

## Cost Comparison Summary

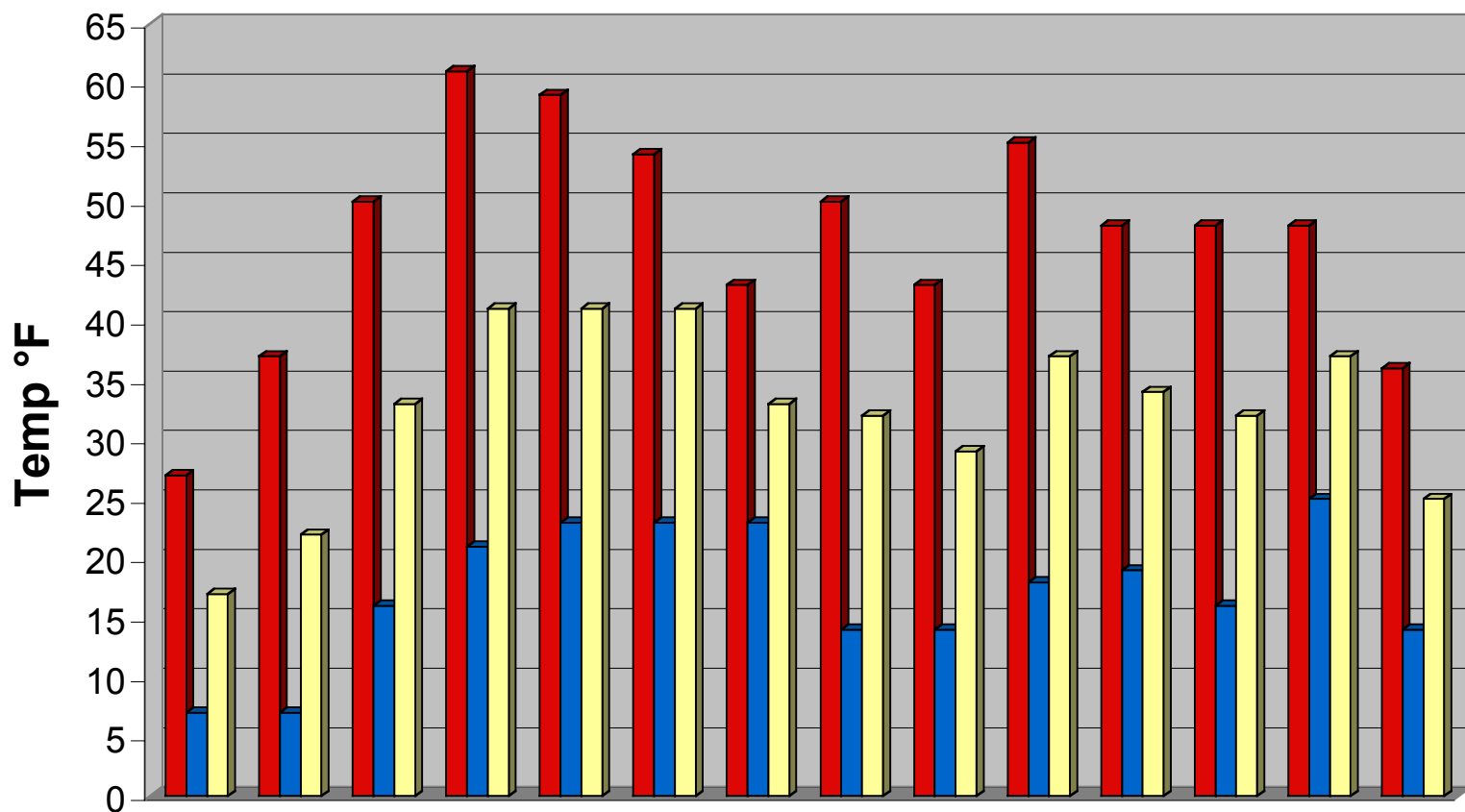
<b>Date of analysis:</b>	Jan. 2nd through Jan 13th, 2001
<b>Location</b>	Loveland, Colorado
<b>Common Denominator</b>	Both spas were the approximately same size and outside in the same environment and location. They were used approximately the same amount of time. They were tested at the same time using the same method.
<b>Method</b>	Digital kilowatt meter measuring kilowatt usage at 15 minute increments
<b>Mode of operation</b>	Set temp at 102 degrees. Filter cycles set at 8 hrs. per day "Foam-Filled Spa" set in economy mode Arctic Spa set in standard mode
<b>Gallons</b>	"Foam-Filled Spa" 400 gallons Arctic Spa 450 gallons
<b>Usage</b>	"Foam-Filled Spa" used 4 hours, 30 minutes. Arctic Spa used 4 hours, 45 minutes

## Results

<b>Arctic Spa</b>	Average daily cost to operate: <i>0.598 cents</i> Elapsed time to heat water from 41° F to 102° F at 7° F outside temperature: <i>7 hours and 15 minutes</i> Cost to heat water on initial fill: <i>\$2.59</i> Estimated cost to operate per month (based on same conditions) = <i>\$17.94</i>
<b>"Foam-Filled Spa"</b>	Average daily cost to operate: <i>0.755</i> Estimated cost to operate per month (based on same conditions) = <i>\$22.65</i>

