%	-36.9%	-38.2%	-39.2%	-39.9%	-40.5%	-41.0%	-41.4%	-41.8%	-42.1%	-42.4%	
20%	5.3%	5.6%	5.6%	-6.1%	-11.4%	-14.4%	-16.0%	-14.2%	-12.9%	-12.6%	-14.3%	-15.6%	-16.7%	-17.6%	-18.4%	-19.0%	-19.6%	
30%	0.5%	0.6%	0.6%	0.6%	-5.2%	-8.7%	-10.6%	-8.5%	-7.0%	-5.7%	-4.6%	-3.8%	-3.0%	-2.4%	-3.3%	-4.2%	-5.0%	
40%	-1.8%	-1.9%	-1.9%	-2.0%	-2.0%	-5.4%	-7.4%	-5.2%	3.4%	-2.0%	-0.9%	0.1%	0.9%	1.6%	2.2%	2.8%	3.2%	
50%	-3.2%	-3.4%	-3.5%	-3.5%	-3.5%	-3.5%	-5.3%	-2.9%	-1.1%	0.4%	1.6%	2.7%	3.5%	4.3%	4.9%	5.5%	6.0%	
60%	-4.2%	-4.4%	-4.5%	-4.5%	-4.5%	4.5%	-4.1%	-1.4%	0.6%	2.1%	3.4%	4.5%	5.4%	6.2%	6.9%	7.5%	8.0%	
70%	-4.9%	-5.1%	-5.2%	-5.2%	-5.2%	-5.2%	-4.8%	0.4%	1.8%	3.4%	4.8%	5.9%	6.8%	7.6%	8.3%	9.0%	9.5%	
80%	-5.4%	-5.7%	-5.7%	-5.8%	-5.8%	-5.8%	-5.4%	-1.0%	2.5%	4.4%	5.8%	6.9%	7.9%	8.7%	9.5%	10.1%	10.7%	
90%	-5.8%	-6.1%	-6.2%	-6.2%	-6.2%	-6.2%	-5.8%	-1.5%	2.1%	5.0%	6.6%	7.8%	8.8%	9.6%	10.4%	11.0%	11.6%	

