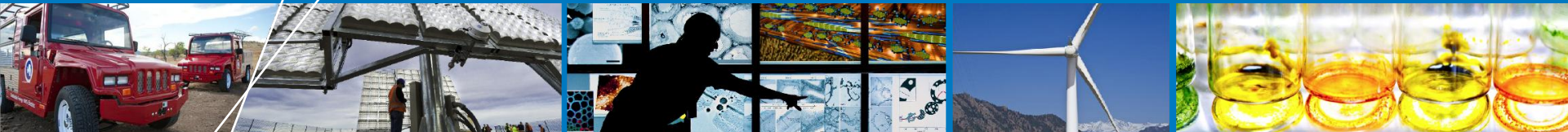


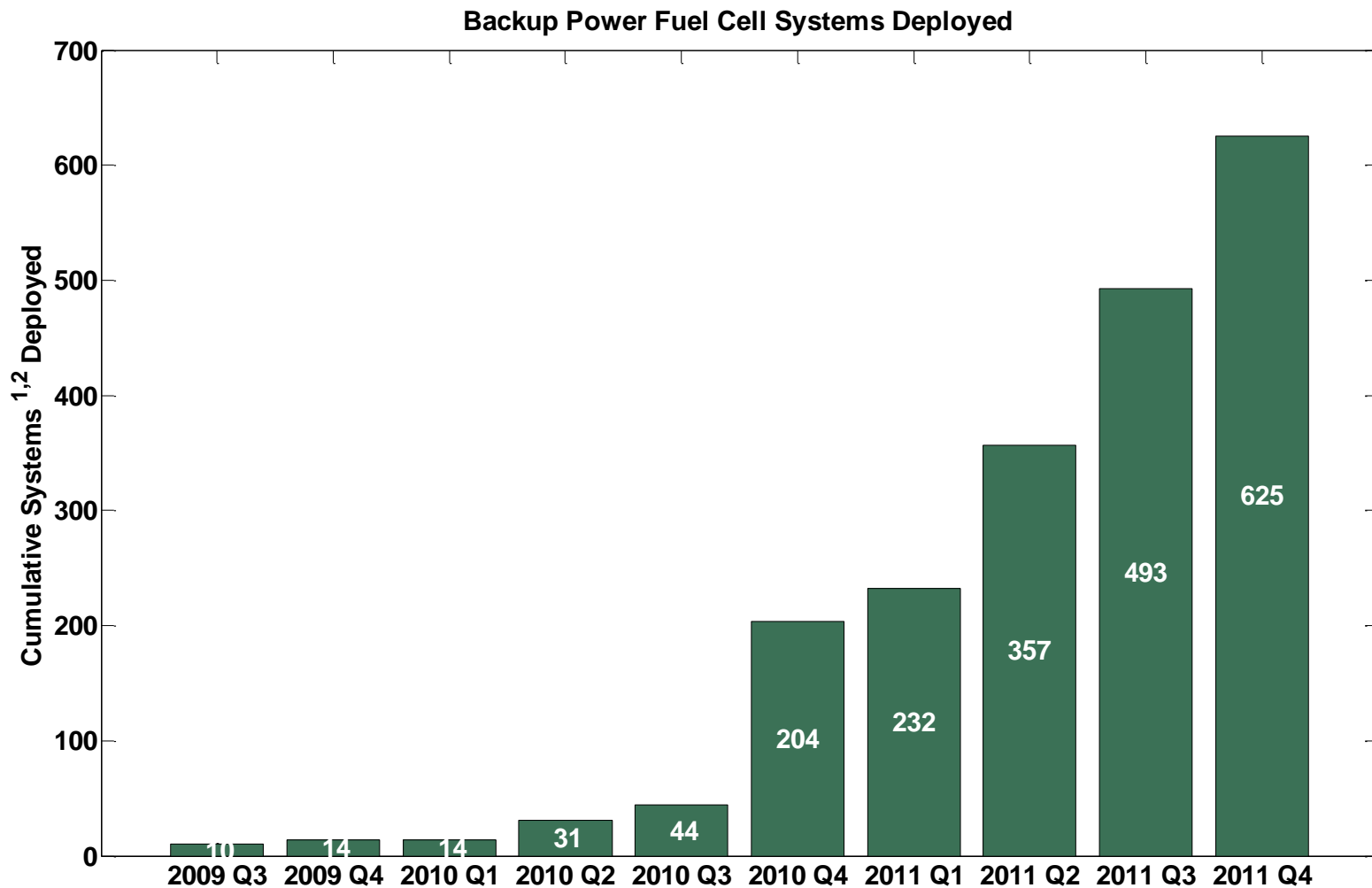
Spring 2012 Composite Data Products – Backup Power