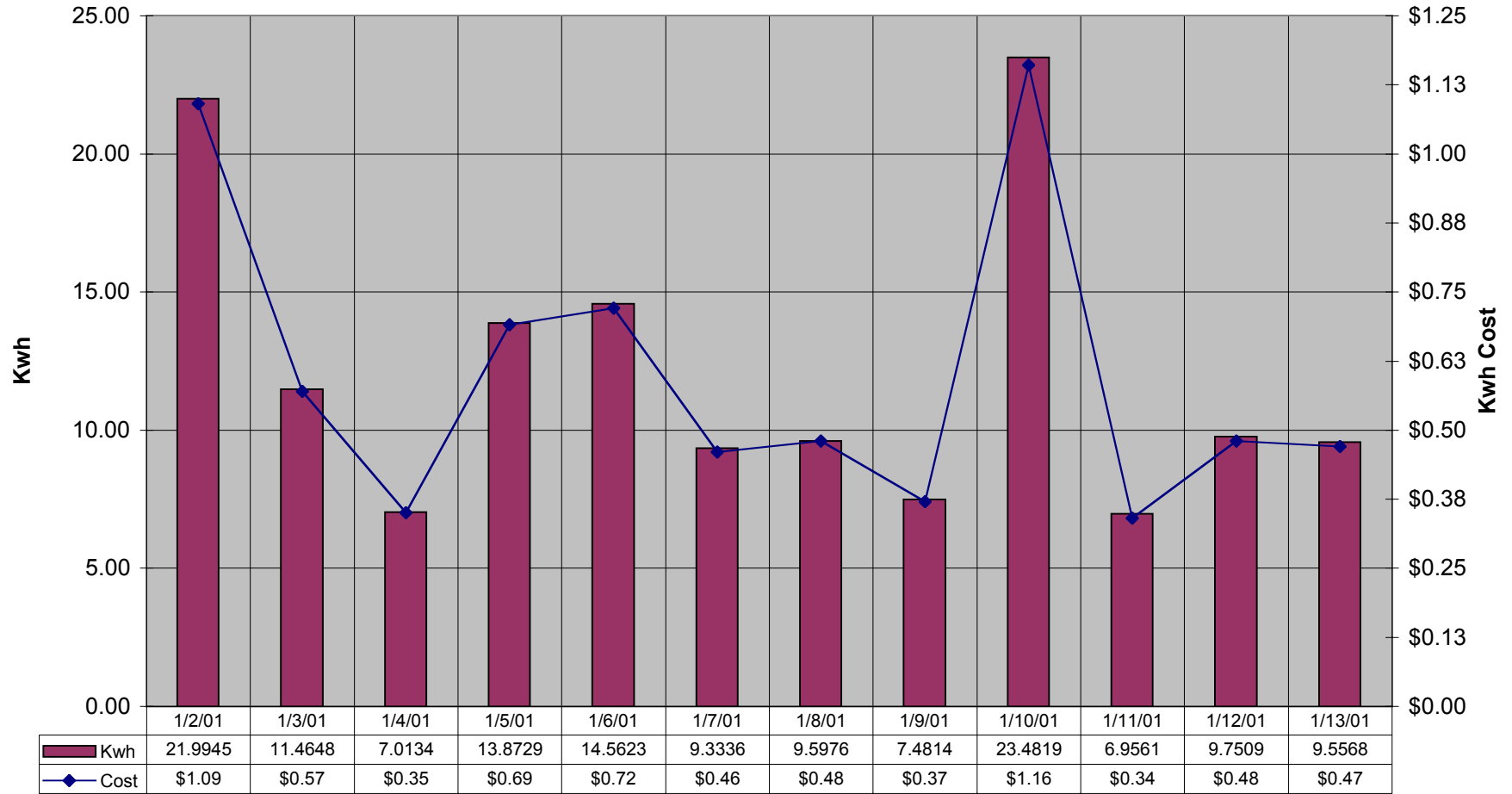
Overall cost to run: Arctic Spa was 26.2% more efficient

# Daily Temperature for January

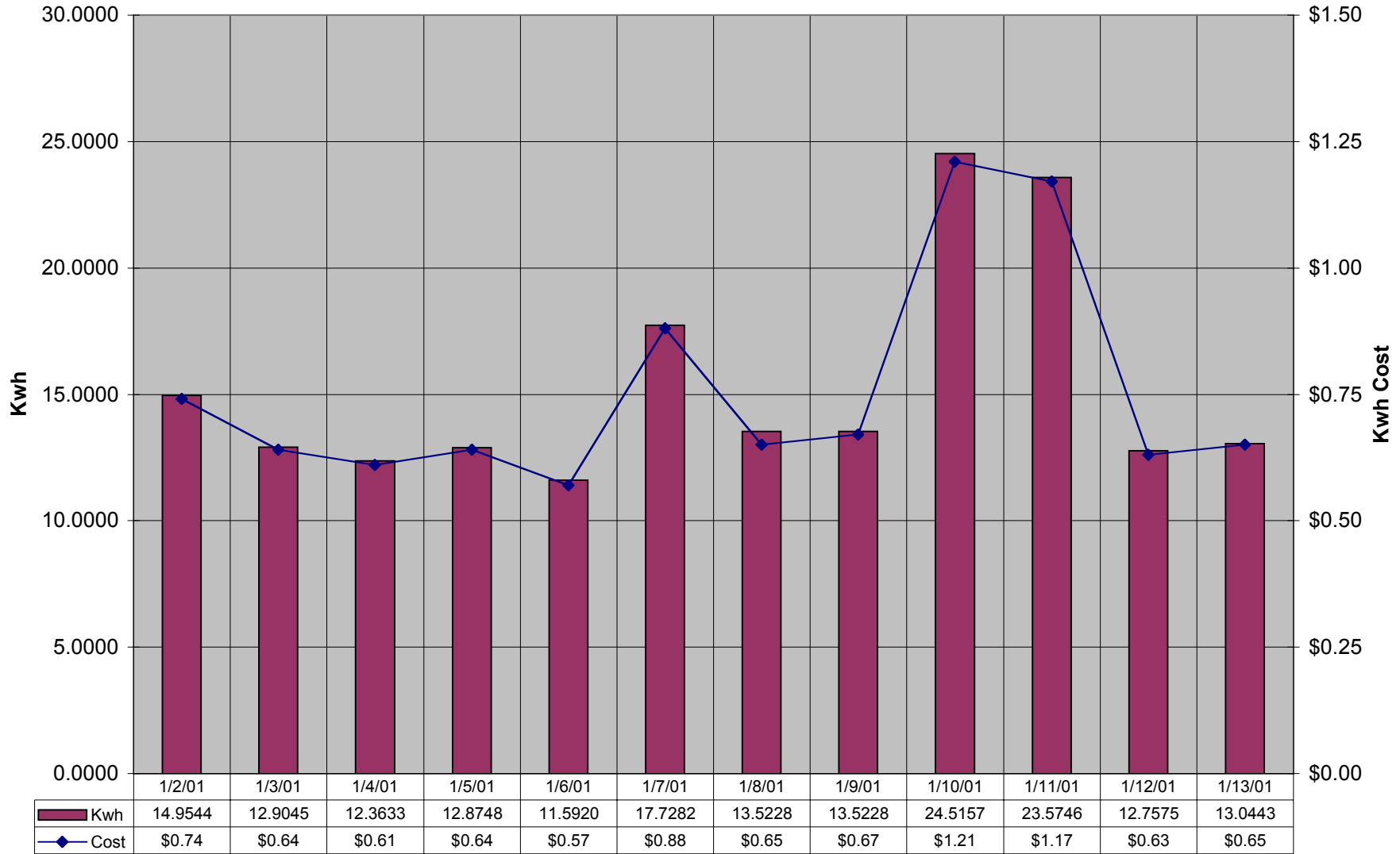


	1-01-01	2-01-01	3-01-01	4-01-01	5-01-01	6-01-01	7-01-01	8-01-01	9-01-01	10-01-01	11-01-01	12-01-01	13-01-01	14-01-01
■ High	27	37	50	61	59	54	43	50	43	55	48	48	48	36
■ Low	7	7	16	21	23	23	23	14	14	18	19	16	25	14
■ Average	17	22	33	41	41	41	33	32	29	37	34	32	37	25