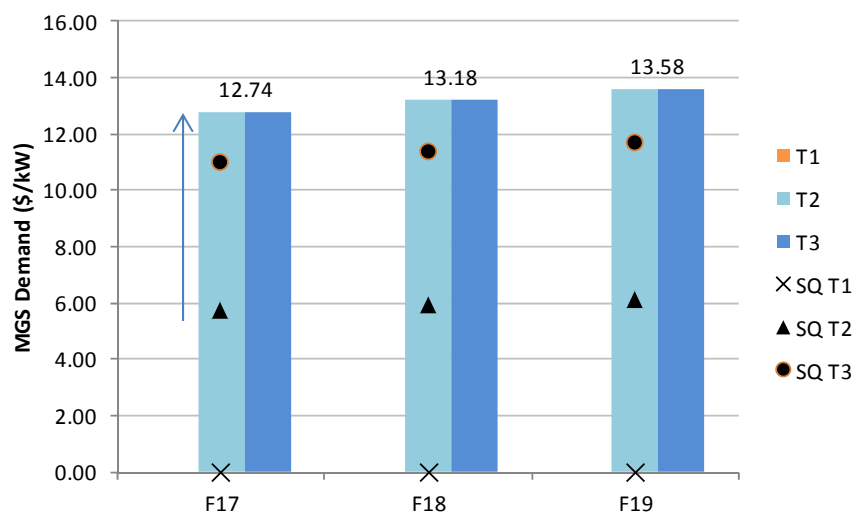
Lowest kw Red means higher than RRA

More intense green indicates higher bill impact

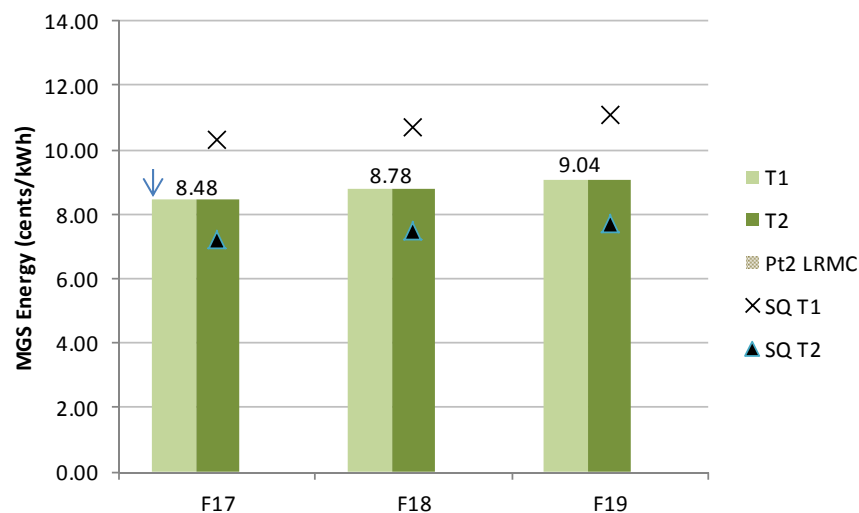
Most "typical" customers as defined by kWh and Load Factor fall approximately within the blue oval area

Major assumption: customers have the annual max kW for all months

MGS: TWO STEP DEMAND CHARGE, FLAT ENERGY RATE, 35% DEMAND COST RECOVERY



Demand Charges



Energy Charges

Illustrative Customer Bill (F2017)

Load Factor of 46%, Baseline Consumption = 744,240 kWh per year, Billed kW = 185 kW each month

Customer Scenario	Demand Charge	Energy Charge	Basic Charge	Total Bill	SQ Bill	Variance
Consume at baseline	\$2,140	\$12,998	\$86	\$15,223	\$16,876	-\$1,653 (-10%)
+ 5% from baseline	\$2,140	\$13,648	\$86	\$15,873	\$17,650	-\$1,777 (-10%)
- 5% from baseline	\$2,140	\$12,348	\$86	\$14,573	\$16,102	-\$1,529 (-9%)

Observations:

- Relative to current cost recovery (15%), Energy charges are Lower and Demand charges are Higher
- High bill impact for low load factor customers
- **Low load factor, high consuming customer have most adverse bill impact.**
- F17 equivalent rate structure at current cost recovery:
Demand: \$5.73/kW
Energy: 9.33c/kWh

Note: Illustrative bill computation excludes rate rider, discounts, ratchets, and other provisions