**J. Kurtz, K. Wipke, S.
Sprik, T. Ramsden, C.
Ainscough, G. Saur**

April 3, 2012

Backup Power Fuel Cell Systems Deployed

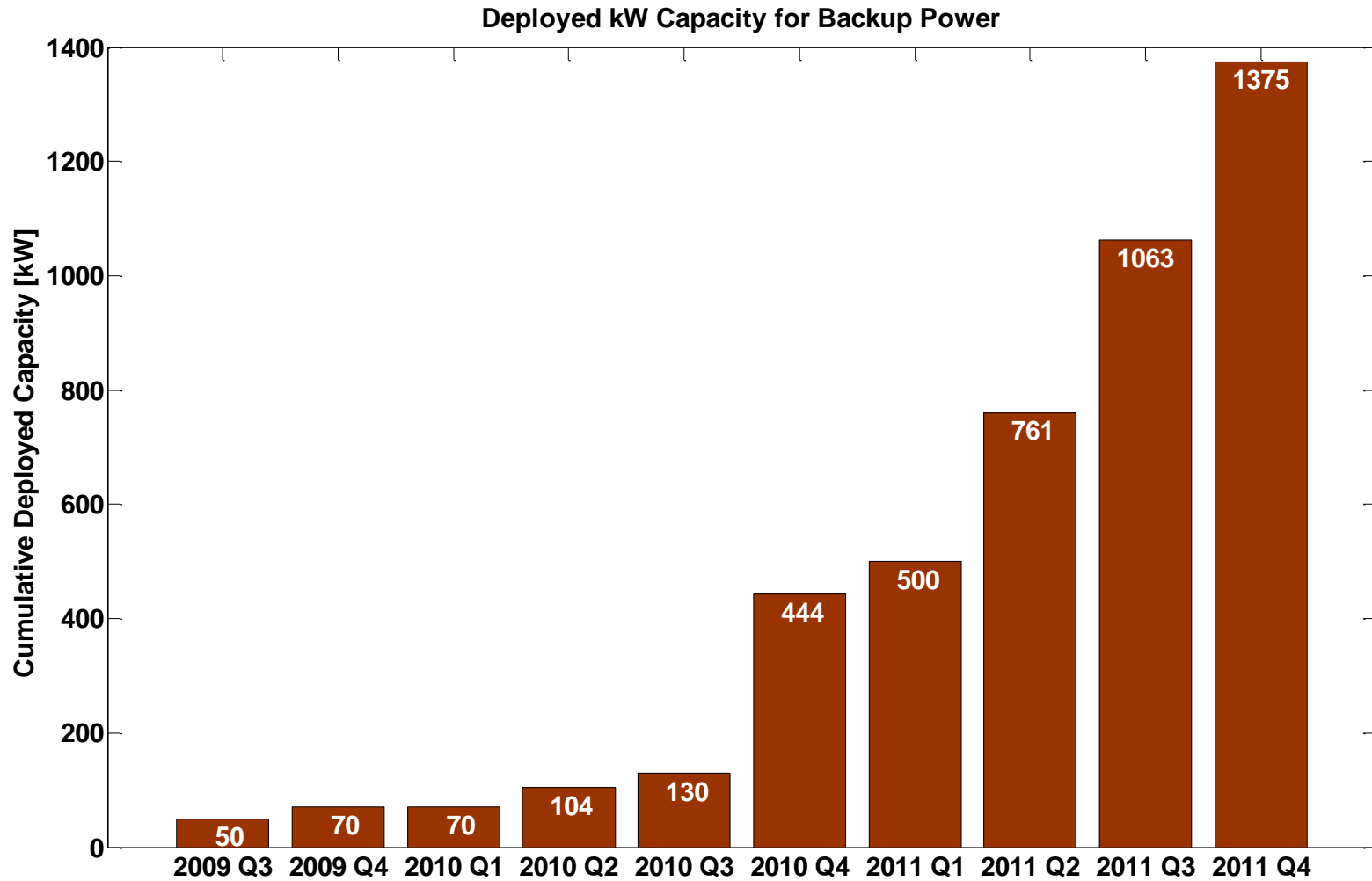


NREL cdp_bu_01

Created: Mar-26-12 12:21 PM

- 1) Sites may have more than one FC system
- 2) Not all FC systems are supplying operation data

