Settlement Year 3 – Third Quarter Progress Report to California Public Utilities Commission Electric Vehicle Charging Station Project

PUBLIC, NON-CONFIDENTIAL VERSION

For the period June 6, 2015 through September 5, 2015 (the Reporting Period) Submitted October 5, 2015 by NRG EV Services LLC on behalf of the Dynegy Parties¹

EXECUTIVE SUMMARY

As of September 5, 2015 (the Reporting Date), NRG EV Services LLC (NRG) had a total of 127 Freedom Station sites either constructed or under development. During the Reporting Period, NRG completed construction on 8 additional Freedom Station installations, for a total of 92 completed sites.

20 out of the 92 Freedom Station sites are located in qualified low-income areas (PUMAs), exceeding the 20% commitment, and serving a broad demographic range at places they prefer to shop, meet and play locally, such as grocery stores, shopping centers and malls.

Utilization of the public charging infrastructure continues to increase during the Reporting Period. 74,077 fast charging sessions were reported in the quarter by drivers of almost every type of electric vehicle on the road, including Nissan, BMW, Tesla, Ford, Chevy, Kia, Volkswagen and Fiat. Together, these sessions consumed 713,000 kWh of electricity, displacing over 71,300 gallons of gasoline. This energy offset represents an increase of YY% compared to the previous quarter.

Freedom Stations are open for any electric vehicle and offer multiple forms of payment, including credit card. Swipe readers have been installed at all but ten sites, which are awaiting new hardware for retrofit, anticipated in the fourth quarter. Every station is open to payment by credit card through the 24 hour call center from the day it opens to the public.

NRG added 61 contracted Make-Readies Sites representing 613 Make-Ready Stubs, for a total of 2,049 Make-Ready Stubs under contract at 179 Make-Readies Sites. Total installations to date increased to 187 Make-Readies Sites and 1,188 Make-Ready Stubs.

The initial Technology Demonstration project is now commissioned for public use, and design and engineering is proceeding for Phase II. The second Technology Demonstration project *EV Storage Accelerator* has been approved; it focuses on energy storage and vehicle to grid (V2G) applications that produce grid benefits from electric vehicles such as increased reliability, efficiency and integration of renewable energy. NRG is awaiting CPUC approval for an additional technology project.

¹ Capitalized terms not otherwise defined herein shall have the meaning ascribed to such terms in the Long-Term Contract Settlement Agreement (the "Agreement").

INSTALLATION OF PUBLIC EV CHARGING STATIONS (FREEDOM STATIONS)

As of the Reporting Date, a total of 127 Freedom Station sites were either completed, under construction, or in the permitting process.

The table below summarizes Freedom Station progress throughout the term of the Agreement:

DC Fast Charging Station Progress	2013		2014				2015			
	Q1/ Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Sites with Permits Submitted		6	22	12	2	22	17	13	13	5
Sites with Permits Approved		6	3	6	2	8	17	15	10	15
Sites under Construction		2	5	11	9	6	16	15	9	15
Sites Completed	0	1	10	15	36	46	56	68	84	92
Completed Sites w/ SAE Combo						3	23	51	84	92
Completed Sites w/ working credit card readers							3	37	59	82
Completed sites with credit card readers and SAE combo							2	31	59	82
Cumulative Settlement Target			40				100			

Installations

During the Reporting Period, NRG completed construction on 8 additional Freedom Stations, for a total of 92 Freedom Stations. Completed Freedom Stations are listed in <u>Appendix A</u>, with new stations **in bold**.

Site Development

As of the Reporting Date, 15 additional Freedom Station sites were under construction, 15 more were fully permitted and another 5 sites had been submitted for permitting. Lead times remain the longest in the Bay Area and parts of the San Joaquin Valley due to utility interconnection time.

Host relationships in Southern California were negatively affected by announced closures of two key hosts – Fresh and Easy, a regional small-format fresh grocery market targeted to mixed-income communities, and Haggen, which acquired dozens of Albertsons supermarkets in 2015 and announced bankruptcy during the quarter.

Low-Income PUMA Distribution

Twenty of the 92 Freedom Stations are located in low-income PUMAs: 8 in the San Francisco Bay Area, 8 in the Los Angeles Basin, 3 in San Diego County, and 1 in the San Joaquin Valley. They represent 22% of all operational sites, exceeding the goal of 20% in this category.

SAE Combo Rollout Status

During the Reporting Period, NRG completed the upgrades to all Freedom Stations to support the SAE combo standard (CCS). This fleet of CCS chargers represents the largest deployment in the world.

Credit Card Payment Upgrades Rollout Status

82 of the 92 Freedom Stations are now able to accept credit card swipe, and NRG expects remaining sites to be completed in the current quarter. Most of the delay is related to eight sites that require a standalone kiosk that had to be developed from scratch. The hardware is awaiting Underwriters' Laboratories (UL) certification in order to start production in Asia. It is expected to be ready for installation in October 2015.