MGS: TWO STEP DEMAND CHARGE, FLAT ENERGY RATE, 35% DEMAND COST RECOVERY

MGS F17 COMPARATIVE ANALYSIS ON BILL IMPACT TWO STEP DEMAND CHARGE, FLAT ENERGY CHARGE

35% cost recovery on demand

Annual Consumption kWh

Highest kw

Load Factor	Annual Consumption kWh																
	10,000	30,000	60,000	90,000	120,000	150,000	180,000	210,000	240,000	270,000	300,000	330,000	360,000	390,000	420,000	450,000	480,000
10%	-12.9%	-13.8%	25.1%	34.3%	38.4%	33.5%	27.7%	26.7%	25.9%	25.4%	24.9%	24.6%	24.3%	24.1%	23.9%	23.7%	23.6%
20%	-12.9%	-13.8%	-14.0%	1.6%	8.6%	12.5%	15.4%	21.1%	25.6%	28.2%	27.4%	26.9%	26.4%	26.0%	25.7%	25.4%	25.1%
30%	-12.9%	-13.8%	-14.0%	-14.1%	-6.0%	-1.2%	2.2%	8.4%	13.2%	17.0%	20.1%	22.8%	25.0%	26.9%	26.8%	26.4%	26.1%
40%	-12.9%	-13.8%	-14.0%	-14.1%	-14.1%	-9.3%	-5.5%	0.8%	5.8%	9.7%	13.0%	15.7%	18.1%	20.0%	21.8%	23.3%	24.6%
50%	-12.9%	-13.8%	-14.0%	-14.1%	-14.1%	-14.2%	-10.6%	-4.2%	0.9%	4.9%	8.3%	11.1%	13.4%	15.5%	17.2%	18.8%	20.2%
60%	-12.9%	-13.8%	-14.0%	-14.1%	-14.1%	-14.2%	-13.8%	-7.7%	-2.6%	1.5%	4.9%	7.7%	10.1%	12.2%	14.0%	15.6%	17.0%
70%	-12.9%	-13.8%	-14.0%	-14.1%	-14.1%	-14.2%	-13.8%	-10.0%	-5.2%	-1.0%	2.4%	5.2%	7.7%	9.8%	11.6%	13.2%	14.6%
80%	-12.9%	-13.8%	-14.0%	-14.1%	-14.1%	-14.2%	-13.8%	-10.0%	-6.9%	-3.0%	0.4%	3.3%	5.8%	7.9%	9.7%	11.3%	12.7%
90%	-12.9%	-13.8%	-14.0%	-14.1%	-14.1%	-14.2%	-13.8%	-10.0%	-6.9%	-4.3%	-1.1%	1.8%	4.2%	6.4%	8.2%	9.8%	11.3%

Red means higher than CARC of 4% for F17

16% cost recovery on demand

Annual Consumption kWh

Highest kw

Load Factor	Annual Consumption kWh																
	10,000	30,000	60,000	90,000	120,000	150,000	180,000	210,000	240,000	270,000	300,000	330,000	360,000	390,000	420,000	450,000	480,000
10%	-4.9%	-5.4%	-2.9%	-2.3%	-2.1%	-6.9%	-11.8%	-13.1%	-14.0%	-14.7%	-15.2%	-15.6%	-16.0%	-16.3%	-16.5%	-16.8%	-16.9%
20%	-4.9%	-5.4%	-5.5%	-4.5%	-4.1%	-3.8%	-3.3%	0.1%	2.8%	4.2%	2.9%	2.0%	1.2%	0.6%	0.1%	-0.4%	-0.8%
30%	-4.9%	-5.4%	-5.5%	-5.6%	-5.1%	-4.7%	-4.2%	-0.4%	2.7%	5.1%	7.0%	8.7%	10.1%	11.3%	10.8%	10.1%	9.5%
40%	-4.9%	-5.4%	-5.5%	-5.6%	-5.6%	-5.3%	-4.7%	-0.6%	2.6%	5.1%	7.2%	9.0%	10.5%	11.7%	12.8%	13.8%	14.7%
50%	-4.9%	-5.4%	-5.5%	-5.6%	-5.6%	-5.6%	-5.0%	-0.8%	2.5%	5.1%	7.3%	9.2%	10.7%	12.0%	13.2%	14.2%	15.1%
60%	-4.9%	-5.4%	-5.5%	-5.6%	-5.6%	-5.6%	-5.2%	-0.9%	2.4%	5.2%	7.4%	9.3%	10.9%	12.3%	13.5%	14.5%	15.4%
70%	-4.9%	-5.4%	-5.5%	-5.6%	-5.6%	-5.6%	-5.2%	-1.0%	2.4%	5.2%	7.5%	9.4%	11.0%	12.4%	13.6%	14.7%	15.7%
80%	-4.9%	-5.4%	-5.5%	-5.6%	-5.6%	-5.6%	-5.2%	-1.0%	2.4%	5.2%	7.5%	9.5%	11.1%	12.6%	13.8%	14.9%	15.8%
90%	-4.9%	-5.4%	-5.5%	-5.6%	-5.6%	-5.6%	-5.2%	-1.0%	2.4%	5.2%	7.6%	9.5%	11.2%	12.7%	13.9%	15.0%	16.0%