Deployed kW Capacity for Backup Power



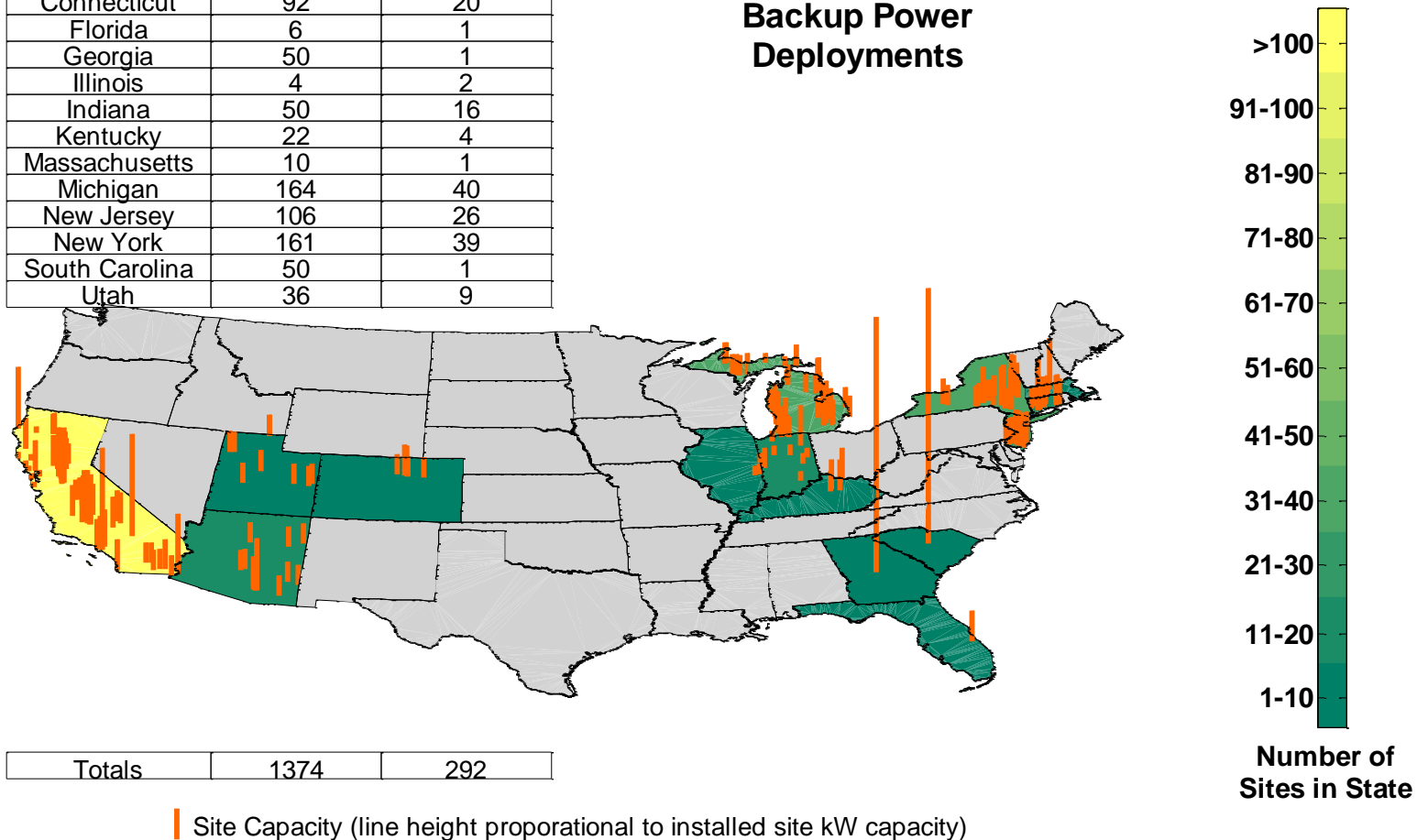
NREL cdp_bu_02

Created: Mar-26-12 12:22 PM

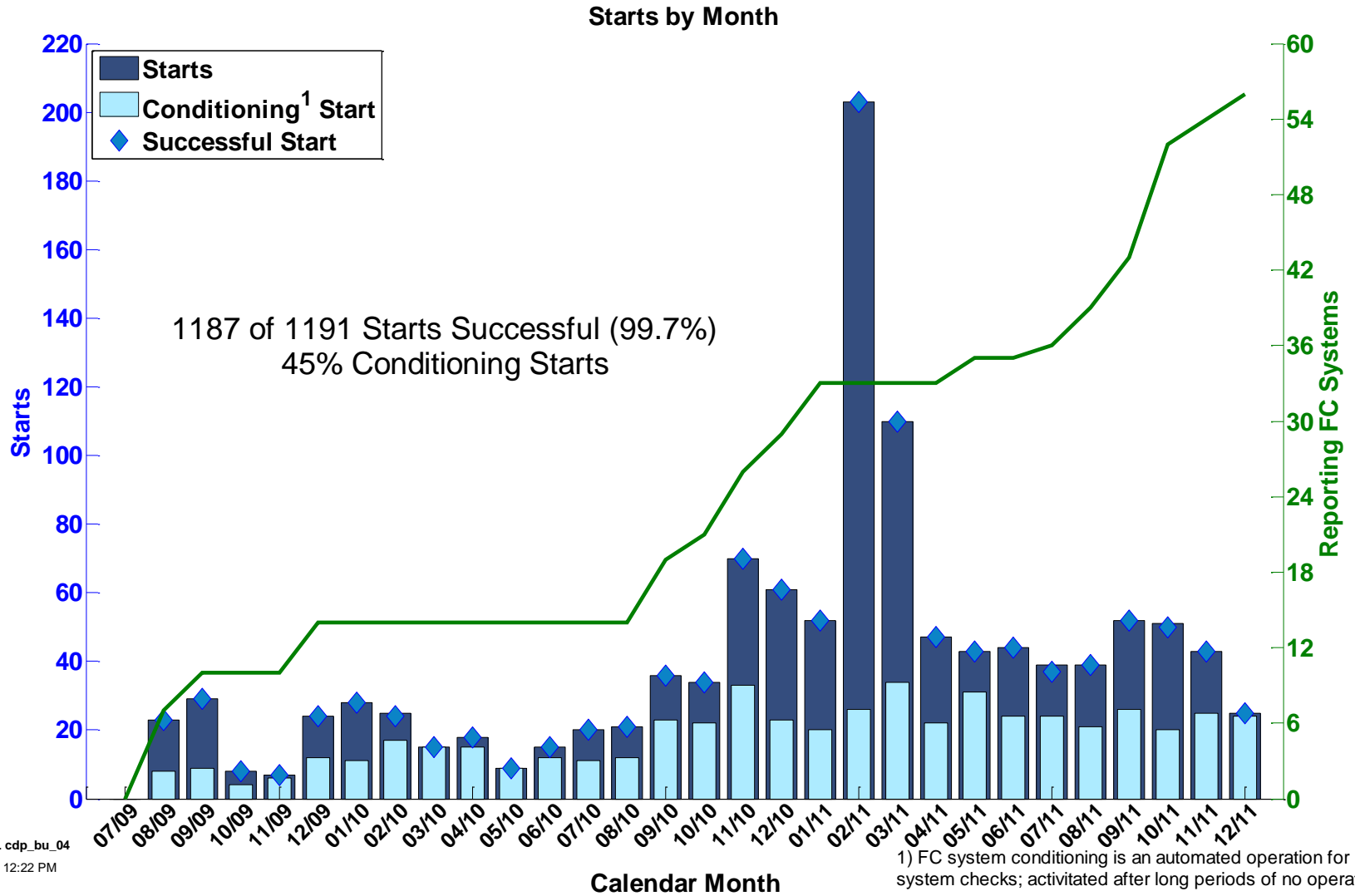
Backup Power Deployments

State	kW Capacity	Sites
Arizona	84	16
California	515	111
Colorado	24	5
Connecticut	92	20
Florida	6	1
Georgia	50	1
Illinois	4	2
Indiana	50	16
Kentucky	22	4
Massachusetts	10	1
Michigan	164	40
New Jersey	106	26
New York	161	39
South Carolina	50	1
Utah	36	9