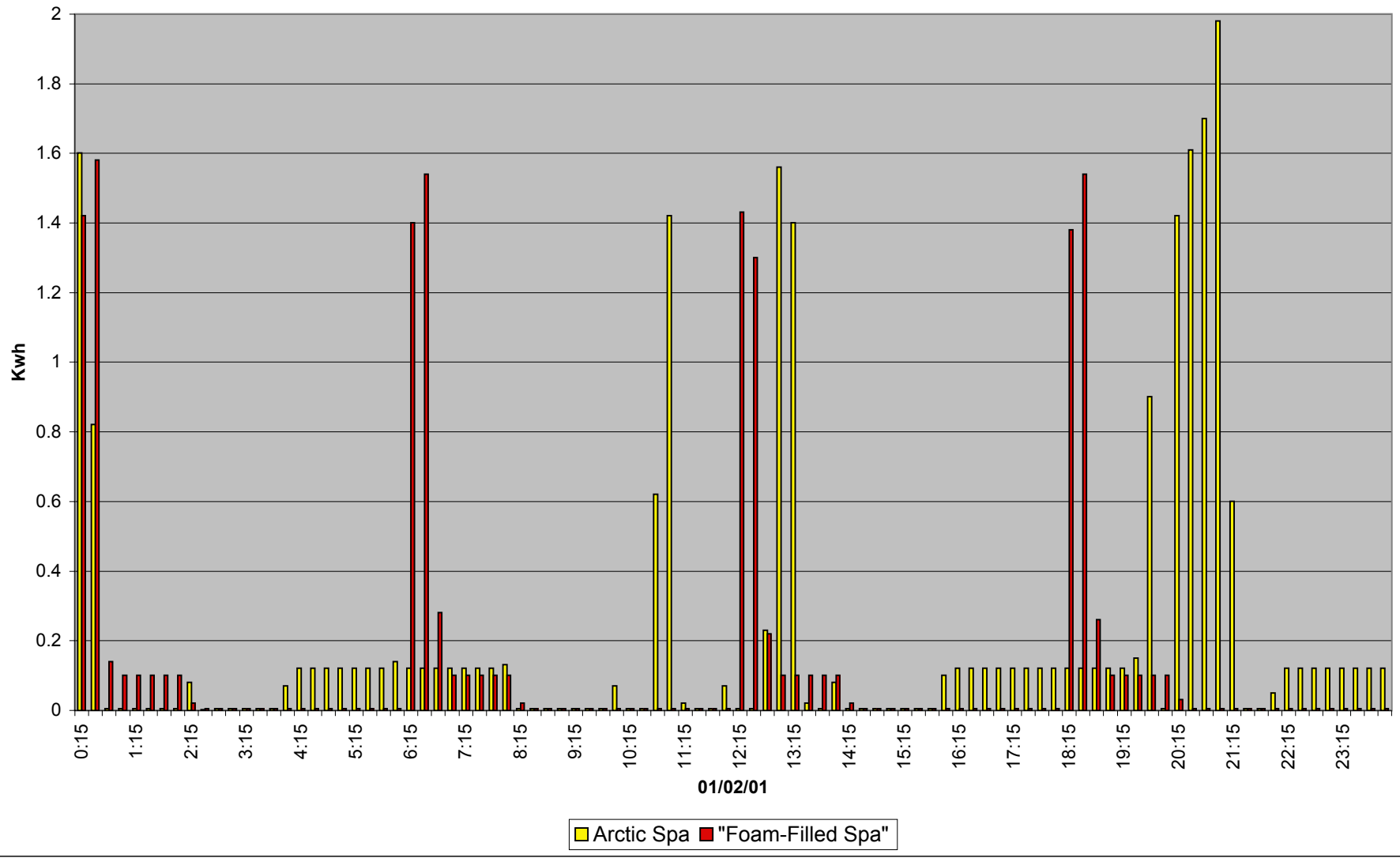
**Arctic Spa Total Usage to Date 145.06 Kwh @ a cost of \$7.18**



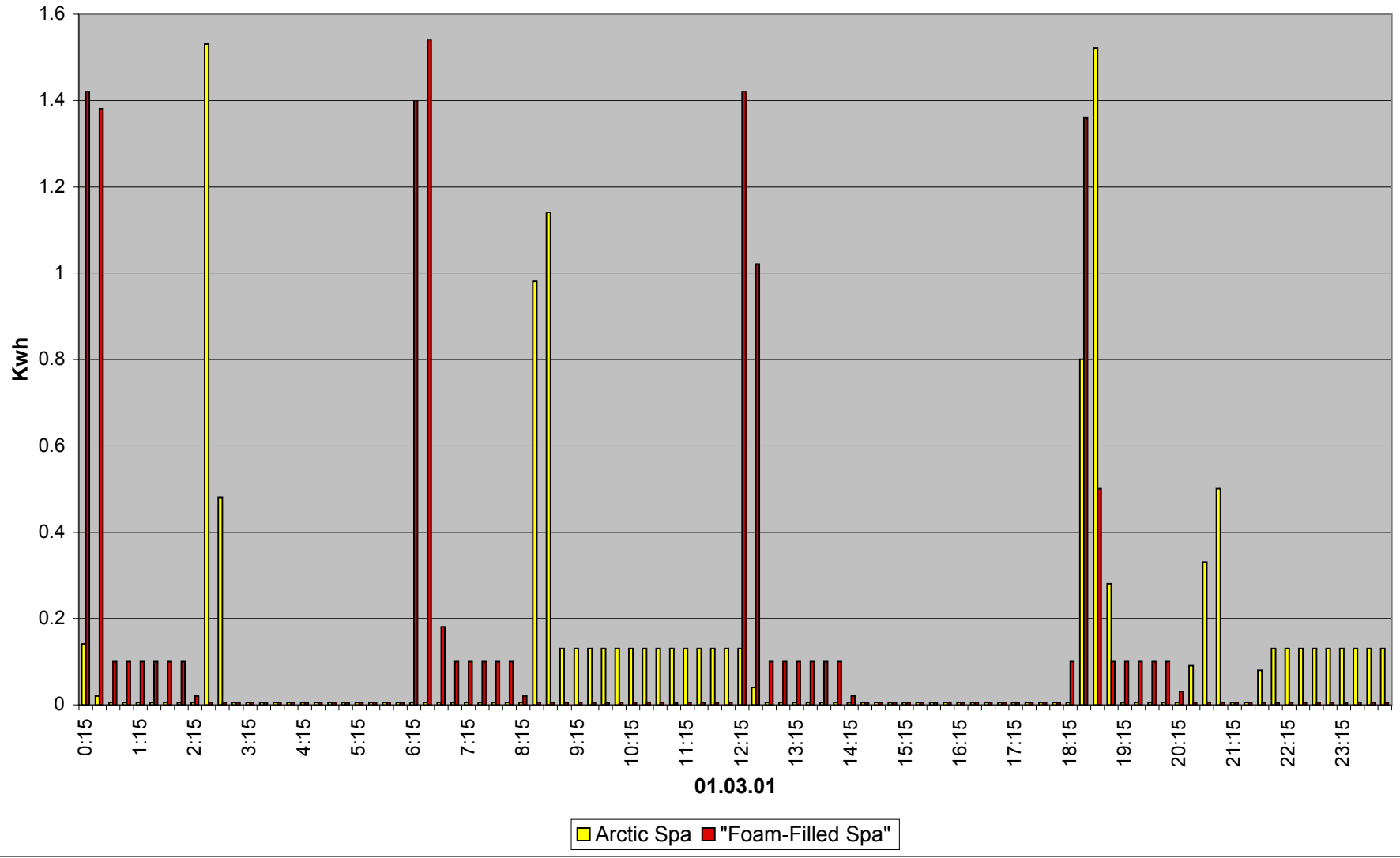
**"Foam-Filled Spa" Total Usage to Date 182.88 Kwh @ a cost of \$9.06**



