Energy Report Summary for September 2014

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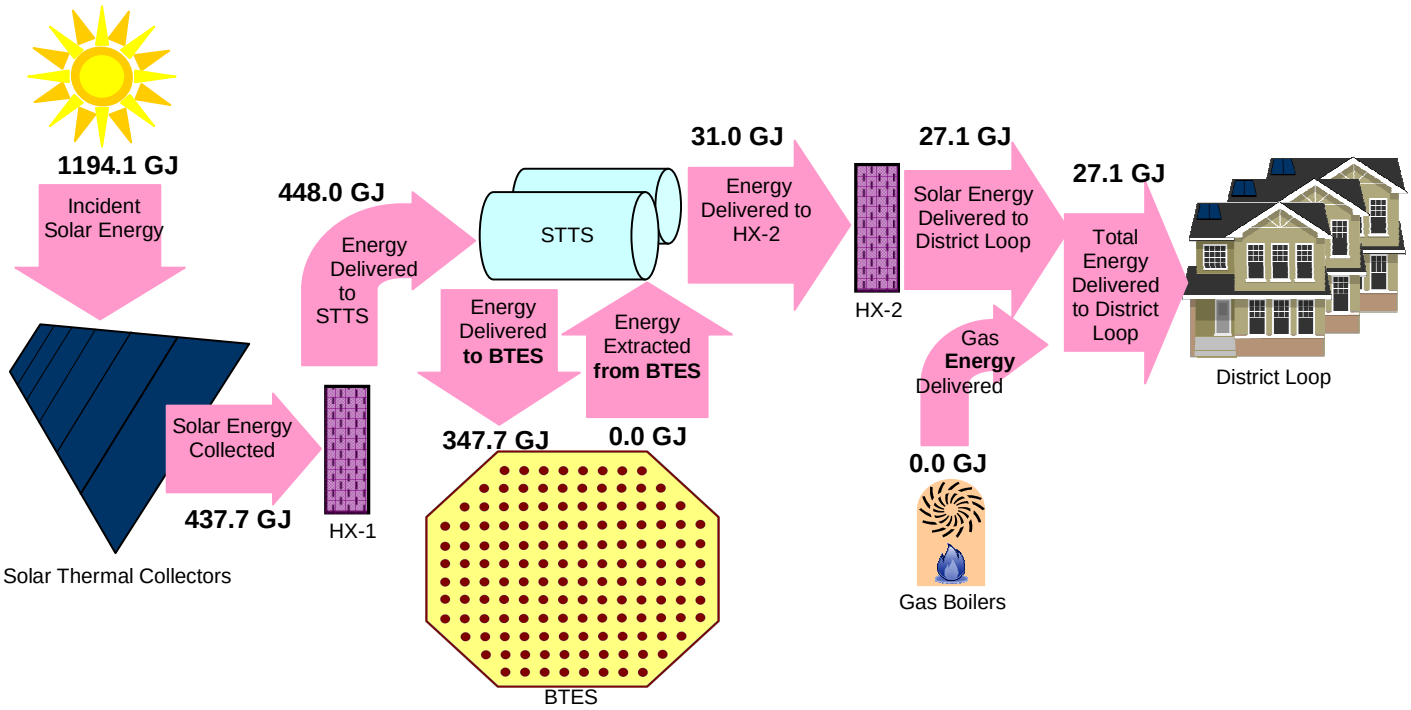
PROPRIETARY

Drake Landing Solar Community Energy Overview for September 2014

This document summarizes the energy generated and used within the Drake Landing Solar Community at Okotoks Alberta.

Additional Information may be found here: http://www.dlsc.ca



System Energy Diagram

Table 0-1 Summary for September 2014		
Description	**This Month**	**Since July 1, 2014**
Total Incident Solar Energy	1097.4 GJ	3805.6 GJ
Total Solar Energy Collected	385.8 GJ	1454.7 GJ
Total Solar Energy Delivered to STTS	383.1 GJ	1505.7 GJ
Total Energy Delivered to BTES	298.8 GJ	1189.4 GJ
Total Energy Extracted from BTES	0.0 GJ	0.0 GJ
Total Energy Delivered from STTS to HX-2	85.9 GJ	138.8 GJ
Total Solar Energy Delivered to District Loop	78.6 GJ	124.4 GJ
Natural Gas Energy Used	0.0 GJ[1]	0.0 GJ
Boiler Thermal Energy Delivered to the District Loop	0.0 GJ	0.0 GJ
Total Energy Delivered to District Loop	78.6 GJ	124.4 GJ
Average Solar Collector Efficiency	35 %	38 %
Average Efficiency of HX-1	99 %	104 %
Average Efficiency of HX-2	92 %	90 %
Average BTES core temperature	58.7 °C	58.5 °C
Electrical energy used	2.1 GJ[2]	11.5 GJ[3]
PV energy generated	6.3003 GJ	26.8 GJ
Net change in energy stored in STTS	53.3 GJ	241.5 GJ
Solar Fraction	100.0 %	100.0 %

[1] Gas consumption is reported during monthly maintenance inspections which may not coincide with the reporting period. The reported gas consumption is for the period between August 1, and September 19, 2014
[2] The electrical energy consumption is reported during monthly maintenance inspections which may not coincide with the reporting period. The reported gas consumption is for the period between September 19, and October 6, 2014.
[3] Since June 26, 2014.