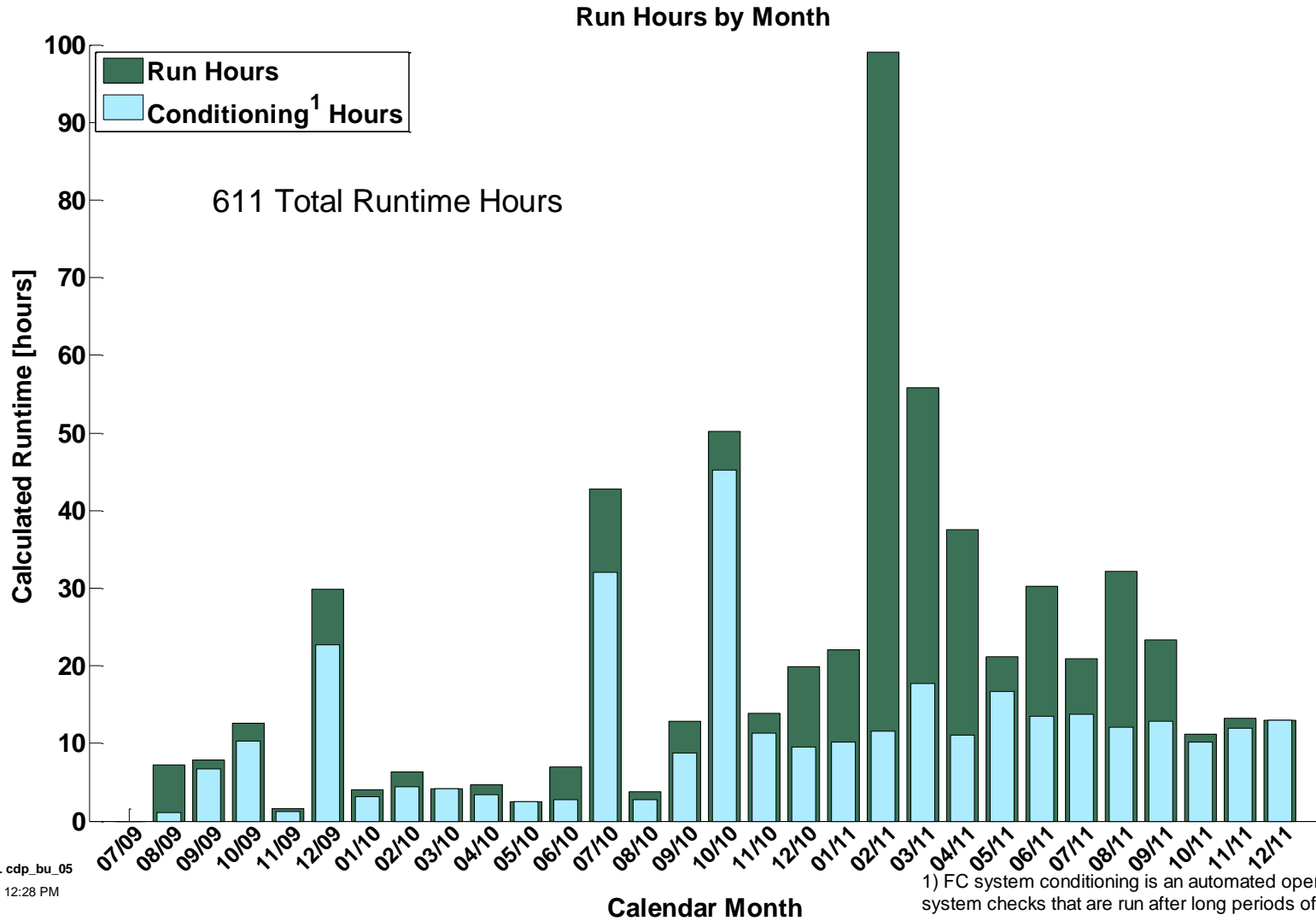
Backup Power Deployments



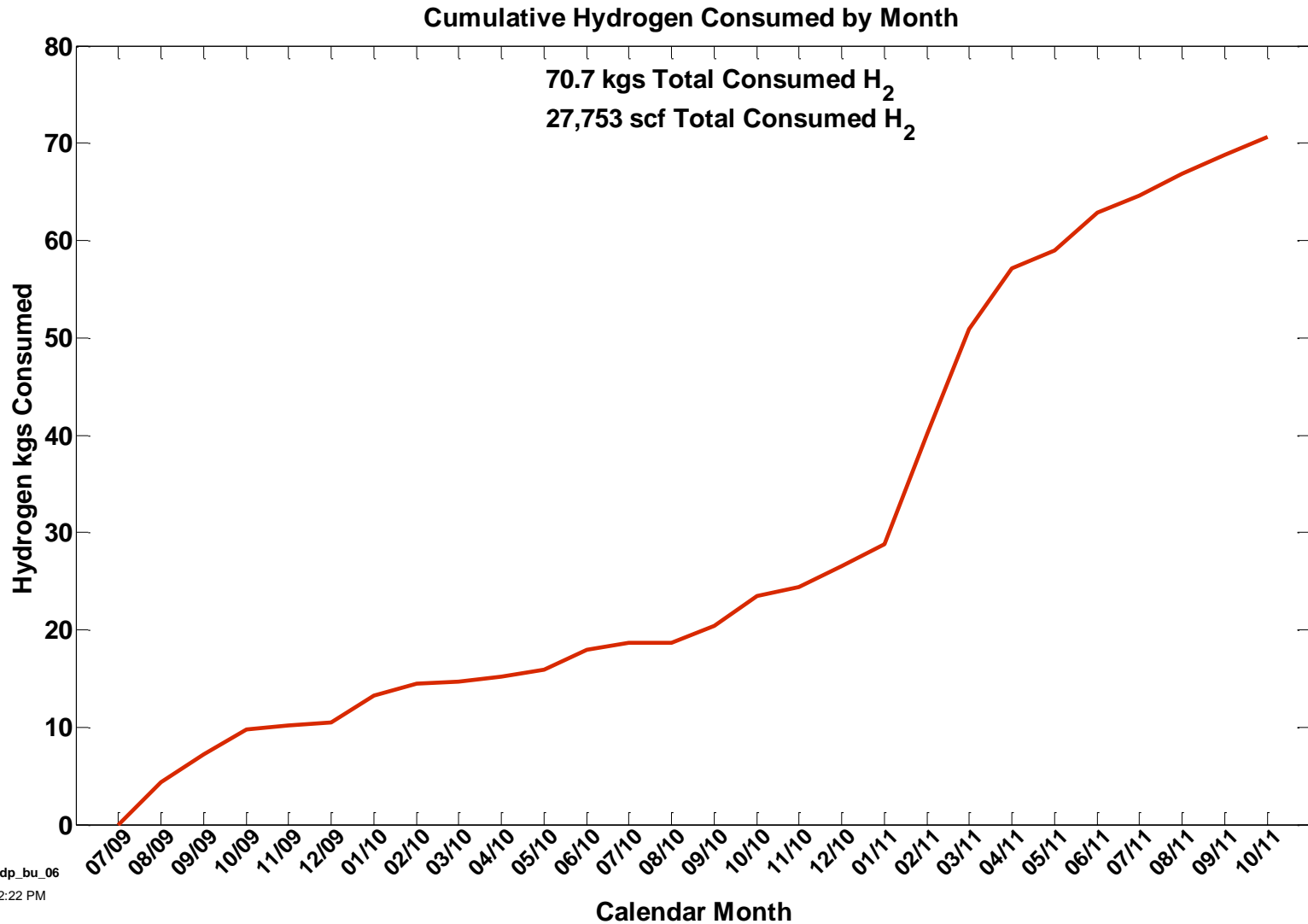
Fuel Cell System Starts by Month



Fuel Cell System Run Hours by Month