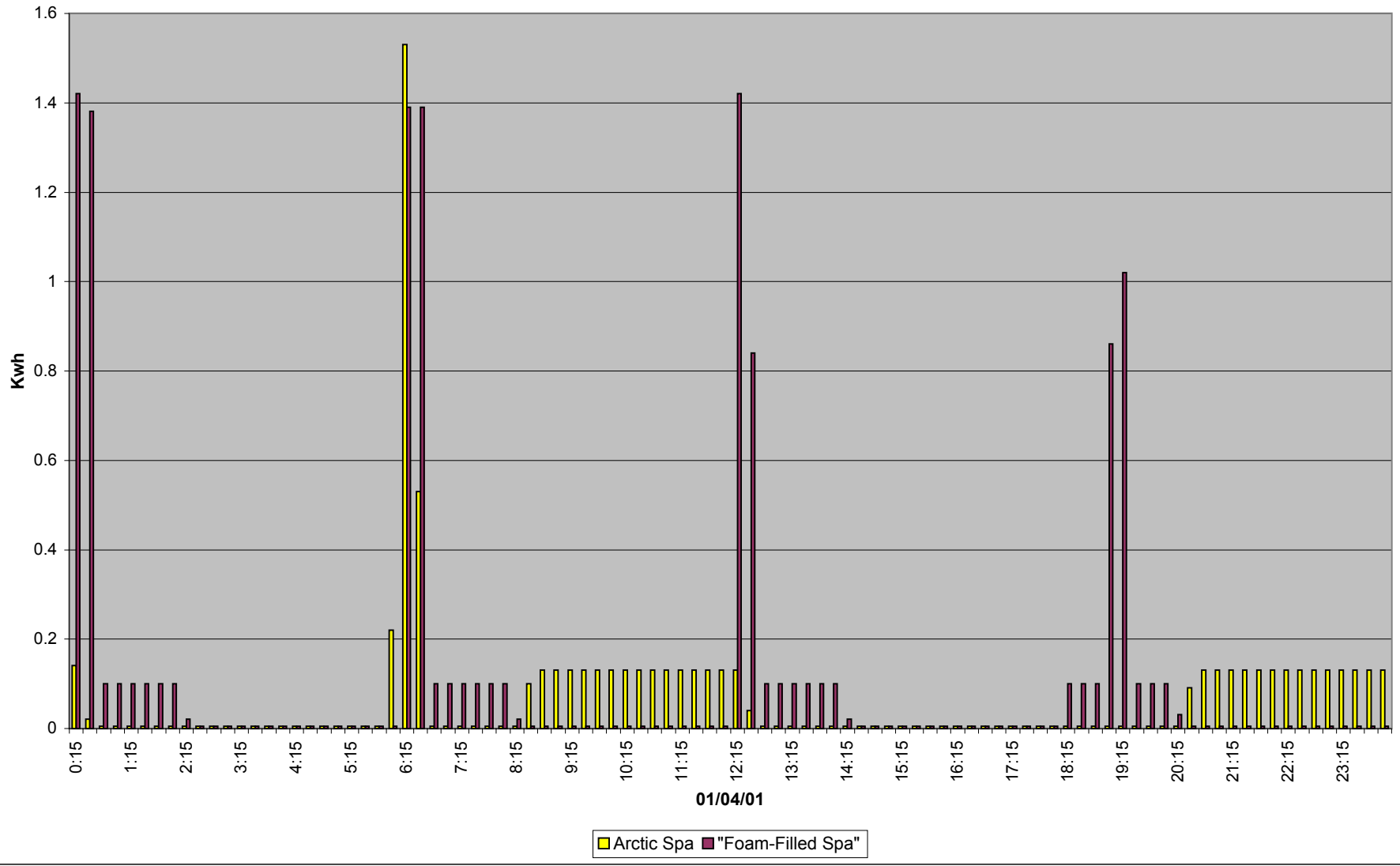
Arctic Spa - Total usage 21.99 Kwh @ \$1.09. "Foam-Filled Spa" 14.95 Kwh @ \$0.74  
Arctic used 1 hr 15 minutes. "Foam-Filled Spa" no usage.