Red means higher than CARC of 4% for F17

MGS: TWO STEP DEMAND CHARGE, FLAT ENERGY RATE, 35% DEMAND COST RECOVERY

MGS F17 COMPARATIVE ANALYSIS OF BILL DIFFERENCE VS RRA TWO STEP DEMAND CHARGE, FLAT ENERGY CHARGE

35% cost recovery on demand

Annual Consumption kWh

Highest kw

Load Factor	Annual Consumption kWh																
	10,000	30,000	60,000	90,000	120,000	150,000	180,000	210,000	240,000	270,000	300,000	330,000	360,000	390,000	420,000	450,000	480,000
10%	-16.9%	-17.8%	21.1%	30.3%	34.4%	29.5%	23.7%	22.7%	21.9%	21.4%	20.9%	20.6%	20.3%	20.1%	19.9%	19.7%	19.6%
20%	-16.9%	-17.8%	-18.0%	-2.4%	4.6%	8.5%	11.4%	17.1%	21.6%	24.2%	23.4%	22.9%	22.4%	22.0%	21.7%	21.4%	21.1%
30%	-16.9%	-17.8%	-18.0%	-18.1%	-10.0%	-5.2%	-1.8%	4.4%	9.2%	13.0%	16.1%	18.8%	21.0%	22.9%	22.8%	22.4%	22.1%
40%	-16.9%	-17.8%	-18.0%	-18.1%	-18.1%	-13.3%	-9.5%	-3.2%	1.8%	5.7%	9.0%	11.7%	14.1%	16.0%	17.8%	19.3%	20.6%
50%	-16.9%	-17.8%	-18.0%	-18.1%	-18.1%	-18.2%	-14.6%	-8.2%	-3.1%	0.9%	4.3%	7.1%	9.4%	11.5%	13.2%	14.8%	16.2%
60%	-16.9%	-17.8%	-18.0%	-18.1%	-18.1%	-18.2%	-17.8%	-11.7%	-6.6%	2.5%	0.9%	3.7%	6.1%	8.2%	10.0%	11.6%	13.0%
70%	-16.9%	-17.8%	-18.0%	-18.1%	-18.1%	-18.2%	-17.8%	-14.0%	-9.2%	-5.0%	-1.6%	1.2%	3.7%	5.8%	7.6%	9.2%	10.6%
80%	-16.9%	-17.8%	-18.0%	-18.1%	-18.1%	-18.2%	-17.8%	-14.0%	-10.9%	-7.0%	-3.6%	-0.7%	1.8%	3.9%	5.7%	7.3%	8.7%
90%	-16.9%	-17.8%	-18.0%	-18.1%	-18.1%	-18.2%	-17.8%	-14.0%	-10.9%	-8.3%	-5.1%	-2.2%	0.2%	2.4%	4.2%	5.8%	7.3%

