



## HOW WEB COMFORT CAN SAVE YOUR CHURCH MONEY

A case study on implementing an integrated energy management solution that saved one church over \$4,600 annually on utility bills

### CHALLENGE

The Greggton United Methodist Church in Longview, Texas was replacing their heating and cooling equipment and needed an easy solution for further reducing their energy costs. With the climate in Texas, the summer months are long and use the bulk of the heating and cooling energy load.

### THE SOLUTION

Web Comfort enables churches to save energy and money by effectively controlling heating and cooling equipment, lighting, computers and plug loads in a single, easy-to-use, wireless platform. Scheduling events and other occupancy needs can easily be managed via the Internet on any Web browser using the 365-day, 24/7 calendar.

### IMPLEMENTATION

The Web Comfort was installed in Greggton United Methodist Church in Longview, Texas. This system utilized 18 thermostats for their 55,500 ft<sup>2</sup> facility. The church is using the 365-day, 24/7 calendar to schedule services, events at the church and group meetings. This 365-day scheduling capability gives them control over the heating and cooling system based on when and what areas of the building will be occupied.

### THE RESULTS

The Greggton United Methodist Church experienced a significant reduction in their electric bill of an average \$863 monthly, with a total summer months' savings of \$3,454. The church recently replaced the gas furnace in the facility to electric heat, impacting the savings potential in the winter months. "We did not expect the colder months to show a significant reduction based on replacing the gas heat with electric heat, but, being in the Texas climate, the summer is when we really saved money." The impact of the Web Comfort Energy Management System on the church's monthly energy costs is depicted below.

The flexibility and scalability of the Web Comfort Energy Management System will allow the church to easily add lighting, plug load and computer controls if the need arises in the future.

Meter Read	Days	Metered/ Billed kW	Metered/ Billed kWh	Load Factor	Bill Amount**	\$/kWh Average	kW Demand \$5.38/kW	kWh Misc.	Change from Previous Year
12-Sep	33	172.4	36560	26.7	\$2,653.38	7.26	\$1,005.09	\$1,648.29	-\$663.46
12-Oct	27	172.9	29200	26.0	\$2,222.40	7.61	\$1,008.01	\$1,214.39	-\$105.24
12-Nov	30	152.8	14640	13.3	\$1,606.87	10.96	\$890.82	\$716.05	-\$151.05
12-Dec	32	151.6	18440	15.8	\$1,726.15	9.36	\$883.83	\$842.32	-\$384.20
13-Jan	32	176.0	31160	23.0	\$2,214.85	7.11	\$1,026.08	\$1,188.77	\$257.34
13-Feb	32	175.6	25600	18.9	\$2,000.41	7.81	\$1,023.75	\$976.66	\$91.60
<b>13-Mar</b>	<b>29</b>	<b>161.6</b>	<b>18720</b>	<b>16.6</b>	<b>\$1,670.57</b>	<b>8.92</b>	<b>\$942.13</b>	<b>\$728.44</b>	<b>-\$164.04</b>
<b>13-Apr</b>	<b>33</b>	<b>162.4</b>	<b>17840</b>	<b>13.8</b>	<b>\$1,706.53</b>	<b>9.57</b>	<b>\$946.79</b>	<b>\$759.74</b>	<b>-\$27.42</b>
<b>13-May</b>	<b>29</b>	<b>148.4</b>	<b>14800</b>	<b>14.3</b>	<b>\$1,611.42</b>	<b>10.89</b>	<b>\$865.17</b>	<b>\$726.25</b>	<b>-\$711.71</b>
<b>13-Jun</b>	<b>28</b>	<b>151.8</b>	<b>14600</b>	<b>14.3</b>	<b>\$1,525.87</b>	<b>10.45</b>	<b>\$884.99</b>	<b>\$640.88</b>	<b>-\$1,364.91</b>
<b>13-Jul</b>	<b>30</b>	<b>163.6</b>	<b>32480</b>	<b>27.5</b>	<b>\$2,427.30</b>	<b>7.47</b>	<b>\$953.79</b>	<b>\$1,473.51</b>	<b>-\$463.48</b>
<b>13-Aug</b>	<b>33</b>	<b>150.8</b>	<b>23880</b>	<b>19.9</b>	<b>\$1,962.53</b>	<b>8.22</b>	<b>\$879.16</b>	<b>\$1,083.37</b>	<b>-\$916.13</b>
<b>TOTAL</b>									<b>-\$4,602.70</b>