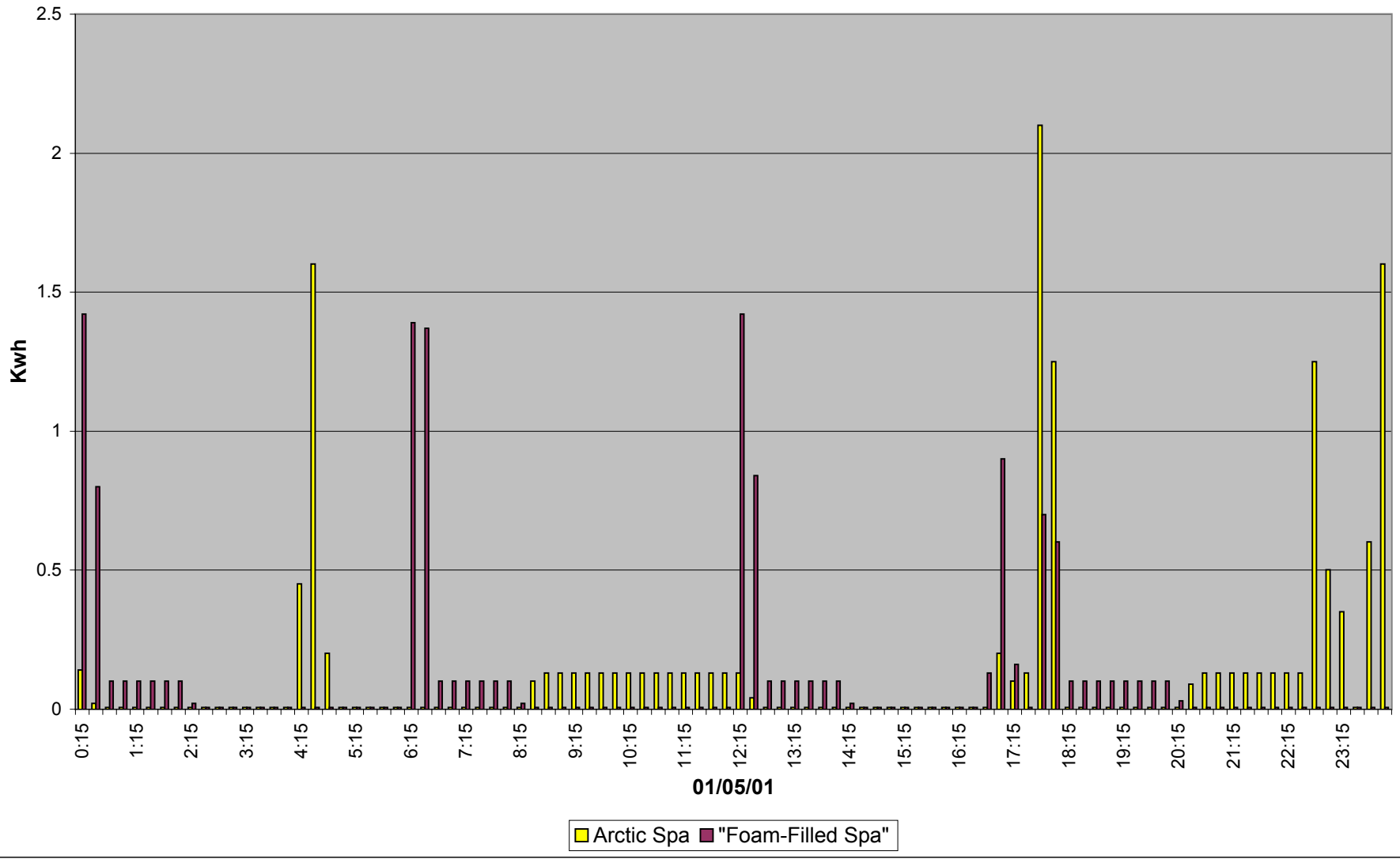
Arctic Spa - Total usage 11.46 @ \$0.57. "Foam-Filled Spa" 12.90 Kwh @ \$0.64  
Arctic spa used 45 minutes. "Foam-Filled Spa" no usage.



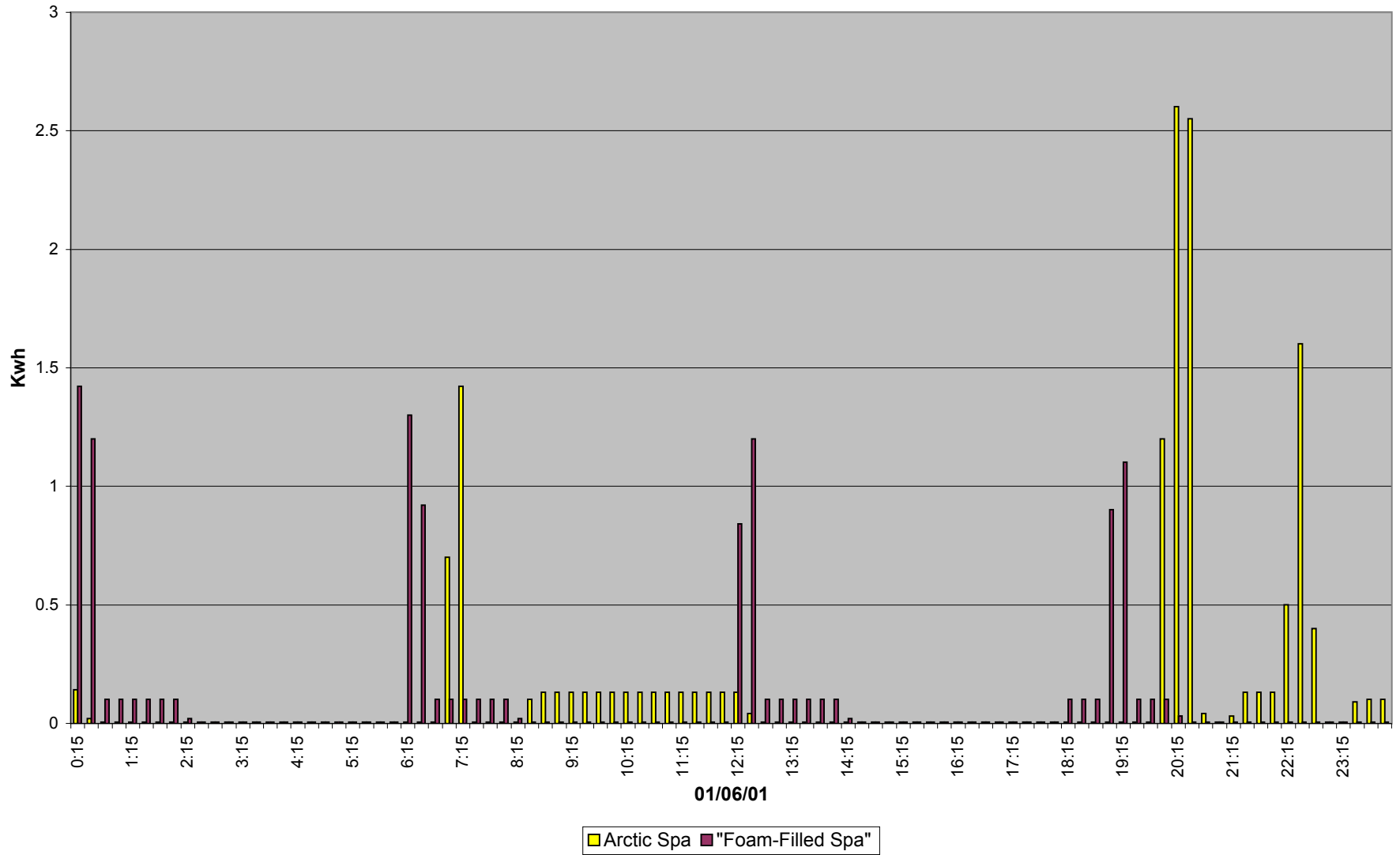
Arctic Spa - Total usage 7.01 Kwh @ \$0.35. "Foam-Filled Spa" 12.36 Kwh @\$0.61  
No usage on both spas