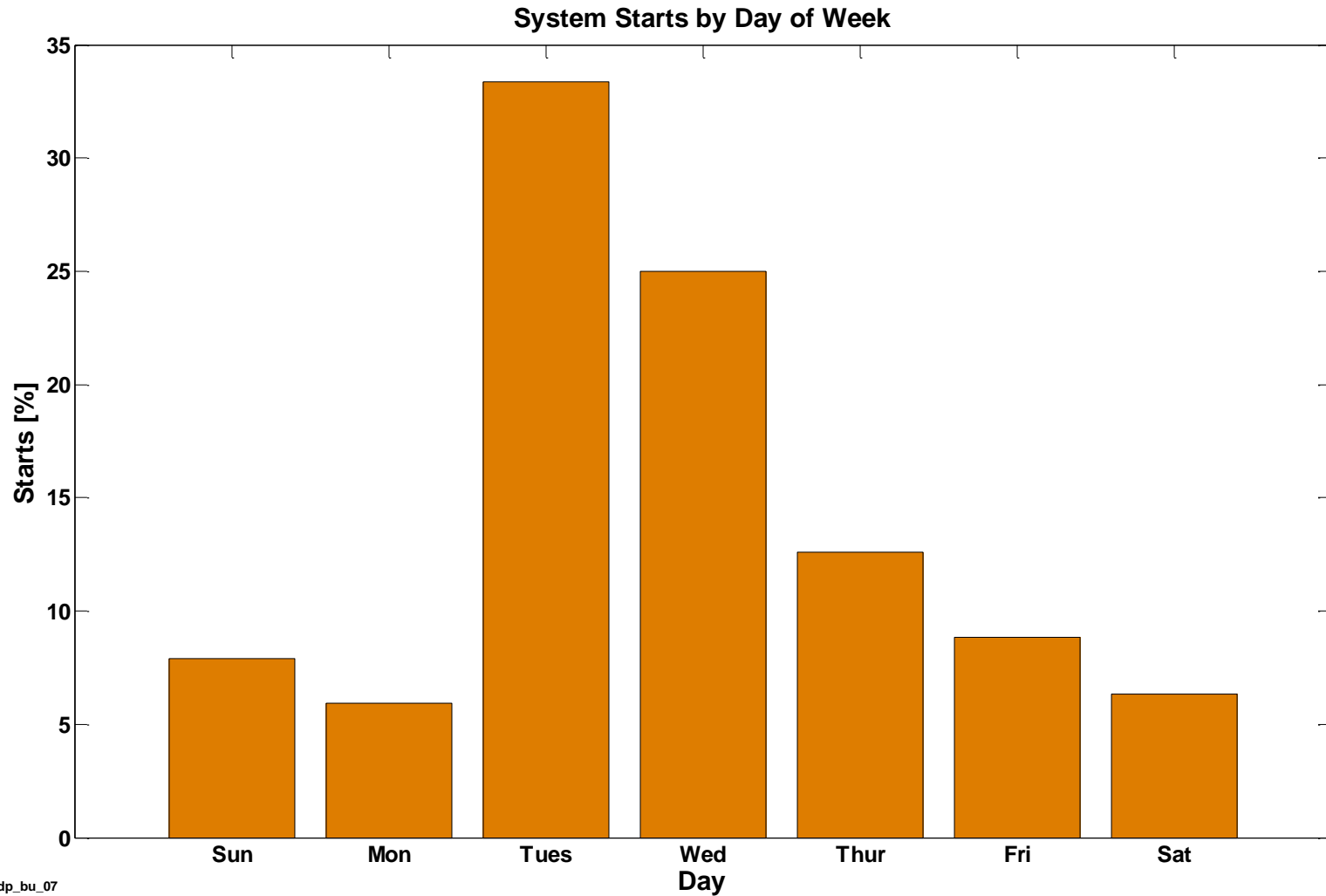
Cumulative Hydrogen Consumed by Month



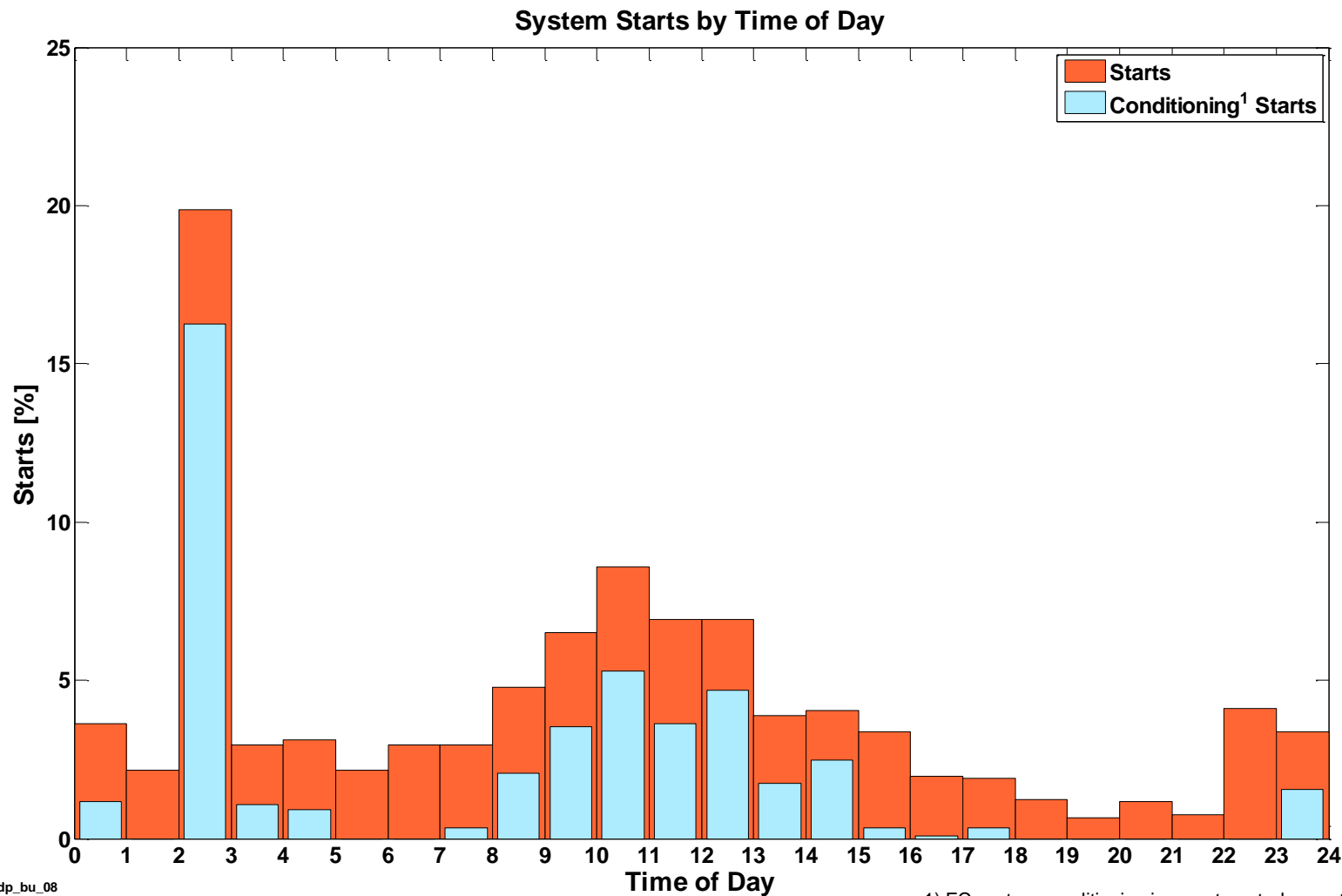
NREL cdp_bu_06

Created: Mar-26-12 12:22 PM

