

CONSIDERATIONS FOR SELECTING THE MOST COST EFFECTIVE RATE SCHEDULE

VEPGA members have much more flexibility in selecting an electric Rate Schedule to minimize their overall cost of electricity than SCC Jurisdictional Commercial customers.

VEPGA

Potential Rate Switching Matrix

Current Rate Schedule		Alternate Availability				
Number	Description	100	110	120	130	132
100	Misc. Light & Pwr.	--	IF ALL ELECT.	IF PUMPING	IF > 50 KW	IF > 500 KW
110	All Electric	YES	--	IF PUMPING	IF > 50 KW	IF > 500 KW
120	Water/Swr. Pumping	YES	IF ALL ELECT.	--	IF > 50 KW	IF > 500 KW
130	Large Power	YES	IF ALL ELECT.	IF PUMPING	--	IF > 500 KW
132	Variable Pricing	YES	IF ALL ELECT.	IF PUMPING	YES	--

Weighted Average VEPGA Price Per KWH 2012 Usage @ Current Rates

Schedule	Base	RAC	Fuel	TOTAL
100	\$ 0.05354	\$ 0.01143	\$ 0.02670	\$ 0.09167
110	\$ 0.05126	\$ 0.01143	\$ 0.02670	\$ 0.08939
120	\$ 0.04821	\$ 0.01301	\$ 0.02670	\$ 0.08792
130	\$ 0.03507	\$ 0.00863	\$ 0.02670	\$ 0.07040

Generally:

Account aggregation is available for contiguous properties such that multiple accounts may be combined into a single account which may make an alternative Rate Schedule attractive over existing accounts with varying Rate Schedules.

- However, may require electrical engineering and capital expenditures borne by the customer.

Schedule 110 is usually cheaper than Schedule 100 for small to medium accounts.

Schedule 120 is an operation-specific Rate Schedule and only available for pumping facilities (water/sewer).

Schedule 132 is available only to larger accounts and can result in considerable cost savings, however, there is also considerable risk associated with this Rate and detailed analyses and/or operational flexibility is required before this Rate Schedule should be considered.

The vast majority of alternative Rate Schedule selection relates to whether Schedule 100 or 130 is the most cost effective.

VEPGA
Number of Accounts That Would Achieve Savings By Switching
(October 2012 through September 2013 Data)

Current Rate Schedule	Alternate Availability					Total
	100	110	120	130	132	
100	--	0	28	111	Not Analyzed	139
110	0	--	9	23	Not Analyzed	32
120	7	0	--	20	Not Analyzed	27
130	101	0	12	--	Not Analyzed	113
<u>132</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>4</u>	--	<u>7</u>
TOTAL	108	3	49	158		318

VEPGA
Distribution of Potential Savings By Switching
(October 2012 through September 2013 Data)

Current Rate Schedule	Alternate Availability				
	100	110	120	130	132
100	--		8.8%	34.9%	Not Analyzed
110		--	2.8%	7.2%	Not Analyzed
120	2.2%		--	6.3%	Not Analyzed
130	31.8%		3.8%	--	Not Analyzed
132		0.9%		1.3%	--

VEPGA
Average Annual Savings Per Account If Switched
(October 2012 through September 2013 Data)

Current Rate Schedule	Alternate Availability				
	100	110	120	130	132
100	--	\$0	\$1,573	\$5,418	Not Analyzed
110	\$0	--	\$181	\$3,285	Not Analyzed
120	\$3,493	\$0	--	\$56,104	Not Analyzed
130	\$7,564	\$0	\$8,987	--	Not Analyzed
132	\$0	\$7,501	\$0	\$9,803	--

VEPGA
Range of Annual Savings Per Account If Switched
(October 2012 through September 2013 Data)

