



Technical Report
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Fall 2012 Composite Data Products – Backup Power

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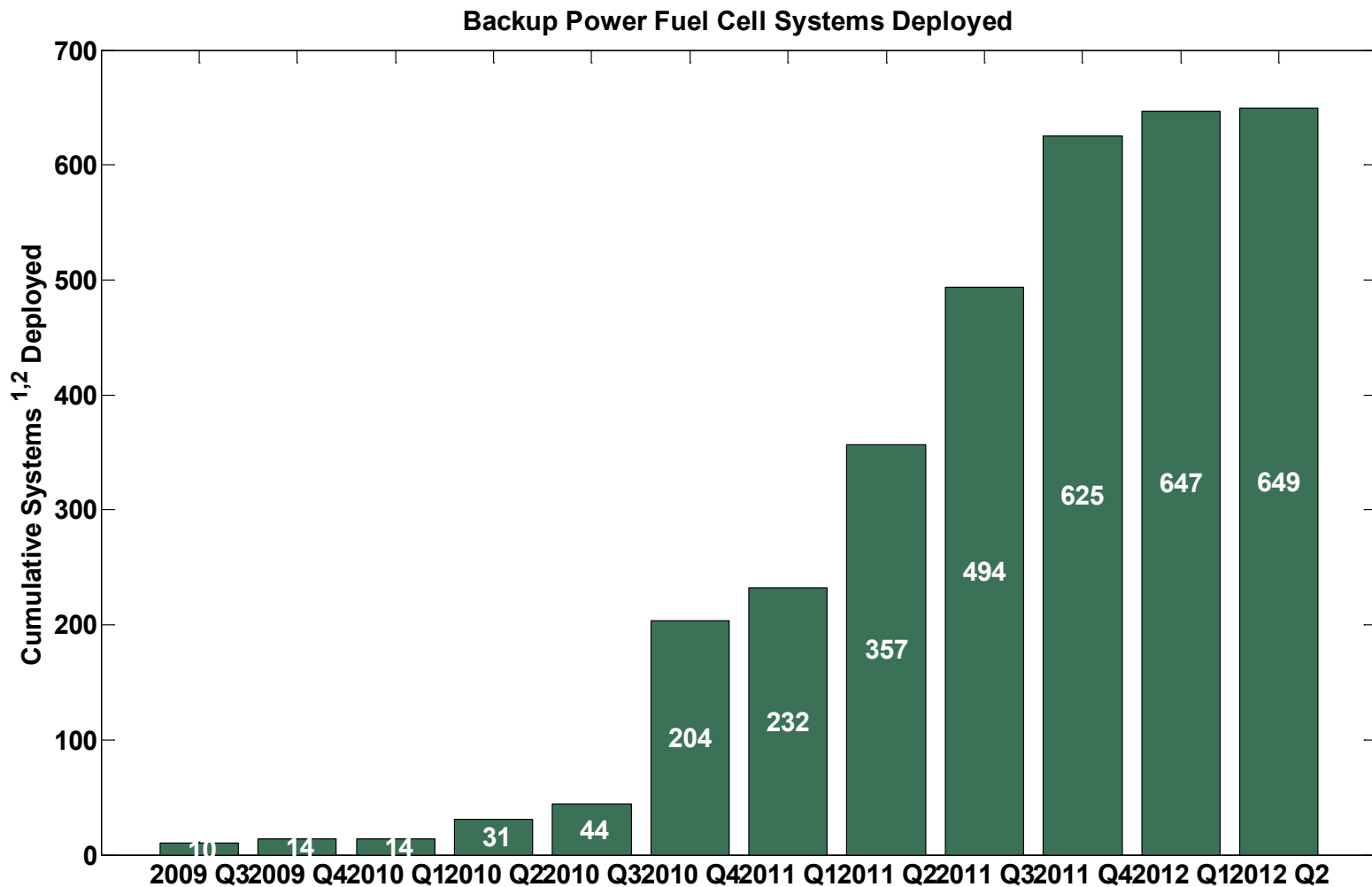
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Backup Power Fuel Cell Systems Deployed