Fuel Cell System Starts by Day of Week



Fuel Cell System Starts by Time of Day

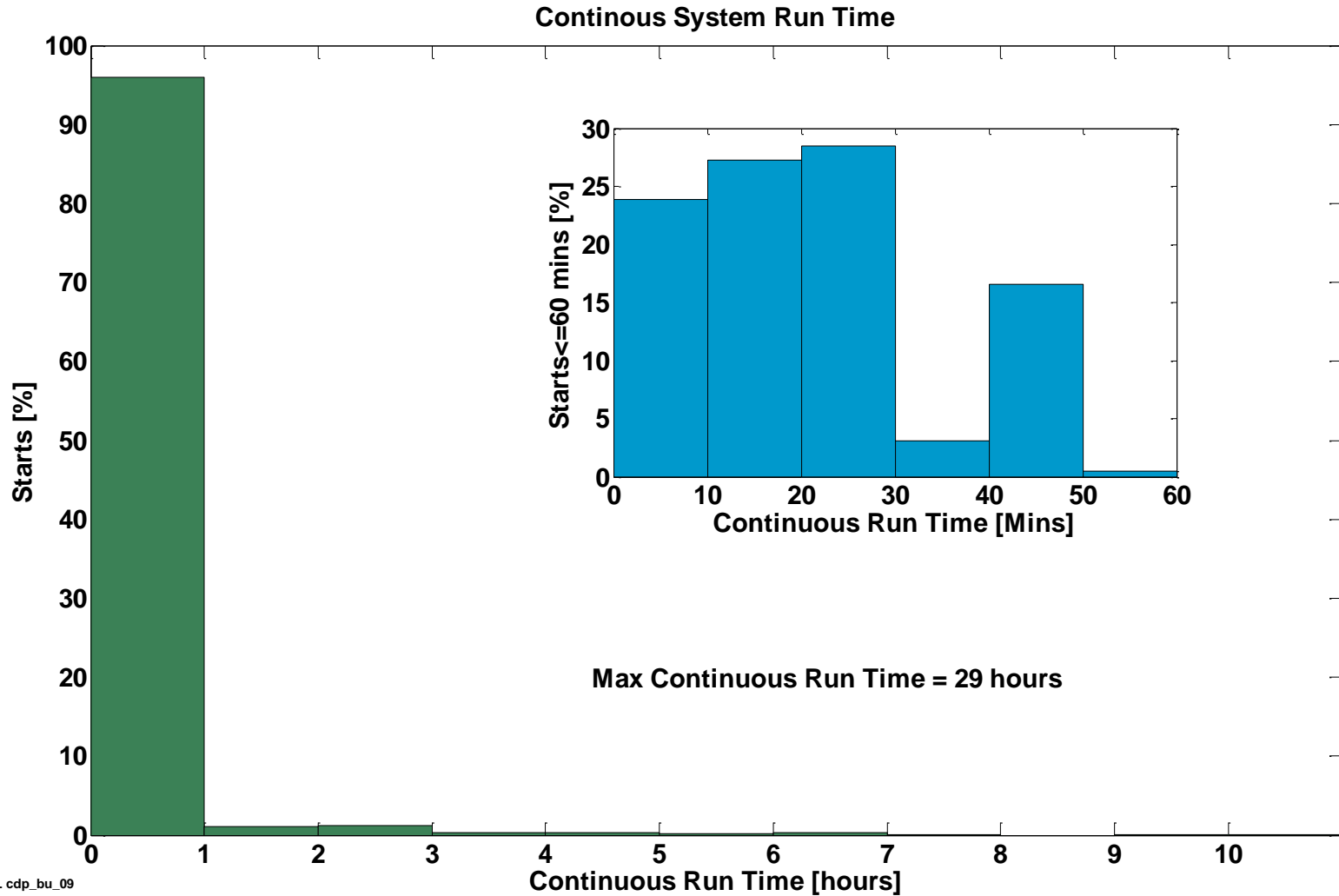


NREL cdp_bu_08

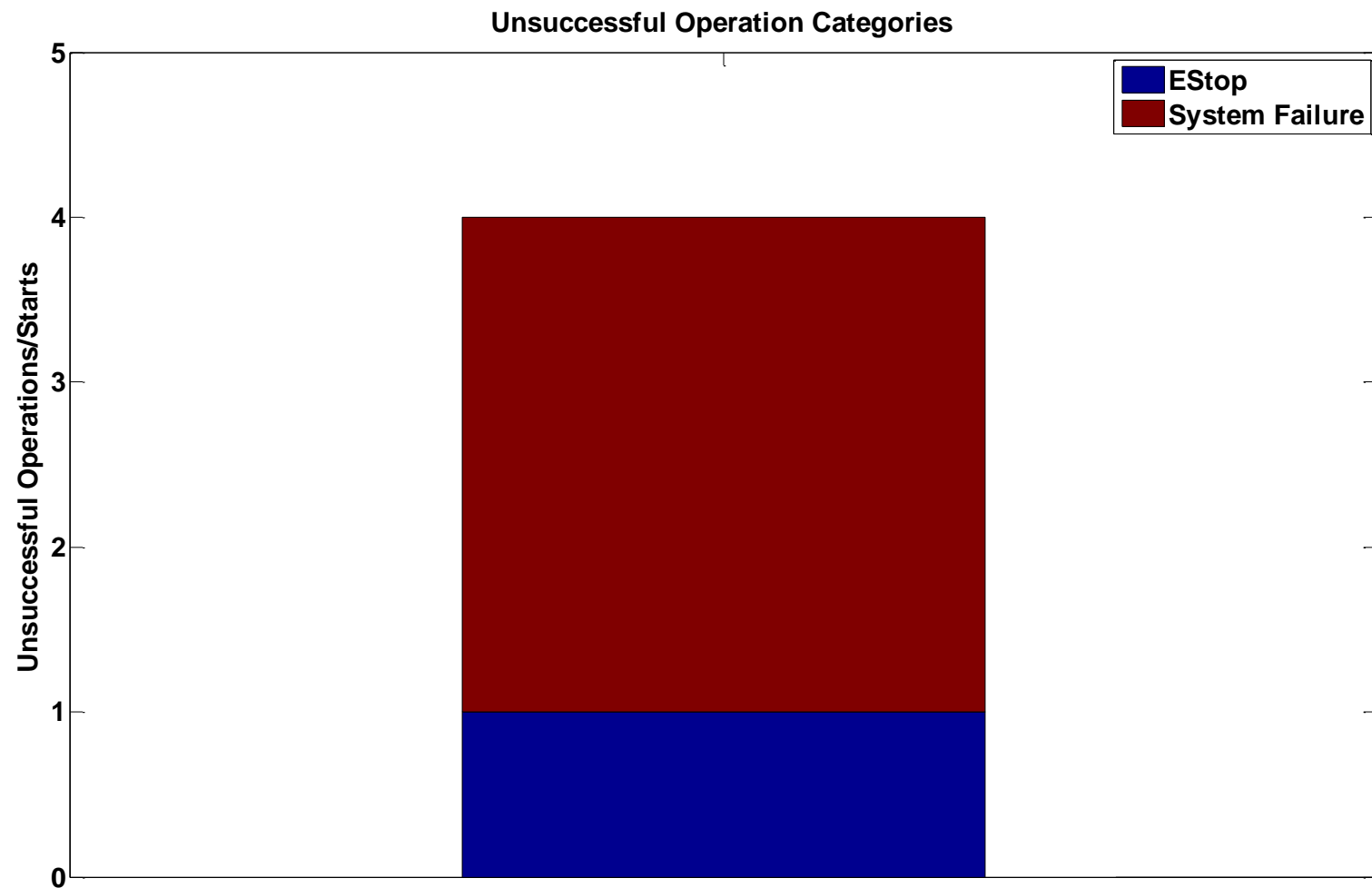
Created: Mar-26-12 12:23 PM

1) FC system conditioning is an automated operation for regular system checks; activated after long periods of no operation.