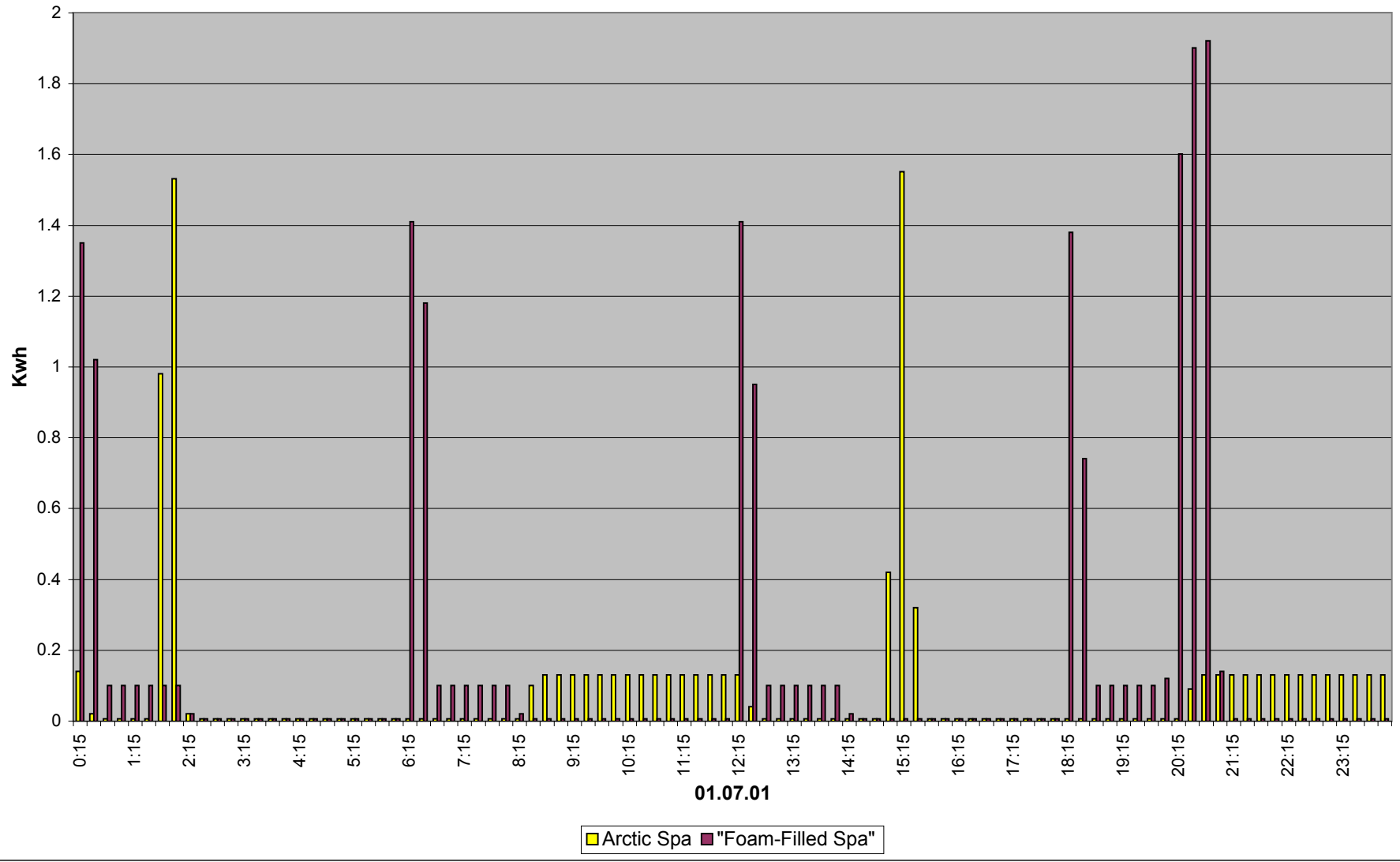
Arctic Spas - Total usage 13.87 Kwh @ \$0.69. "Foam-Filled Spa" 12.87 Kwh @4\$0.64  
Arctic Spa used 45 minutes. "Foam-Filled Spa" no usage.



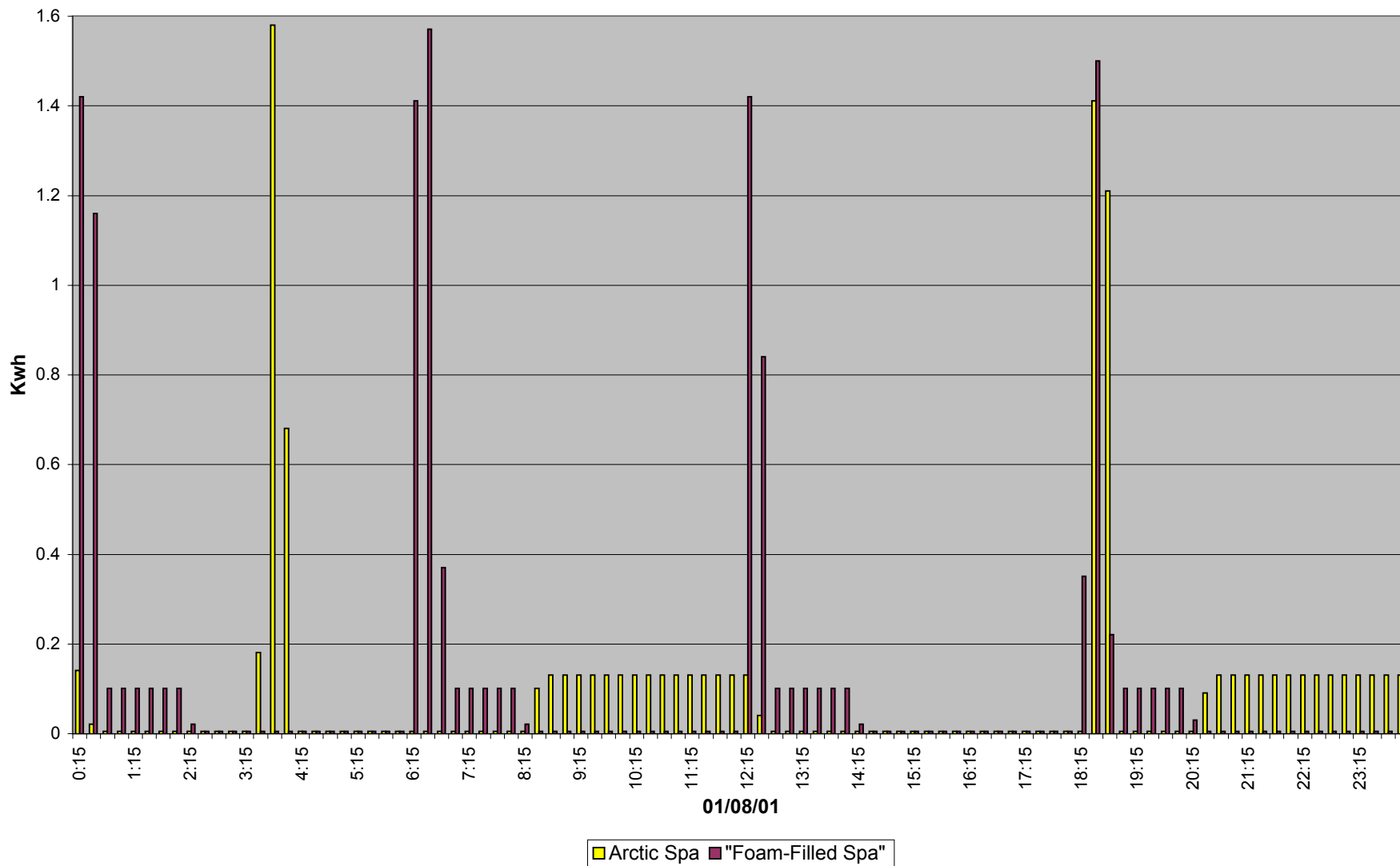
Arctic Spa - Total usage 14.56 Kwh @ \$0.72. "Foam-Filled Spa" 11.52 Kwh @ \$0.57  
Arctic Spa used 45 minutes. "Foam-Filled Spa" no usage.