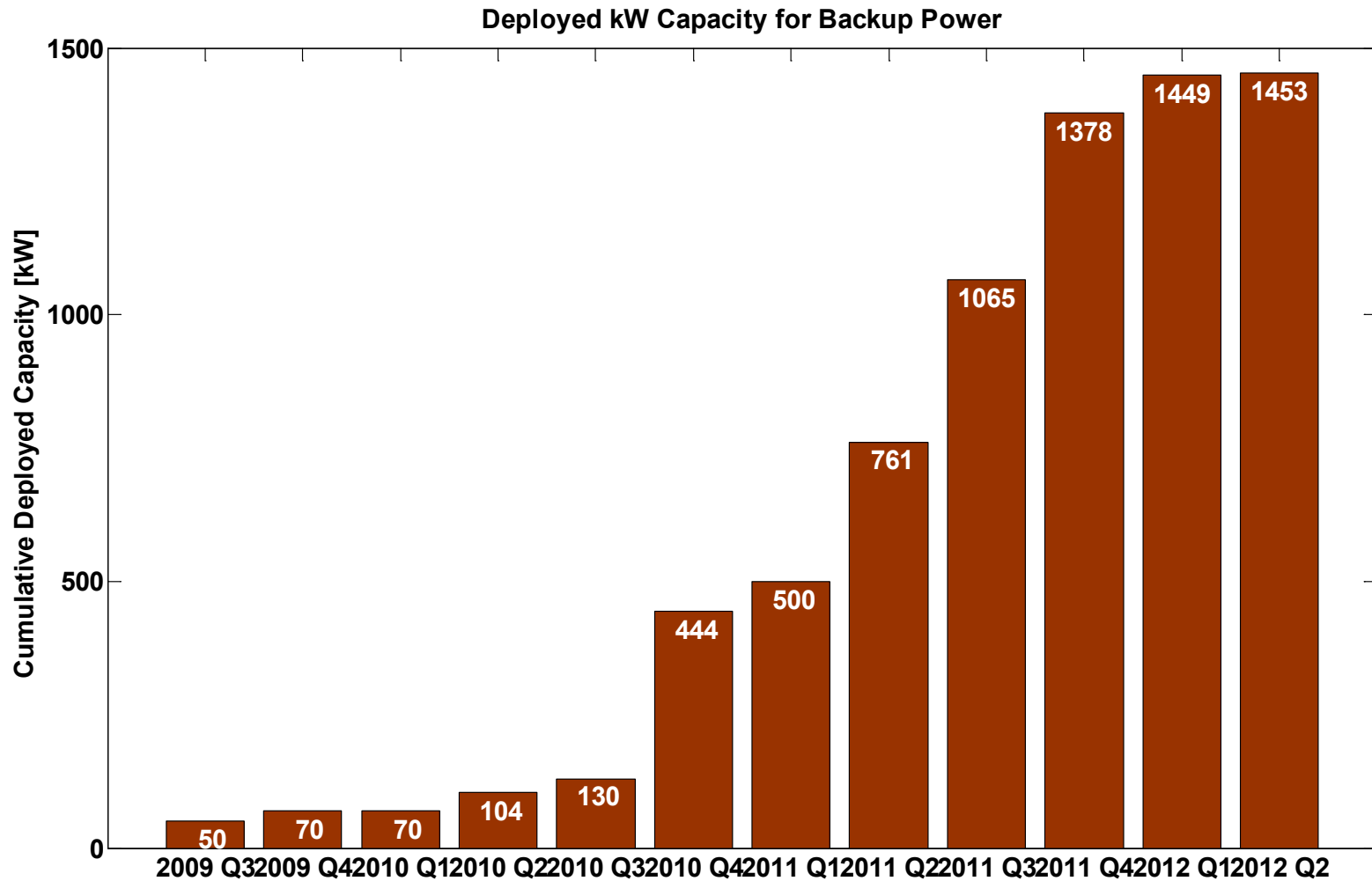


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- 1) Sites may have more than one FC system
- 2) Not all FC systems are supplying operation data

Deployed kW Capacity for Backup Power



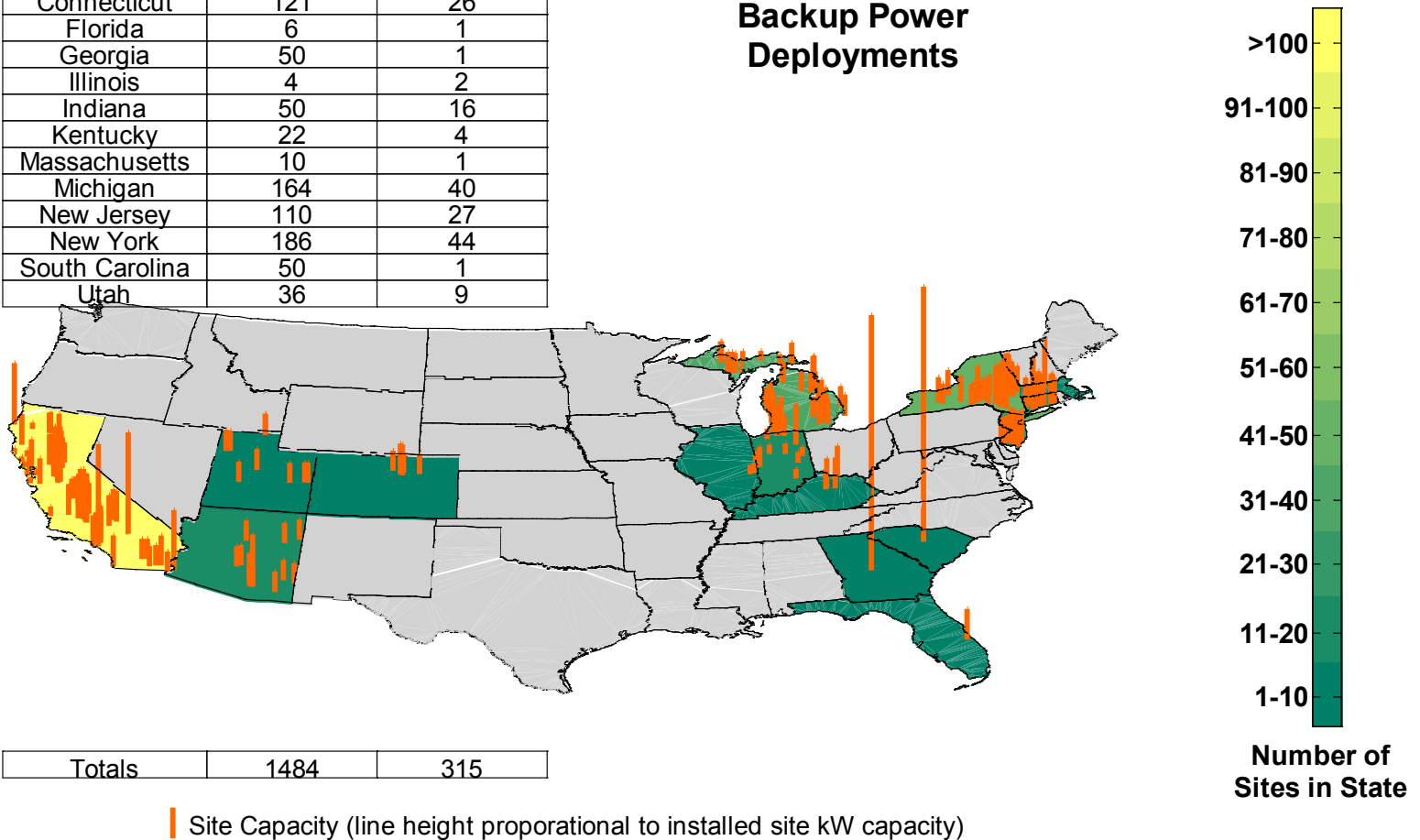
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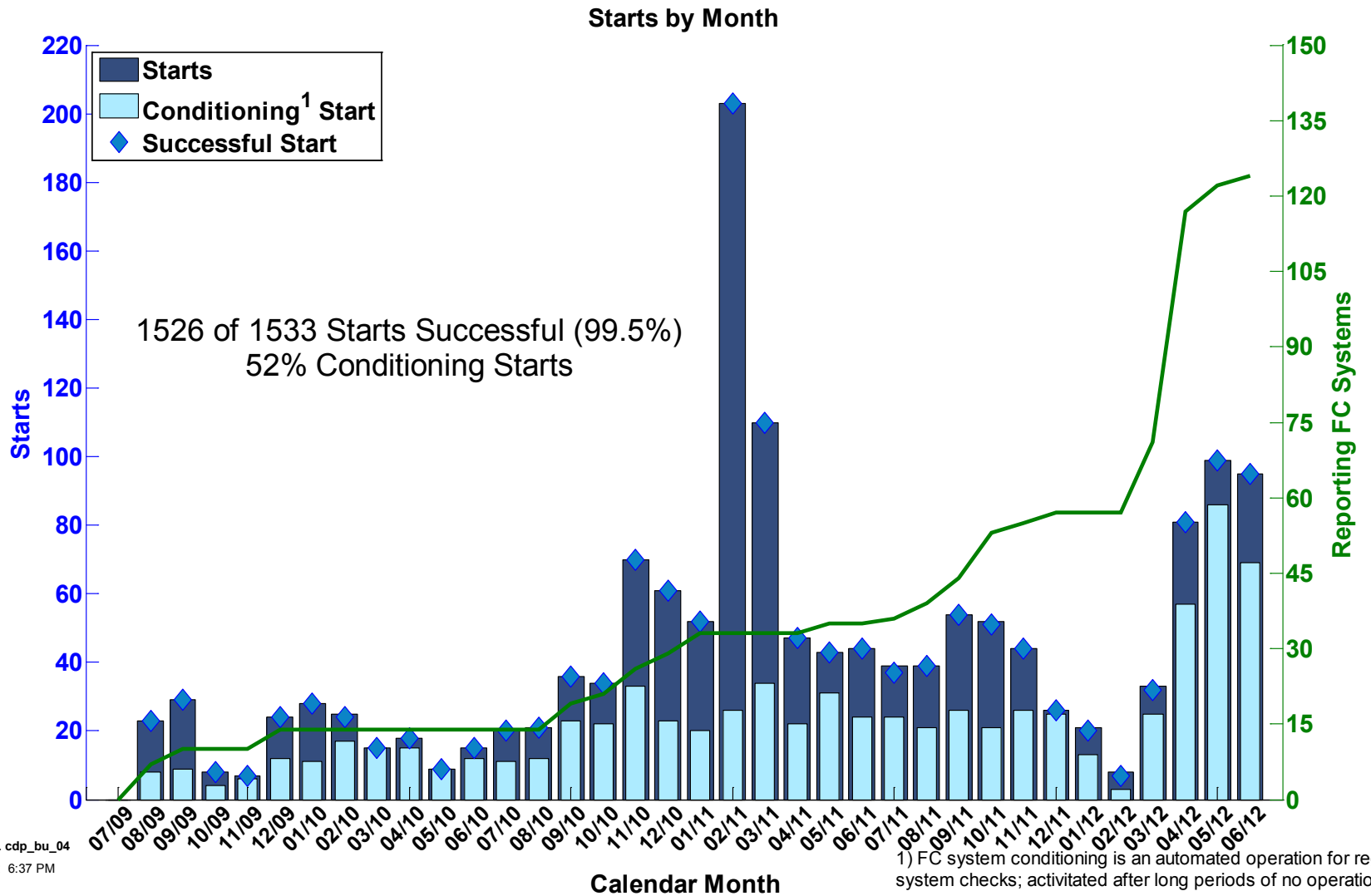
Backup Power Deployments