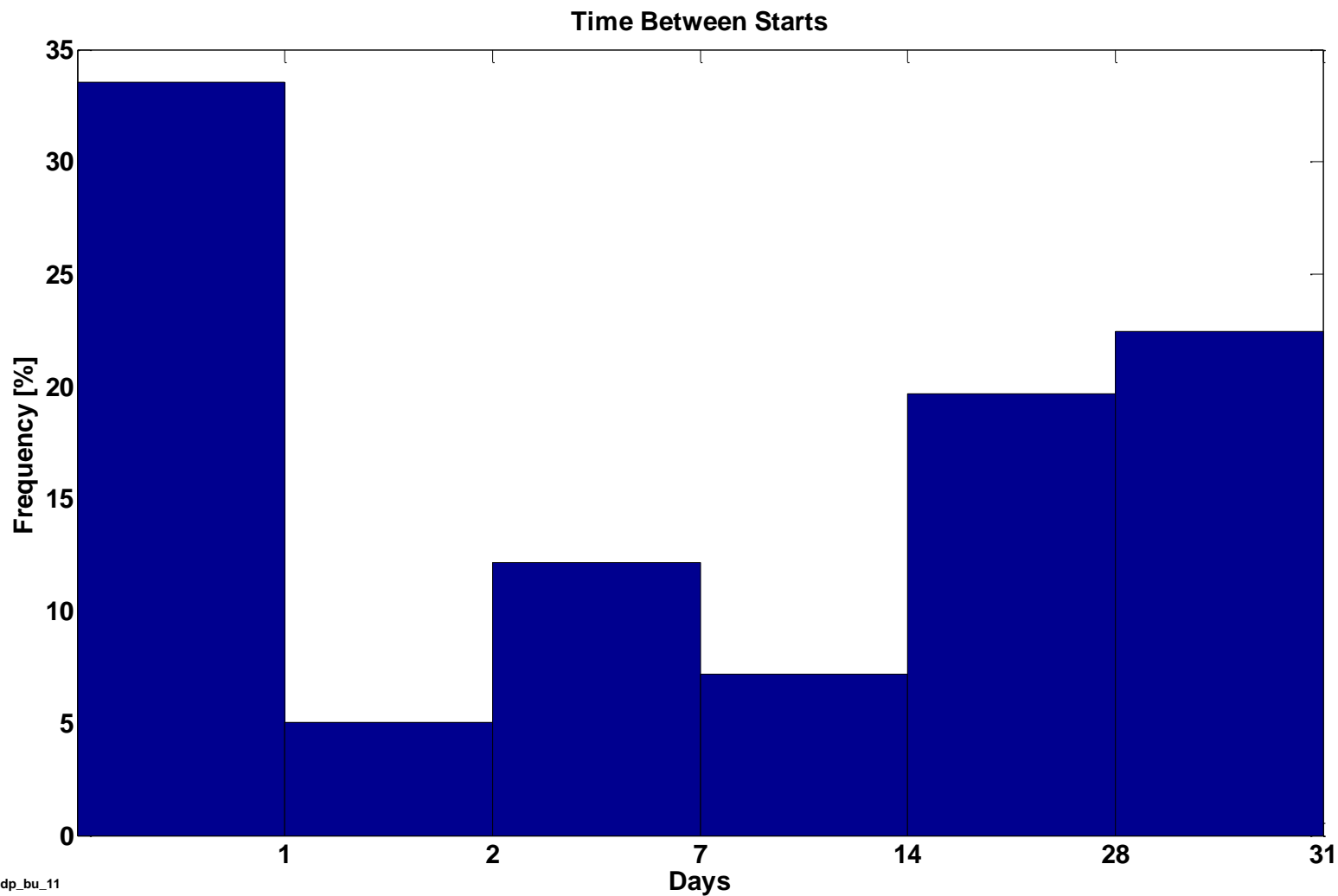
Continuous Fuel Cell System Run Time

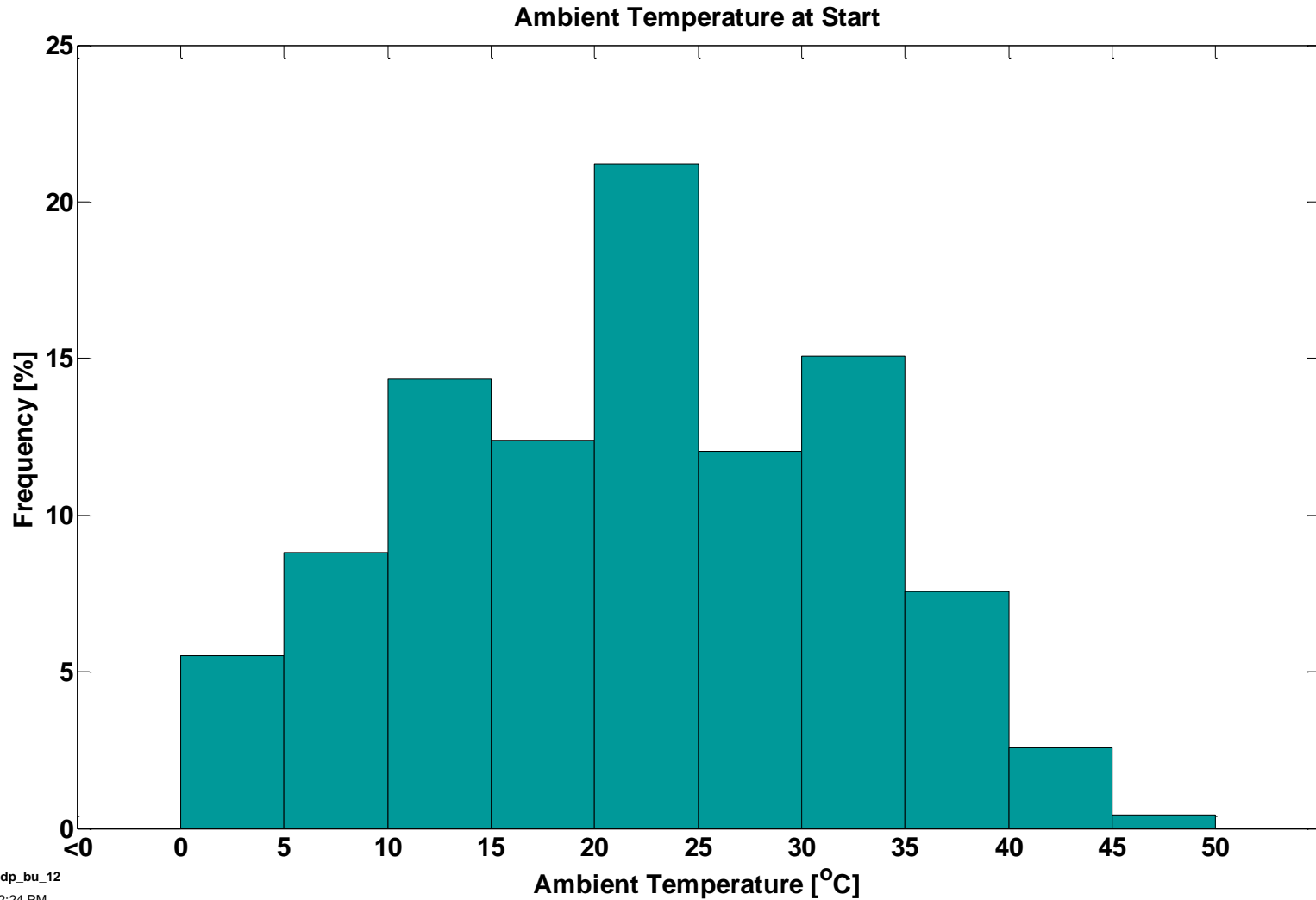


Unsuccessful Operation Categories



Time Between System Starts





NREL cdp_bu_12

Created: Mar-26-12 12:24 PM