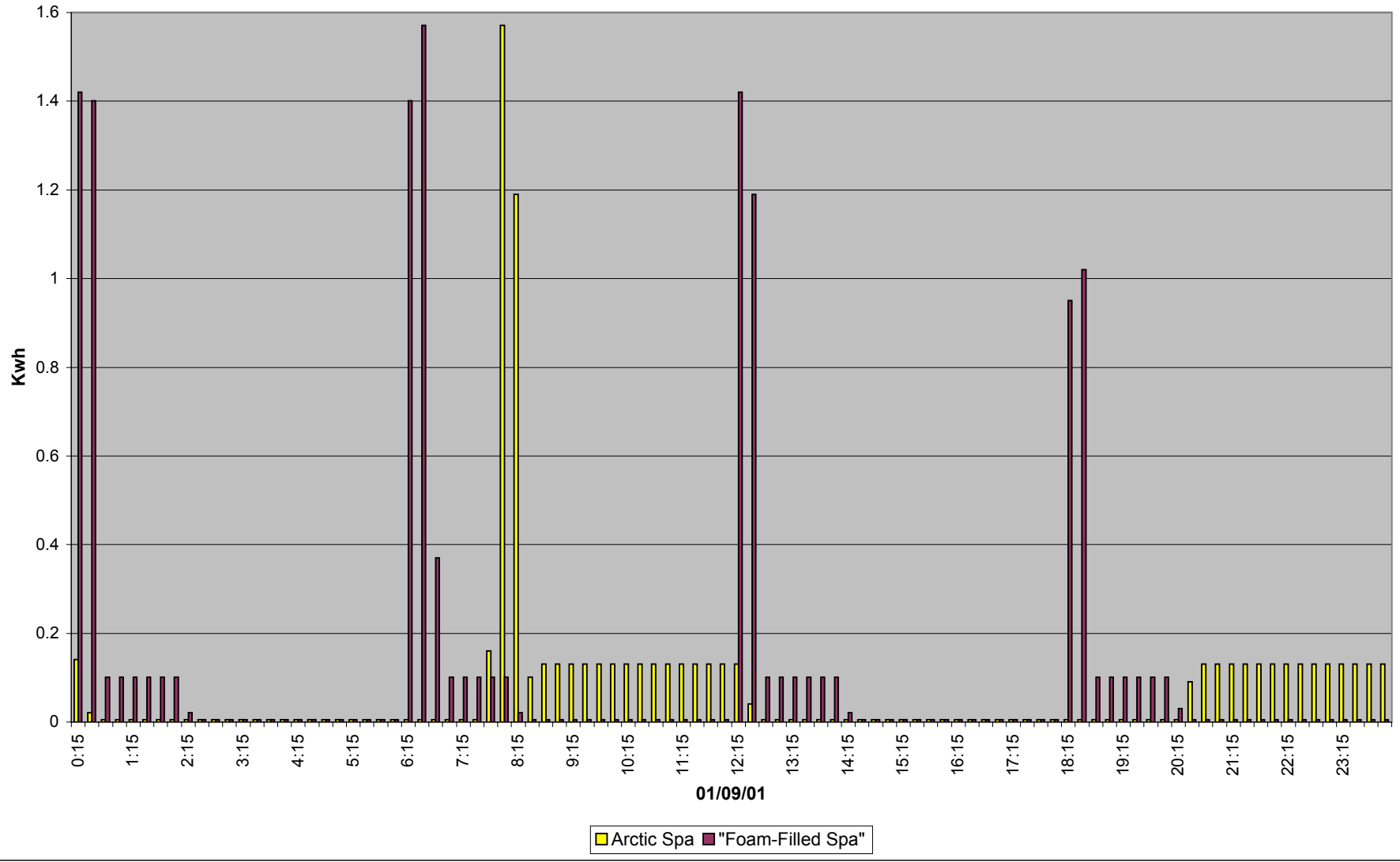
Arctic Spa - Total usage 9.33 Kwh @ \$0.46. "Foam-Filled Spa" 17.72 Kwh @ \$0.88  
"Foam-Filled Spa" used 45 minutes. Arctic Spa no usage