Red means higher than RRA

16% cost recovery on demand

Annual Consumption kWh

Highest kw

Load Factor	Annual Consumption kWh																
	10,000	30,000	60,000	90,000	120,000	150,000	180,000	210,000	240,000	270,000	300,000	330,000	360,000	390,000	420,000	450,000	480,000
10%	-8.9%	-9.4%	-6.9%	-6.3%	-6.1%	-10.9%	-15.8%	-17.1%	-18.0%	-18.7%	-19.2%	-19.6%	-20.0%	-20.3%	-20.5%	-20.8%	-20.9%
20%	-8.9%	-9.4%	-9.5%	-8.5%	-8.1%	-7.8%	-7.3%	-3.9%	-1.2%	0.2%	-1.1%	-2.0%	-2.8%	-3.4%	-3.9%	-4.4%	-4.8%
30%	-8.9%	-9.4%	-9.5%	-9.6%	-9.1%	-8.7%	-8.2%	4.4%	-1.3%	1.1%	3.0%	4.7%	6.1%	7.3%	6.8%	6.1%	5.5%
40%	-8.9%	-9.4%	-9.5%	-9.6%	-9.6%	-9.3%	-8.7%	-4.6%	-1.4%	1.1%	3.2%	5.0%	6.5%	7.7%	8.8%	9.8%	10.7%
50%	-8.9%	-9.4%	-9.5%	-9.6%	-9.6%	-9.6%	-9.0%	-4.8%	-1.5%	1.1%	3.3%	5.2%	6.7%	8.0%	9.2%	10.2%	11.1%
60%	-8.9%	-9.4%	-9.5%	-9.6%	-9.6%	-9.6%	-9.2%	-4.9%	-1.6%	1.2%	3.4%	5.3%	6.9%	8.3%	9.5%	10.5%	11.4%
70%	-8.9%	-9.4%	-9.5%	-9.6%	-9.6%	-9.6%	-9.2%	-5.0%	-1.6%	1.2%	3.5%	5.4%	7.0%	8.4%	9.6%	10.7%	11.7%
80%	-8.9%	-9.4%	-9.5%	-9.6%	-9.6%	-9.6%	-9.2%	-5.0%	-1.6%	1.2%	3.5%	5.5%	7.1%	8.6%	9.8%	10.9%	11.8%
90%	-8.9%	-9.4%	-9.5%	-9.6%	-9.6%	-9.6%	-9.2%	-5.0%	-1.6%	1.2%	3.6%	5.5%	7.2%	8.7%	9.9%	11.0%	12.0%

Red means higher than RRA



FOR GENERATIONS

MGS F17 COMPARATIVE ANALYSIS ON BILL IMPACT FLAT ENERGY, 35% DEMAND COST RECOVERY

Flat Demand Charge

Annual Consumption kWh

Highest kw

Load Factor	* -6.8%	10,000	30,000	60,000	90,000	120,000	150,000	180,000	210,000	240,000	270,000	300,000	330,000	360,000	390,000	420,000	450,000	480,000
	10%		50.1%	52.5%	12.0%	2.4%	-1.8%	-9.1%	-15.3%	-17.5%	-19.1%	-20.3%	-21.2%	-21.9%	-22.6%	-23.1%	-23.5%	-23.9%
20%		18.6%	19.4%	19.6%	6.8%	1.0%	-2.2%	-3.9%	-2.0%	-0.6%	-0.2%	-2.0%	-3.5%	-4.7%	-5.7%	-6.5%	-7.2%	-7.8%
30%		8.1%	8.3%	8.4%	8.4%	2.4%	-1.2%	-3.1%	1.0%	0.6%	1.9%	3.0%	3.9%	4.7%	5.4%	4.5%	3.5%	2.7%
40%		2.9%	2.8%	2.8%	2.8%	2.8%	-0.6%	-2.7%	-0.4%	1.3%	2.7%	3.9%	4.9%	5.7%	6.4%	7.0%	7.6%	8.0%
50%		-0.3%	-0.5%	-0.6%	-0.6%	0.6%	-0.6%	-2.4%	-0.1%	1.8%	3.3%	4.5%	5.5%	6.4%	7.1%	7.7%	8.3%	8.8%
60%		-2.4%	-2.7%	-2.8%	-2.8%	-2.9%	2.9%	-2.5%	0.2%	2.1%	3.6%	4.9%	5.9%	6.8%	7.6%	8.3%	8.8%	9.4%
70%		-3.9%	-4.3%	-4.4%	-4.4%	-4.5%	-4.5%	-4.1%	0.2%	2.4%	3.9%	5.2%	6.3%	7.2%	8.0%	8.6%	9.2%	9.8%
80%		-5.0%	-5.5%	-5.6%	-5.6%	-5.7%	-5.7%	-5.3%	-1.1%	2.3%	4.1%	5.4%	6.5%	7.5%	8.3%	8.9%	9.6%	10.1%
90%		-5.9%	-6.4%	-6.5%	-6.6%	-6.6%	-6.6%	-6.3%	-2.1%	1.3%	4.1%	5.6%	6.7%	7.7%	8.5%	9.2%	9.8%	10.4%