State	kW Capacity	Sites
Arizona	84	16
California	567	122
Colorado	24	5
Connecticut	121	26
Florida	6	1
Georgia	50	1
Illinois	4	2
Indiana	50	16
Kentucky	22	4
Massachusetts	10	1
Michigan	164	40
New Jersey	110	27
New York	186	44
South Carolina	50	1
Utah	36	9

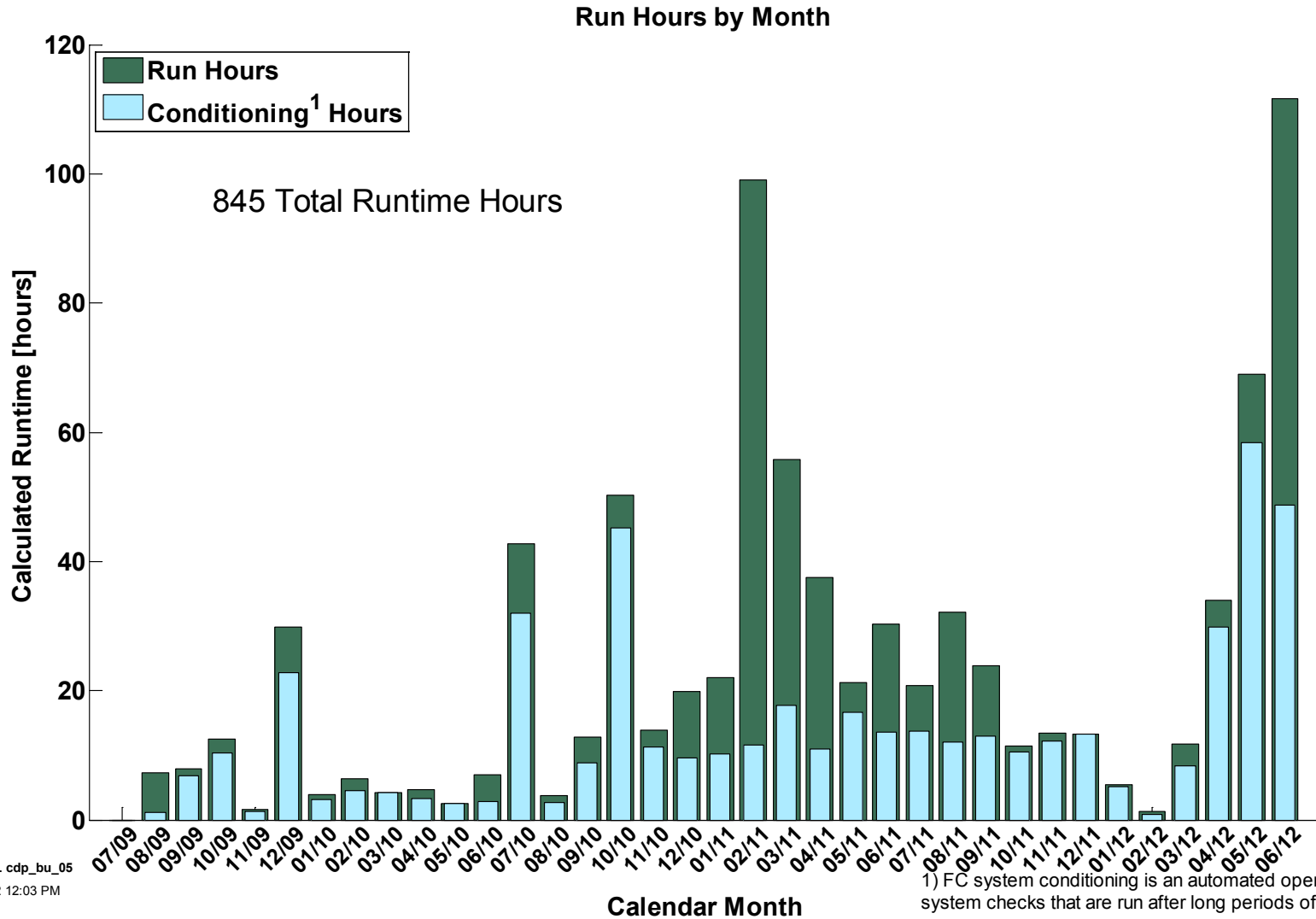
Backup Power Deployments



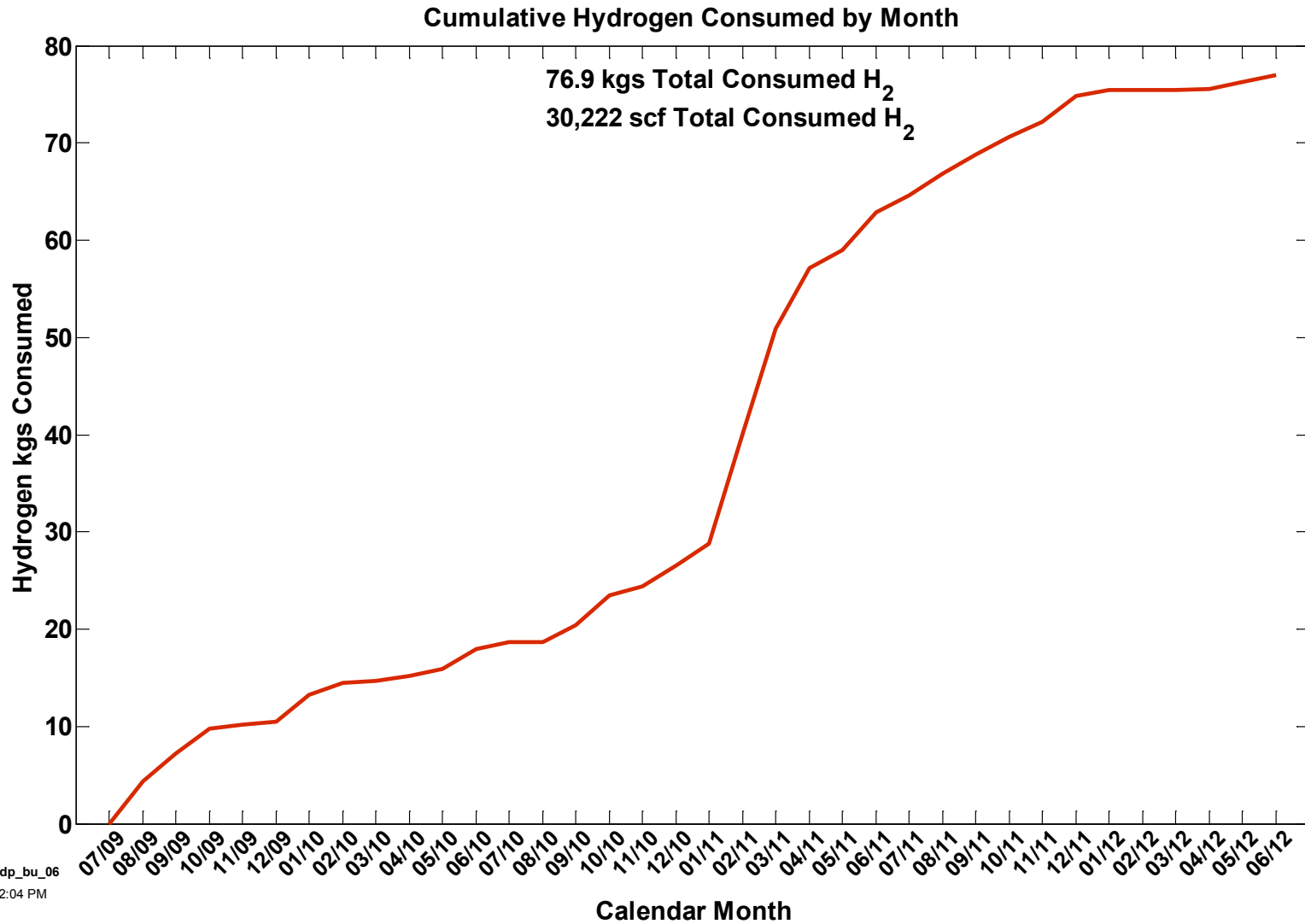
Fuel Cell System Starts by Month



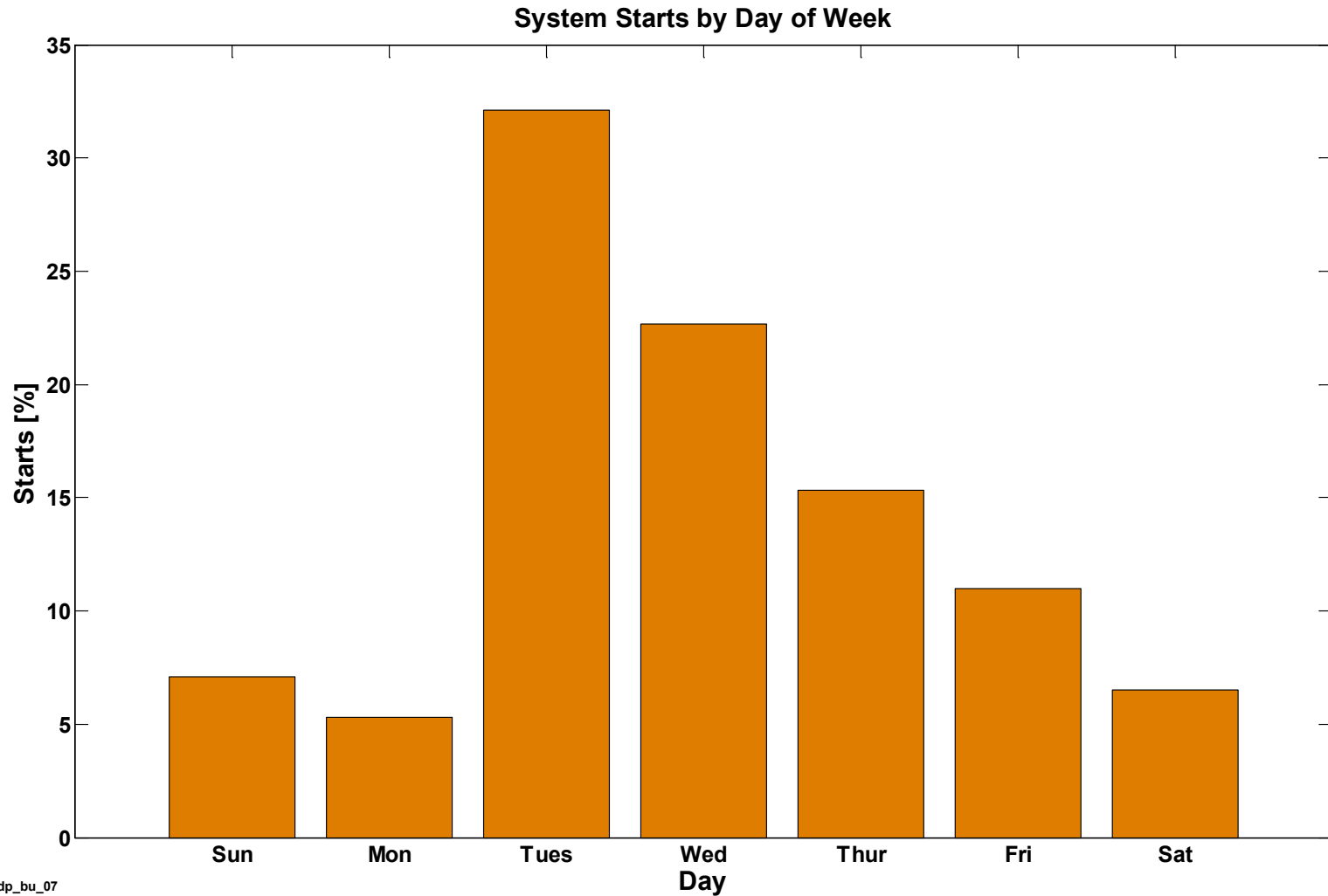
Fuel Cell System Run Hours by Month