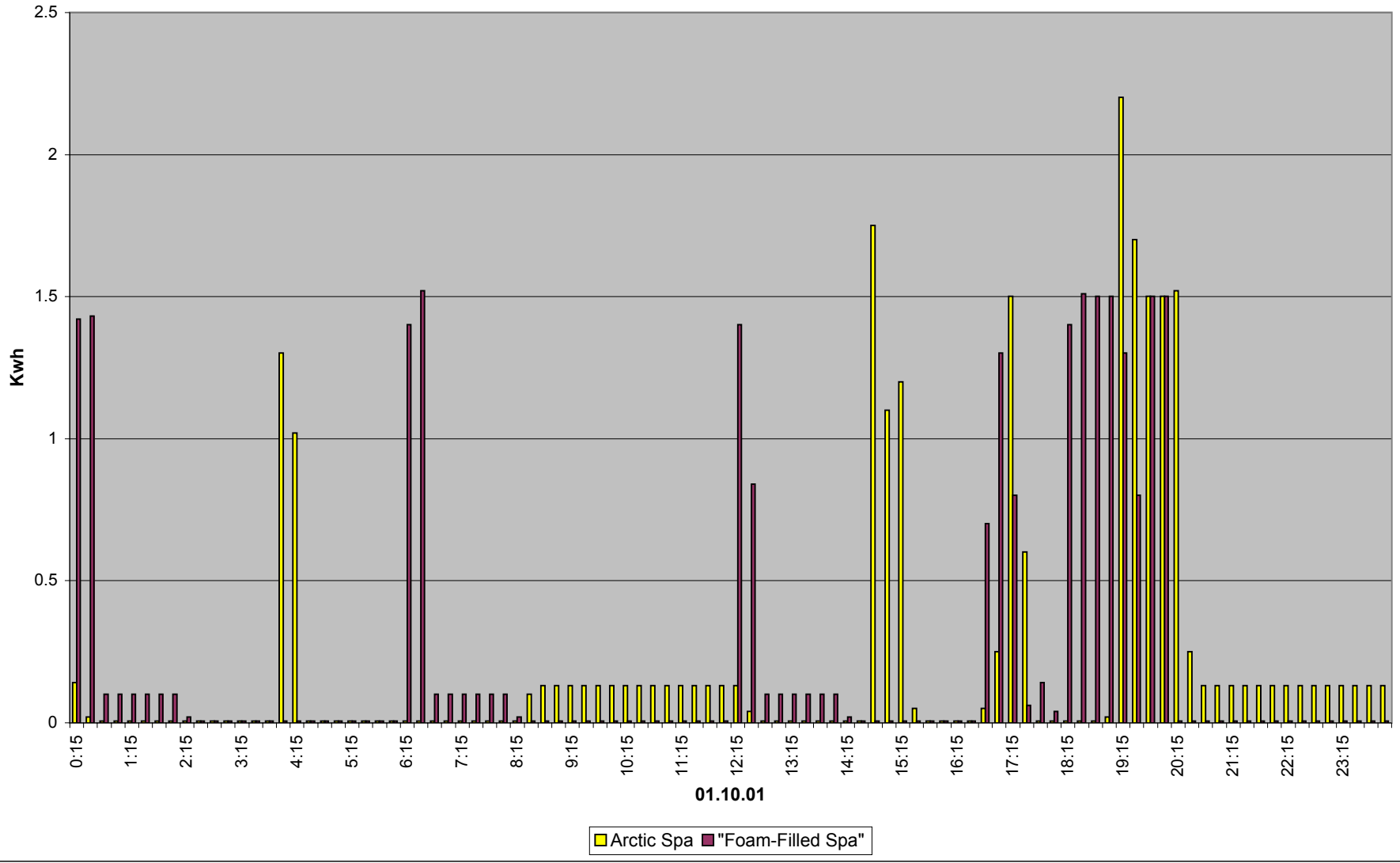
Arctic Spas - Total usage 9.59 Kwh @ \$0.48. "Foam-Filled Spa" 13.05 Kwh @ \$0.65  
No usage on both spas



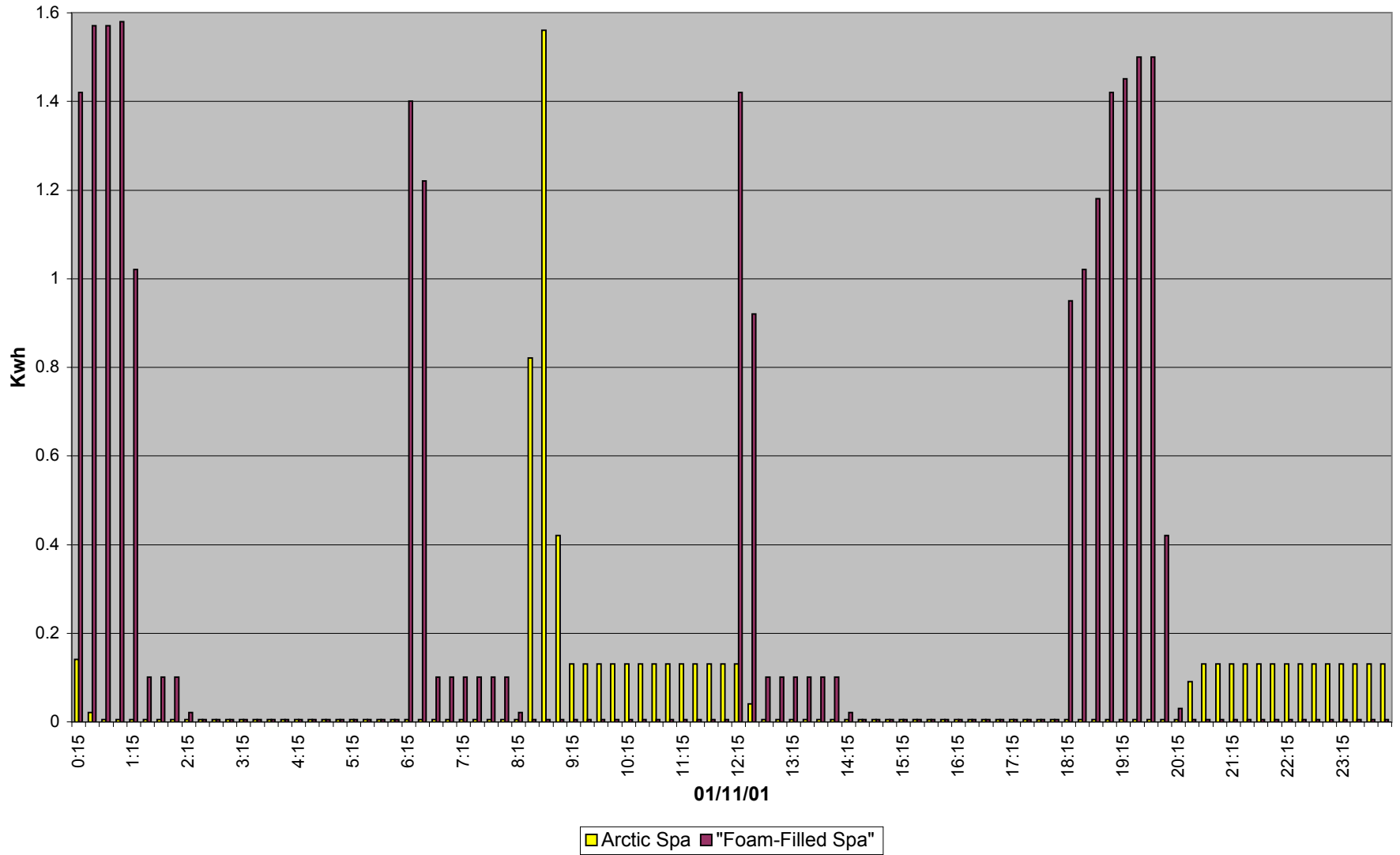
Arctic Spa - Total usage 7.48 Kwh @ \$0.37. "Foam-Filled Spa" 13.52 Kwh @ \$0.67  
No usage on both spas



Arctic Spa - Total usage 23.48 Kwh @ \$1.16. "Foam-Filled Spa" 24.51 Kwh @ 1.21  
"Foam-Filled Spa" used 2 hrs. Arctic spa used 1hr 15 min.



Arctic Spa - Total usage 6.95 Kwh @ \$0.34. "Foam-Filled Spa" 23.57 Kwh @ \$1.17.  
"Foam-Filled Spa" used 1hr. 45 minutes. Arctic spa not used.



Arctic Spa - Total usage 9.75 Kwh @ \$0.48. "Foam-Filled Spa" 12.75 Kwh @ \$0.63.