Lowest kw Red means higher than CARC of 4% for F17

Two Step Demand Charge

Annual Consumption kWh

Highest kw

Load Factor	-6.3%	10,000	30,000	60,000	90,000	120,000	150,000	180,000	210,000	240,000	270,000	300,000	330,000	360,000	390,000	420,000	450,000	480,000
	10%		-12.9%	-13.8%	25.1%	34.3%	38.4%	33.5%	27.7%	26.7%	25.9%	25.4%	24.9%	24.6%	24.3%	24.1%	23.9%	23.7%
20%		-12.9%	-13.8%	-14.0%	1.6%	8.6%	12.5%	15.4%	21.1%	25.6%	28.2%	27.4%	26.9%	26.4%	26.0%	25.7%	25.4%	25.1%
30%		-12.9%	-13.8%	-14.0%	-14.1%	-6.0%	-1.2%	2.2%	8.4%	13.2%	17.0%	20.1%	22.8%	25.0%	26.9%	26.8%	26.4%	26.1%
40%		-12.9%	-13.8%	-14.0%	-14.1%	-14.1%	-9.3%	-5.5%	0.8%	5.8%	9.7%	13.0%	15.7%	18.1%	20.0%	21.8%	23.3%	24.6%
50%		-12.9%	-13.8%	-14.0%	-14.1%	-14.1%	-14.2%	-10.6%	-4.2%	0.9%	4.9%	8.3%	11.1%	13.4%	15.5%	17.2%	18.8%	20.2%
60%		-12.9%	-13.8%	-14.0%	-14.1%	-14.1%	-14.2%	-13.8%	-7.7%	-2.6%	1.5%	4.9%	7.7%	10.1%	12.2%	14.0%	15.6%	17.0%
70%		-12.9%	-13.8%	-14.0%	-14.1%	-14.1%	-14.2%	-13.8%	-10.0%	-5.2%	-1.0%	2.4%	5.2%	7.7%	9.8%	11.6%	13.2%	14.6%
80%		-12.9%	-13.8%	-14.0%	-14.1%	-14.1%	-14.2%	-13.8%	-10.0%	-6.9%	-3.0%	0.4%	3.3%	5.8%	7.9%	9.7%	11.3%	12.7%
90%		-12.9%	-13.8%	-14.0%	-14.1%	-14.1%	-14.2%	-13.8%	-10.0%	-6.9%	-4.3%	-1.1%	1.8%	4.2%	6.4%	8.2%	9.8%	11.3%