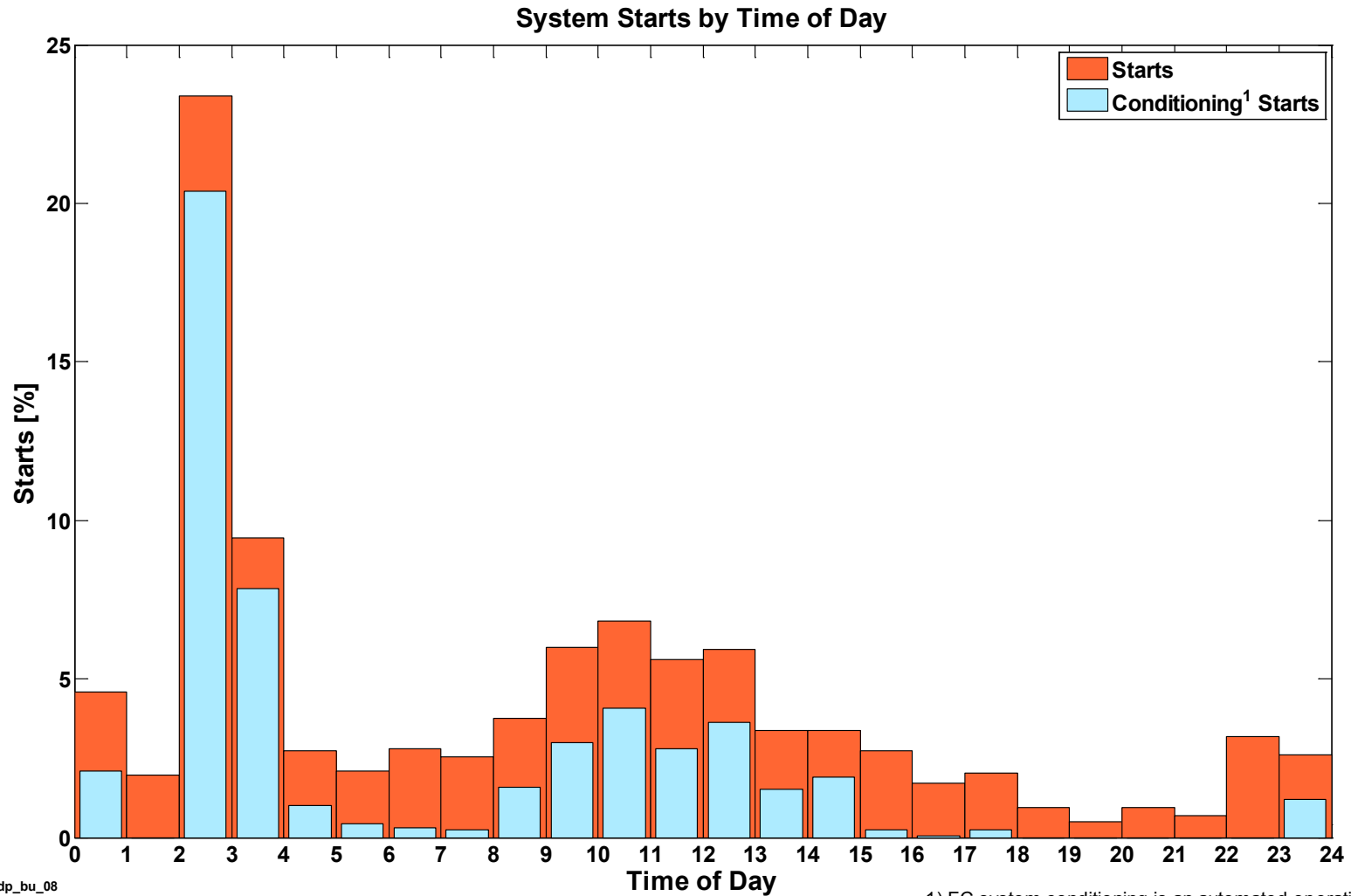
Cumulative Hydrogen Consumed by Month



Fuel Cell System Starts by Day of Week



Fuel Cell System Starts by Time of Day

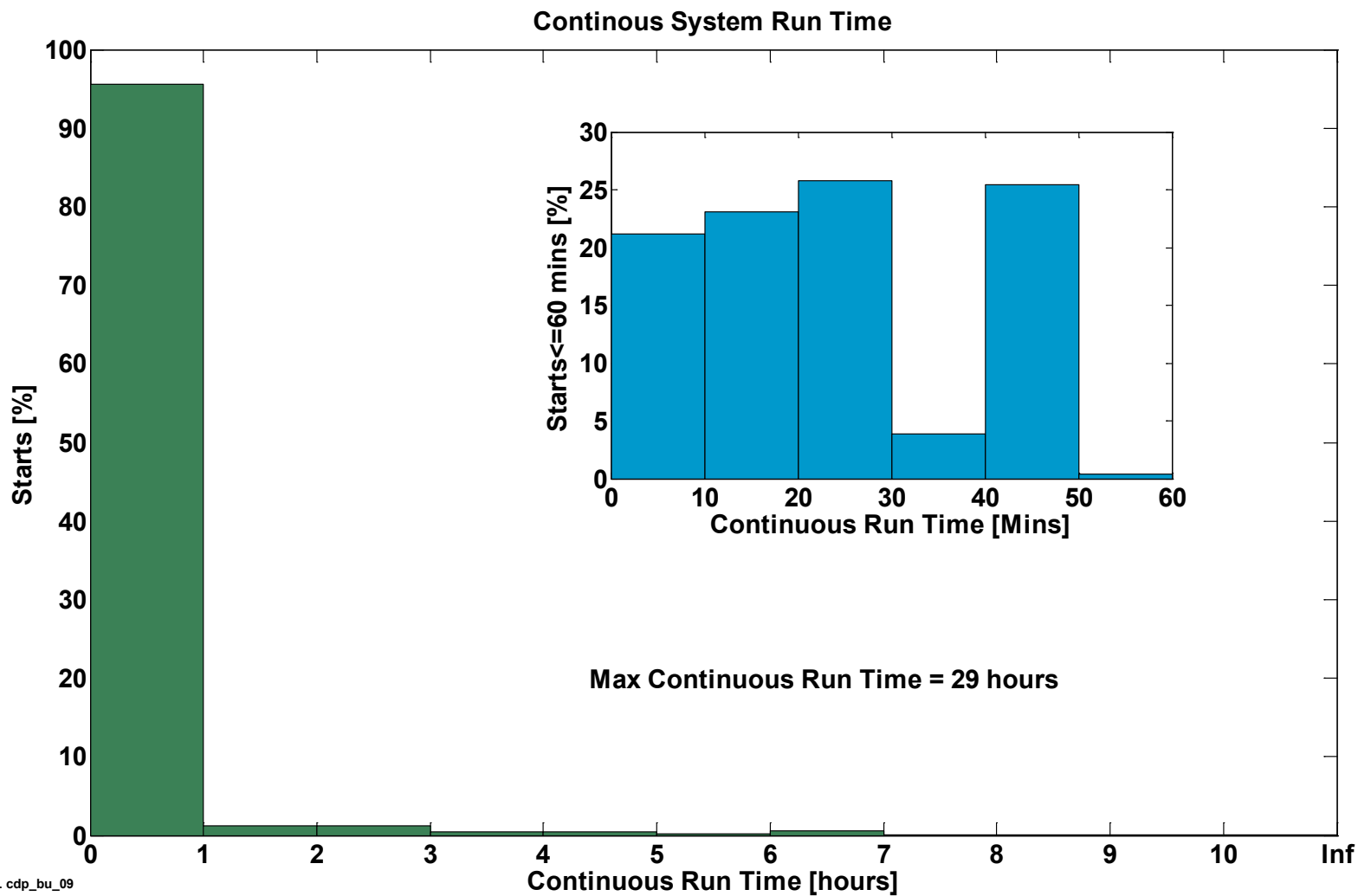


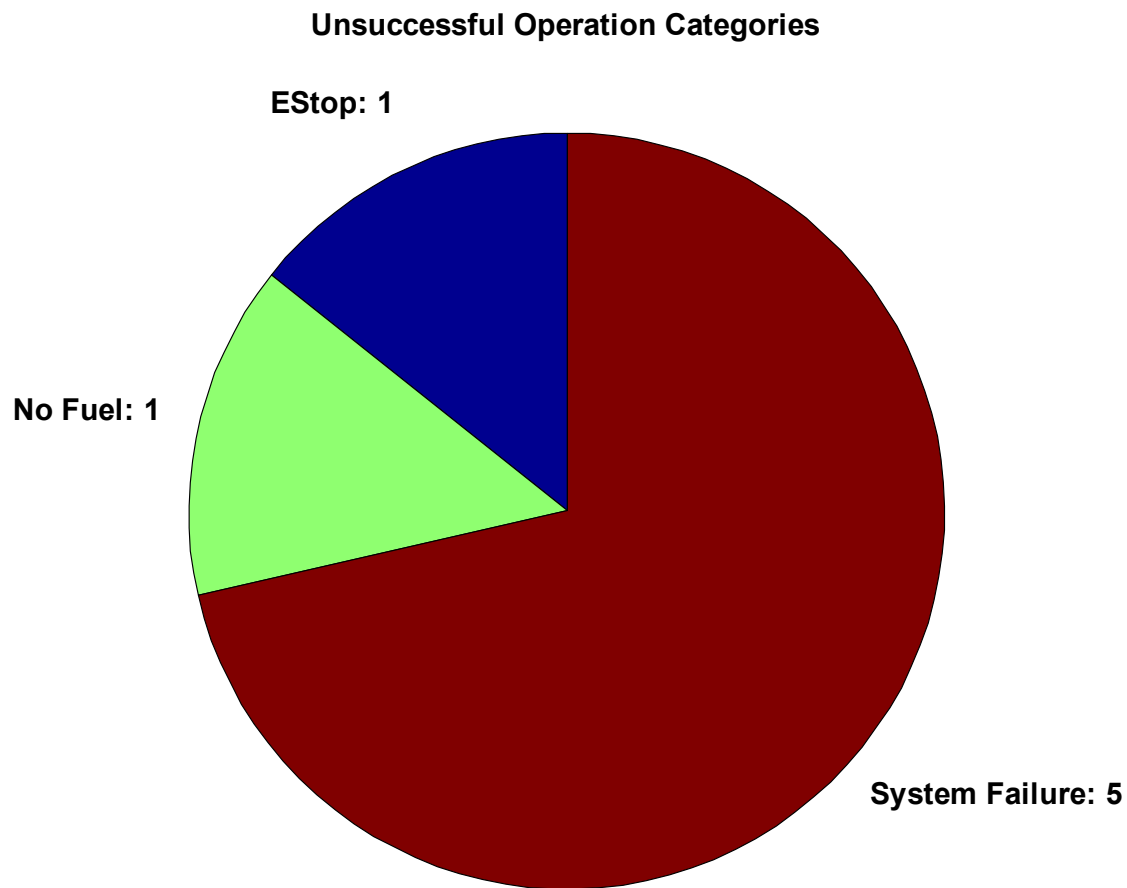
