

Energy Report Summary for March 2016

Prepared for:



Natural Resources Canada Ressources Naturelles Canada



Prepared by:





Leidos Canada (Formerly SAIC Canada)

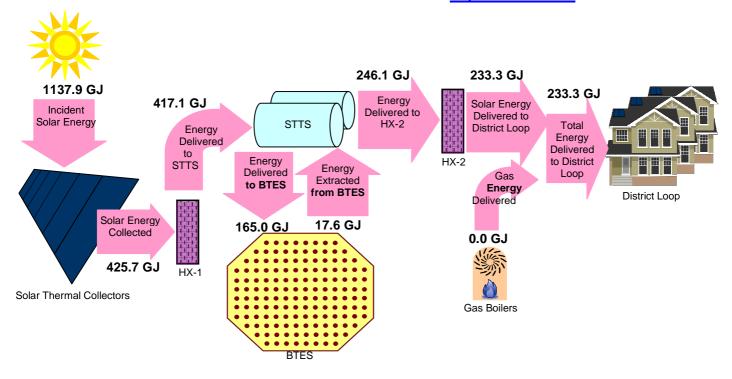
June 23, 2016 Document Version 1.0 CM002171

PROPRIETARY

Drake Landing Solar Community Energy Overview for March 2016

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

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



System Energy Diagram

Table 0-1 Summary for March 2016				
Description	This Month		Since July 1, 2015	
Total Incident Solar Energy	1137.9	GJ	8691.5	GJ
Total Solar Energy Collected	425.7	GJ	2892.9	GJ
Total Solar Energy Delivered to STTS	417.1	GJ	2879.3	GJ
Total Energy Delivered to BTES	165.0	GJ	1558.0	GJ
Total Energy Extracted from BTES	17.6	GJ	852.1	GJ
Total Energy Delivered from STTS to HX-2	246.1	GJ	2011.7	GJ
Total Solar Energy Delivered to District Loop	233.3	GJ	1942.2	GJ
Natural Gas Energy Used	0.0	GJ ¹	1.0	GJ
Boiler Thermal Energy Delivered to the District Loop	0.0	GJ	2.1	GJ
Total Energy Delivered to District Loop	233.3	GJ	1944.3	GJ
Average Solar Collector Efficiency	37	%	33	%
Average Efficiency of HX-1	98	%	100	%
Average Efficiency of HX-2	95	%	97	%
Average BTES core temperature	-	°C	58.0	°C
Electrical energy used	5.5691	GJ	64.2	GJ ²
PV energy generated	6.3104	GJ	45.2	GJ
Net change in energy stored in STTS	23.6	GJ	161.7	GJ
Solar Fraction	100.0	%	99.9	%

CM002171 3 Leidos Canada

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 February 26, 2016 and April 29, 2016

Since June 30, 2015.