Red means higher than CARC of 4% for F17

MGS F17 COMPARATIVE ANALYSIS, FLAT ENERGY, 35% DEMAND COST RECOVERY

Flat Demand Charge

Annual Consumption kWh

Highest kw

Load Factor	Annual Consumption kWh																	
	10,000	30,000	60,000	90,000	120,000	150,000	180,000	210,000	240,000	270,000	300,000	330,000	360,000	390,000	420,000	450,000	480,000	
10%	46.1%	48.5%	8.0%	-1.6%	-5.8%	-13.1%	-19.3%	-21.5%	-23.1%	-24.3%	-25.2%	-25.9%	-26.6%	-27.1%	-27.5%	-27.9%	-28.2%	
20%	14.6%	15.4%	15.6%	2.8%	-3.0%	-6.2%	-7.9%	-6.0%	-4.6%	-4.2%	-6.0%	-7.5%	-8.7%	-9.7%	-10.5%	-11.2%	-11.8%	
30%	4.1%	4.3%	4.4%	4.4%	-1.6%	-5.2%	-7.1%	5.0%	-3.4%	-2.1%	-1.0%	-0.1%	0.7%	1.4%	0.5%	-0.5%	-1.3%	
40%	-1.1%	-1.2%	-1.2%	-1.2%	-1.2%	-4.6%	-6.7%	-4.4%	-2.7%	-1.3%	-0.1%	0.9%	1.7%	2.4%	3.0%	3.6%	4.0%	
50%	-4.3%	-4.5%	-4.6%	-4.6%	-4.6%	-4.6%	-6.4%	-4.1%	-2.2%	-0.7%	0.5%	1.5%	2.4%	3.1%	3.7%	4.3%	4.8%	
60%	-6.4%	-6.7%	-6.8%	-6.8%	-6.9%	-6.9%	-6.5%	-3.8%	-1.9%	-0.4%	0.9%	1.9%	2.8%	3.6%	4.3%	4.8%	5.4%	
70%	-7.9%	-8.3%	-8.4%	-8.4%	-8.5%	-8.5%	-8.1%	-5.5%	-1.6%	-0.1%	1.2%	2.3%	3.2%	4.0%	4.6%	5.2%	5.8%	
80%	-9.0%	-9.5%	-9.6%	-9.6%	-9.7%	-9.7%	-9.3%	-5.1%	-1.7%	0.1%	1.4%	2.5%	3.5%	4.3%	4.9%	5.6%	6.1%	
90%	-9.9%	-10.4%	-10.5%	-10.6%	-10.6%	-10.6%	-10.3%	-6.1%	-2.7%	0.1%	1.6%	2.7%	3.7%	4.5%	5.2%	5.8%	6.4%	

Lowest kw

Red means higher than RRA

Two Step Demand Charge

Annual Consumption kWh

Highest kw

Load Factor	Annual Consumption kWh																	
	10,000	30,000	60,000	90,000	120,000	150,000	180,000	210,000	240,000	270,000	300,000	330,000	360,000	390,000	420,000	450,000	480,000	
10%	-16.9%	-17.8%	21.1%	30.3%	34.4%	29.5%	23.7%	22.7%	21.9%	21.4%	20.9%	20.6%	20.3%	20.1%	19.9%	19.7%	19.6%	
20%	-16.9%	-17.8%	-18.0%	-2.4%	4.6%	8.5%	11.4%	17.1%	21.6%	24.2%	23.4%	22.9%	22.4%	22.0%	21.7%	21.4%	21.1%	
30%	-16.9%	-17.8%	-18.0%	-18.1%	-10.0%	-5.2%	-1.8%	4.4%	9.2%	13.0%	16.1%	18.8%	21.0%	22.9%	22.8%	22.4%	22.1%	
40%	-16.9%	-17.8%	-18.0%	-18.1%	-18.1%	-13.3%	-9.5%	-3.2%	1.8%	5.7%	9.0%	11.7%	14.1%	16.0%	17.8%	19.3%	20.6%	
50%	-16.9%	-17.8%	-18.0%	-18.1%	-18.1%	-18.2%	-14.6%	-8.2%	-3.1%	0.9%	4.3%	7.1%	9.4%	11.5%	13.2%	14.8%	16.2%	
60%	-16.9%	-17.8%	-18.0%	-18.1%	-18.1%	-18.2%	-17.8%	-11.7%	-6.6%	2.5%	0.9%	3.7%	6.1%	8.2%	10.0%	11.6%	13.0%	
70%	-16.9%	-17.8%	-18.0%	-18.1%	-18.1%	-18.2%	-17.8%	-14.0%	-9.2%	-5.0%	-1.6%	1.2%	3.7%	5.8%	7.6%	9.2%	10.6%	
80%	-16.9%	-17.8%	-18.0%	-18.1%	-18.1%	-18.2%	-17.8%	-14.0%	-10.9%	-7.0%	-3.6%	-0.7%	1.8%	3.9%	5.7%	7.3%	8.7%	
90%	-16.9%	-17.8%	-18.0%	-18.1%	-18.1%	-18.2%	-17.8%	-14.0%	-10.9%	-8.3%	-5.1%	-2.2%	0.2%	2.4%	4.2%	5.8%	7.3%	

Red means higher than RRA