Current Rate Schedule	Alternate Availability				
	100	110	120	130	132
100	--	0	\$26 to \$27,438	\$98 to \$44,901	Not Analyzed
110	0	--	\$13 to \$347	\$626 to \$22,945	Not Analyzed
120	\$135 to \$10,901	0	--	\$678 to \$425,781	Not Analyzed
130	\$626 to \$54,878	0	\$2,251 to \$33,481	--	Not Analyzed
132	0	\$833 to \$20,736	0	\$656 to \$21,804	--

VEPGA
Weighted Average Percent Savings Per Account If Switched
(October 2012 through September 2013 Data)

Current Rate Schedule	Alternate Availability				
	100	110	120	130	132
100	--	0.0%	8.4%	7.9%	Not Analyzed
110	0.0%	--	4.9%	6.2%	Not Analyzed
120	2.1%	0.0%	--	27.3%	Not Analyzed
130	8.1%	0.0%	10.2%	--	Not Analyzed
132	0.0%	5.1%	0.0%	3.7%	--

TOTAL POTENTIAL VEPGA SAVINGS = \$2,802,680

Based on only one year of data (10/12 through 9/13)

VEPGA
Number of Accounts That Would Achieve Savings By Switching
(3 Years Constant Savings - 2011 through 2013)

Current Rate Schedule	Alternate Availability					Total
	100	110	120	130	132	
100	--	0	11	27	Not Analyzed	38
110	0	--	0	7	Not Analyzed	7
120	0	0	--	2	Not Analyzed	2
<u>130</u>	<u>21</u>	<u>0</u>	<u>1</u>	<u>--</u>	Not Analyzed	<u>22</u>
TOTAL	21	0	12	36		69

Considerations for Switching Rate Schedules

100 to 130 (35% of Potential Accounts)

Or

130 to 100 (32% of Potential Accounts)

- (1) Minimum load for Schedule 130 is 50 KW
- (2) Monthly and annual load factor
 - Load factor is the relationship of energy usage (KWH) to maximum load (KW)
 - Monthly load factor → daily or weekly variations
 - Annual load factor → seasonal use patterns
- (3) Does facility use electricity for heating (as compared to natural gas or oil)?
- (4) Does facility have significant HVAC (electric and/or air conditioning) load relative to total load?
- (5) Does facility utilize machinery or equipment that requires significant start-up load each work day or at the beginning of each work week?
- (6) Is facility not operated or significantly curtailed during the Summer or Winter seasons?
- (7) Does facility have sporadic usage?

General Considerations of Rate 130 vs. Rate 100

Demand charges are the key!

- Schedule 130 has ratcheted demand whereas Schedule 100 does not.
- Majority of Schedule 130 demand charge subject to 90% ratchet (based on past June-September max load).
- Generation and Transmission Riders are based on demand (KW) for Schedule 130 but based on energy (KWH) for Schedule 100. Thus, as Riders become more and more prevalent, demand-based rates will play an even more important role in pricing considerations.
- Schedule 130 tends to be a cheaper alternative for high load factor customers (but remember the ratchet).
- The larger the account (in terms of KWH), the more attractive Schedule 130 may be. However, if load factor is low, Schedule 100 may provide lower electric bills.
- If an account is marginally close to the 50 KW minimum, the minimum billing demand is 50 KW per month → months in which actual load is less than 50 KW, bill demand is 50 KW regardless of season.

Specific Examples of Optimal Rate Schedule (SCH. 100 vs. SCH. 110 vs. SCH. 130)

SPREADSHEET ANALYSIS

CONCLUSIONS

Do not rely on only one year of data --- particularly if substantial weather sensitive load.

Consider load factor --- if only qualitatively.

For facilities with significant HVAC load, Schedule 130 becomes less attractive if natural gas or oil is used for heating (assumes significant air conditioning load).

For all electric facilities, Schedule 110 is generally advantageous over Schedule 100.

For large facilities, Schedule 132 can result in substantial savings but there is a significant risk if not carefully evaluated.

- There are natural savers particularly those with much lower Summer use than during other periods of the year.
- If not a natural saver, facility must be able to manage or curtail load on certain days.
- Even if annual savings can be achieved, be prepared for volatile monthly electric bills.