

**Jim & Sandy-**

February 18, 2004

I finally broke down and decided to do a simple analysis of the electrical costs associated with my Super Custom Fallsburg (SCF). As you remember, both of you installed it on 29 November 2002 (day after Thanksgiving) and I might add you did a great job and it was nice to finally meet both of you in person. So that gave me almost a perfect starting point for a comparison of electrical costs. I didn't interpolate the average kW usage/cost for the last 1.5 days in November the spa was connected and heating up/being used. November was treated as a non-SCF month. I did exclude a facility charge from this analysis because it is a constant and is not dependent upon kW used. State and Town taxes were added at the end (see summary data table) to account for their increases too.

Keep in mind that without a meter directly on the spa there is no practical way to isolate the electrical costs exclusively associated with the SCF. So other factors, weather, one of my kids moved back in, etc. are still unaccounted for variables.

**kW Rates:**

Rates were almost constant. They were/are as follows:

1. Dec 2001 – 1st 2000 kW used were \$ 0.091741, additional kW @ \$ 0.066027
2. Jan 2002 through present – 1st 2000 kW used are \$ 0.087150, additional kW @ \$ 0.062720 per unit

**Physical Conditions:**

The SCF is located on a patio underneath a sunroom and is not directly exposed to sunlight until approximately 1-2 hours before sundown. Although I bought the thermal blanket I have never used it, too much trouble. Spa temperature is maintained at 102 degrees. SCF has 24 hour filtering with ozonator. On average the SCF is used 8 hours/week from September to May. The colder the better. Summer months are just too hot, sporadic use mainly.

**Well, do you want the good news or the bad news first?** Since there is no bad news this will be easy. I looked at my yearly electrical costs from:

1. Dec 2001 through Nov 2002 (No SCF)
2. Dec 2002 through Nov 2003 (SCF up and running strong)

**Summary:** (See supporting data on next page.)

Some months better than others but the **average monthly increase of \$ 20.61** is better than I expected and reinforces that I'll probably never use the thermal blanket. Remember also that all this increase cannot be attributed to the SCF. Wow! Actually the real average monthly increase for me (this year only) was only \$ 6.15. This is because we use Southwestern Electrical Cooperative and they did not charge any customers (residential/commercial) for any electrical costs in October 2003. Profits returned to the customer base. However, I did use October usage/costs in the analysis even though I had no out of pocket expenses.



**Supporting Data:**

Electrical Usage and Costs (Excludes facility charge.)							
Month	kW Used			Month	Cost		
	Before SCF Baseline Year 2001-2002	With SCF 2002-2003	Monthly kW Delta		Before SCF Baseline Year 2001-2002	With SCF 2002-2003	Monthly Cost Delta
Dec*	2,042	2,861	819	Dec*	\$186.26	\$228.30	\$42.05
Jan	2,031	3,114	1,083	Jan	\$176.24	\$244.17	\$67.93
Feb	1,965	2,716	751	Feb	\$171.25	\$219.21	\$47.96
Mar	2,151	2,397	246	Mar	\$183.77	\$199.20	\$15.43
Apr	1,577	1,862	285	Apr	\$137.44	\$162.27	\$24.84
May	1,391	1,850	459	May	\$121.23	\$161.23	\$40.00
Jun	2,316	2,254	(62)	Jun	\$194.12	\$190.23	(\$3.89)
Jul	2,898	2,838	(60)	Jul	\$230.62	\$226.86	(\$3.76)
Aug	2,414	3,040	626	Aug	\$200.27	\$239.53	\$39.26
Sep	2,339	2,076	(263)	Sep	\$195.56	\$179.07	(\$16.50)
Oct	2,213	1,867	(346)	Oct	\$187.66	\$162.71	(\$24.95)
Nov	2,134	2,190	56	Nov	\$182.70	\$186.22	\$3.51
<b>TOTAL</b>	<b>25,471</b>	<b>29,065</b>	<b>3,594</b>	<b>TOTAL</b>	<b>\$2,167.12</b>	<b>\$2,398.99</b>	<b>\$231.88</b>
<b>Dec* 2002- First Full Month of SCF Use</b>							
Delta kW/Year from Baseline	Baseline	3,594			<b>Yearly Cost Difference</b>	<b>\$231.88</b>	
Avg kW/Month increase from Baseline	Baseline	299.5			<b>Yearly State and Town Taxes</b>	<b>\$15.44</b>	(combined tax rate is \$0.0666)
Avg kW Used per Month	2,123	2,422			<b>Total Yearly Cost Difference</b>	<b>\$247.32</b>	
					<b>Total Monthly Cost Difference</b>	<b>\$20.61</b>	

**IMHO:** Well, what can I say? The facts speak for themselves! **For \$ 20.61 per month how can you go wrong?** I would have thought it to be at least 30-50% higher and that still would have been acceptable to me considering the spa's power and the enjoyment we have had using the spa. I ran the numbers several times because I thought I made a mistake. As far as I can tell I didn't. This is certainly an unexpected benefit to owning a Haven SCF but I'm sure you're not surprised. Just to let you know the SCF is still running strong and I'm as happy now as I was when you guys first installed it. Thanks for a great spa and providing such outstanding customer service.

Rich Pisko  
Troy, IL