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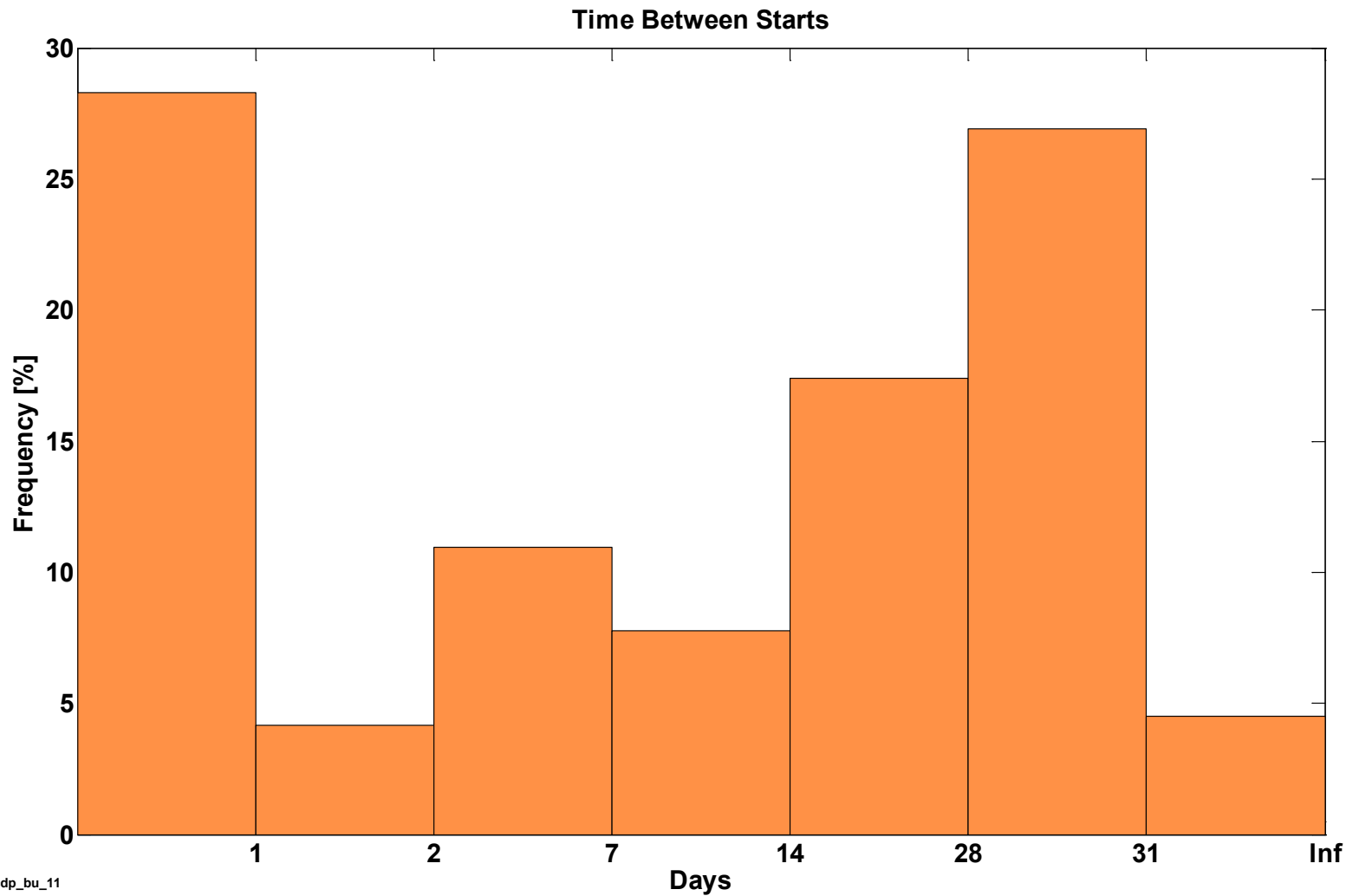
1) FC system conditioning is an automated operation for regular system checks; activated after long periods of no operation.

Continuous Fuel Cell System Run Time



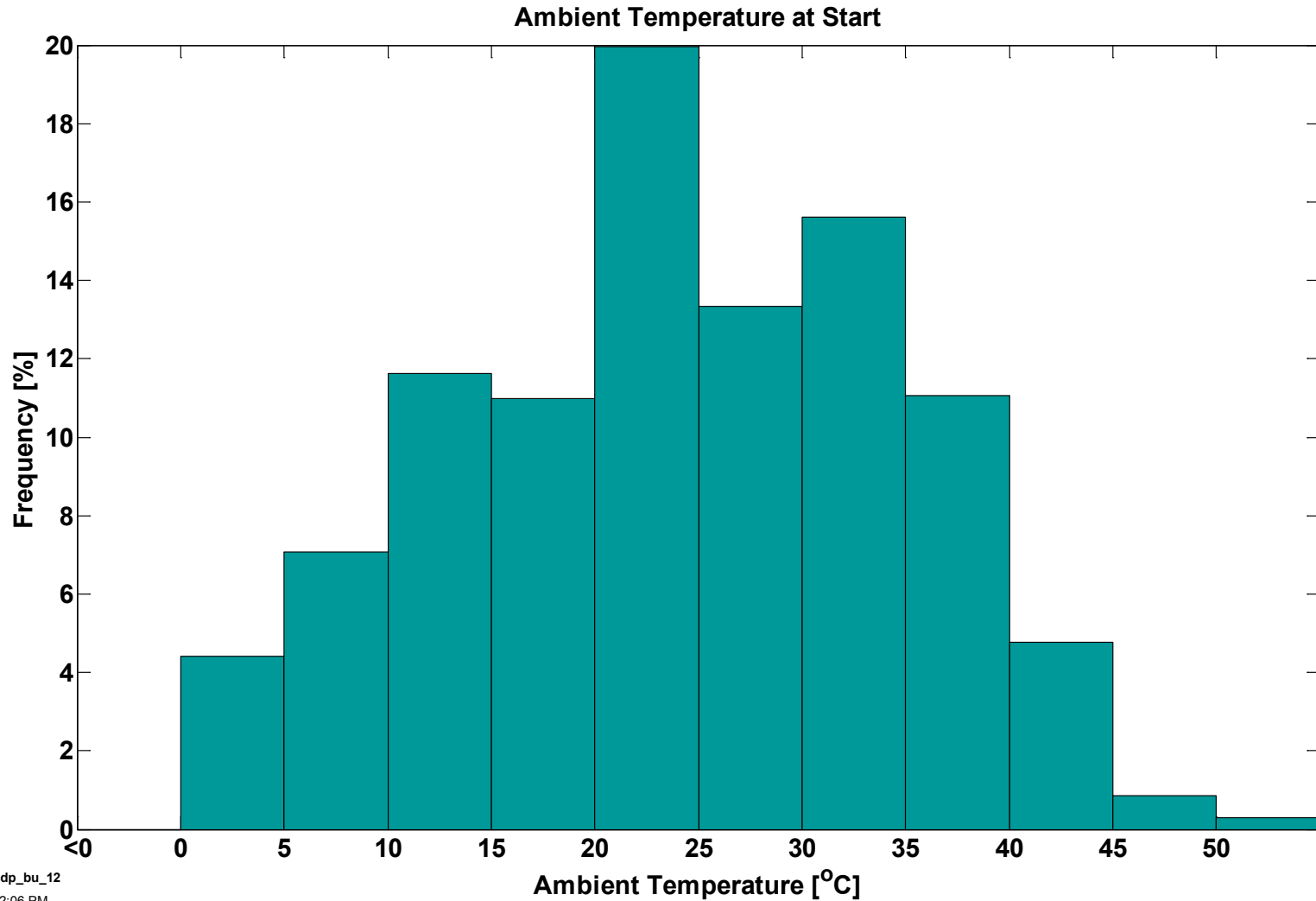


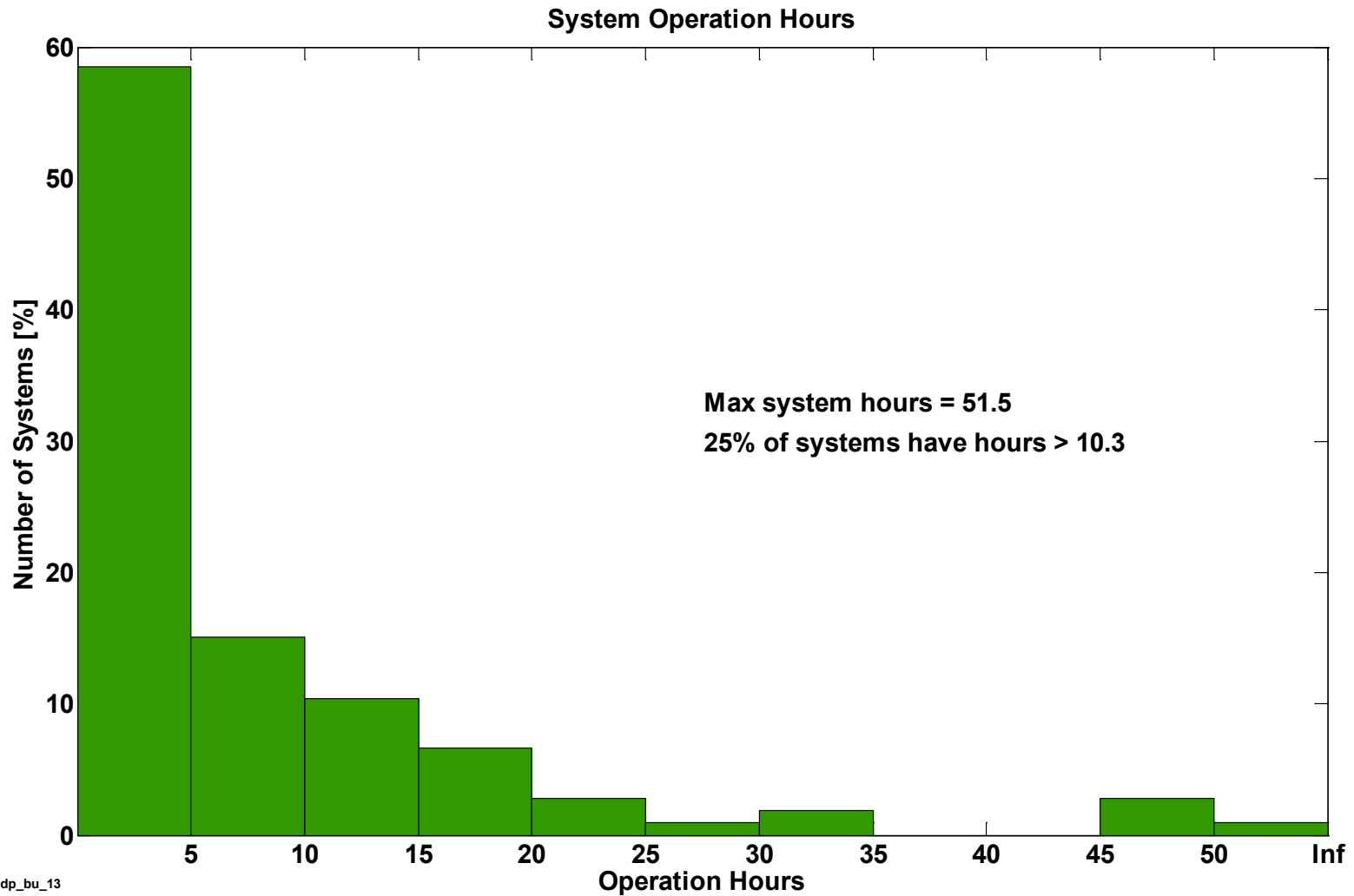
Time Between System Starts



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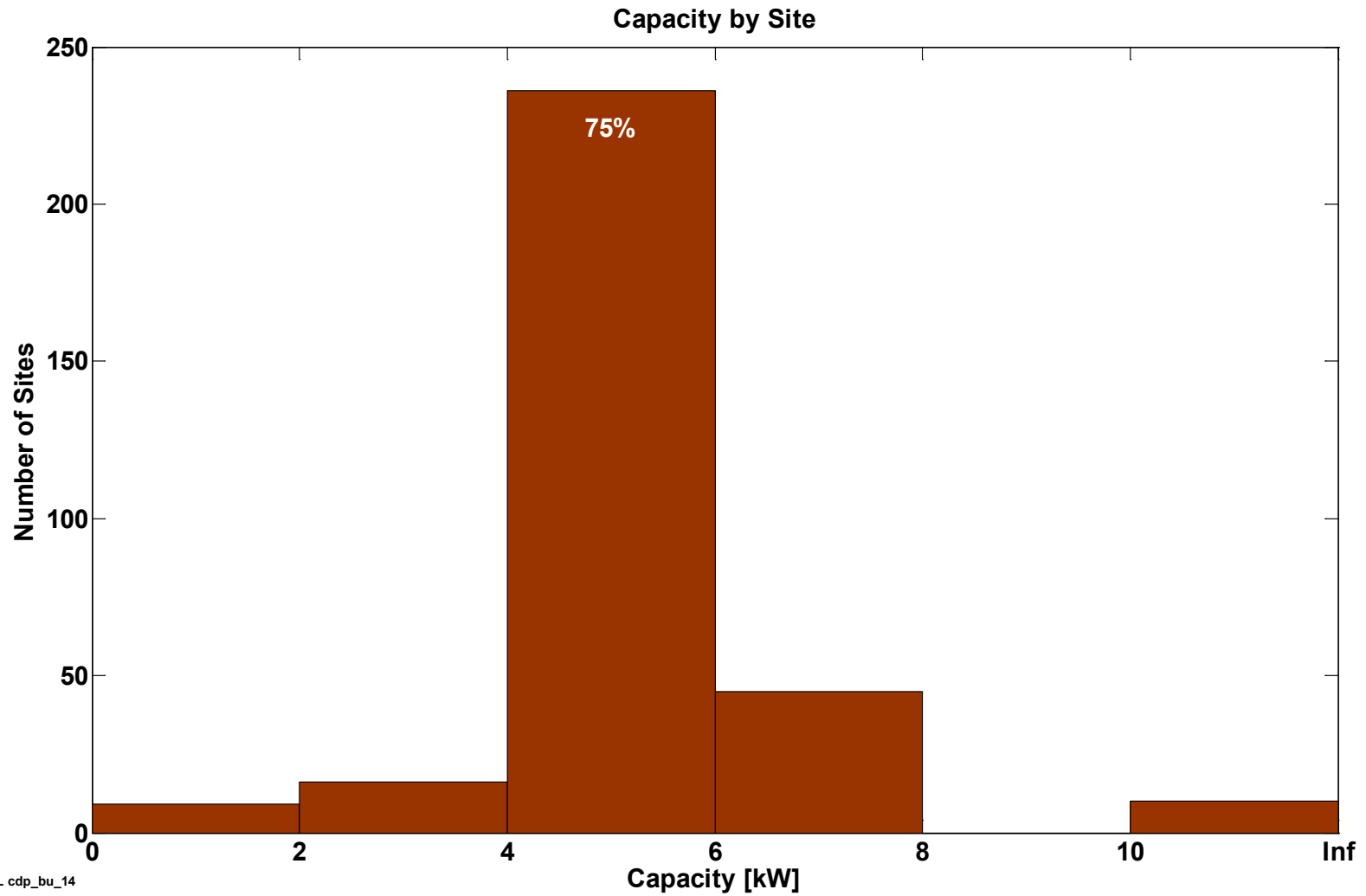
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Site Capacity



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CDP-BU-15

Backup Power Operation with Grid Outage from 01/2010 – 06/2012