INSTALLATION OF MAKE READY STUBS AND MAKE READY ARRAYS

Status of Make-Readies Sites

Overall, NRG has 240 Make-Readies Sites under contract, representing 2,049 Make-Ready Stubs. Of these, 1,188 Make-Ready Stubs have been installed at 187 sites, as set forth in confidential Appendix A. As previously reported, NRG has signed master host agreements covering 90 additional sites, representing approximately 610 to 680 Make-Ready Stubs. Finally, NRG has signed non-binding Letters of Intent through the Take Charge CA campaign, for 112 additional sites, representing approximately another 420 to 590 Make-Ready Stubs.

Pursuant to Section 4(b)(vi)(B) of the Agreement, NRG has established a website which identifies each installed Make-Ready Array's location and Start-Up Period expiration date. See http://www.nrgevgo.com/california-rev-progress/.

Included in the newly signed letters of intent are two providers of affordable housing representing over 40 rental communities.

DEMONSTRATION PROGRAMS

Battery Energy Storage System

The site has been operational as of June 2, 2015. Design and engineering for Phase II of the demonstration have been developed and approved by UCSD for permitting. Phase II consists of:

- Replacing the two installed ABB Terra 53 DC charging stations with four 50kW BTC DC charging stations.
- Installing two second life EV battery energy storage systems each consisting of 50 kWh storage and a 30 kW IPC inverter.
- Integrating the charging station and second life battery with a controller to mitigate peak demand consumption at the site.

NRG has also engaged with UCSD and UL to discuss further exploration of developing standards for redeployment of EV batteries in second life energy storage cases. UCSD and UL have entered into a MOU around the testing and development of new technology and how to certify the performance and safety standards around these technologies. The Battery Energy Storage System is the first project at UCSD to be examined under this new MOU. Working with UL is critical to the commercial success of any products developed through the demonstration, therefore NRG is eager to engage with this new process and contribute to industry learning with regards to second life batteries. UL anticipates that a new standard for second life EV batteries – UL 1974 – will be published in late 2015 or early 2016.

EV Storage Accelerator

On July 9th, 2015 the CPUC approved NRG EVgo to utilize \$1 million of Settlement Technology Demonstration Funds to conduct a project entitled EV Storage Accelerator: Proving Commercial Viability and System Benefits of Energy Storage from Electric Vehicles.

The EV Storage Accelerator will leverage the work that NRG has done in collaboration with the University of Delaware to engage OEMs and test relevant use cases in the state of California. In partnership with the University of California – San Diego, nine bidirectional vehicles and charging stations will be set up on the campus to provide grid services.

The goals of this project are:

- To work with two major automakers to test their separate approaches to energy storage to prepare them for a further commitment to the technology.
- To reduce the costs and increase the viability of inverter technology for EVs.
- To identify viable distributed energy resource use cases for V2G electric vehicles and assess the system and ratepayer benefits, as well as the financial and operational performance of those vehicles against those use cases. Use cases will include grid services, retail load management, and distribution system/microgrid support in an effort to understand the best use cases for California. In doing so, the project will address the technical and practical differences between electric vehicles serving as an energy storage resource (which is not yet a commercial product) and stand-alone distributed battery systems (which is a commercial product). These differences include automaker acceptance, inverter technology, use cases, and cost.
- Finally, NRG recognizes that, between the CPUC and the CEC, there are least five pilot projects that were proposed in the same context of the EV Storage Accelerator and we will make efforts to coordinate with those other projects. The EV Storage Accelerator aims to leverage data and insights from the project to play a constructive role in the VGI Roadmap process and in other related stakeholder processes, such as energy storage.

Extreme High Speed Charging

No update this quarter: On April 1, 2015, NRG submitted a request to the CPUC for its approval of a second Technology Demonstration Project which will deploy "extreme" high power charging equipment (approximately 100kW and greater) in an effort to advance the state of the charging industry by bringing together partners, demonstrating new technologies, and deploying

new technologies in the field for drivers to test and utilize. The proposed budget is \$2,100,000. NRG continues to await CPUC approval.

EV OPPORTUNITY PROJECTS

No update this quarter: An EV Opportunity project was submitted to CPUC for approval on April 1, 2015 for an EV transportation program for neighborhood health clinics. The initial proposed budget was \$2,060,000; after discussion with the CPUC, NRG amended its proposal, reducing the proposed scope and budget to \$890,000. NRG continues to await CPUC approval.

Additional projects are pending. The projects are expected to leverage program offerings from Air Resources Board for car sharing and school bus demonstrations.

USAGE DATA

NRG EVgo completed 74,077 fast-charging sessions in the third quarter at Freedom Station sites and dispensed over 713,000 kilowatt-hours of electricity, a 17% increase over the previous quarter.

This translates to over 2.1 million miles driven on electricity in this quarter alone, displacing 71,300 gallons of gasoline (assuming 30 mpg).

See confidential Appendix C for the original raw usage data for the Reporting Period.

Appendix A

Freedom Station Table

See attached.

APPENDIX A Dated as of: September 5, 2015

<u>Name</u>	Street Address	<u>City</u>	Completion	<u>PUMA</u>	SAE	<u>cc</u>
			<u>Date</u>		Combo	<u>Reader</u>
CF Day Avea						
SF Bay Area	7F Courth got a Avia	Daly City	6/24/2012		.,	.,
1 Westlake Shopping Center	75 Southgate Ave.	Daly City	6/24/2013		X	X
2 Whole Foods Fremont	3111 Mowry Ave.	Fremont	9/25/2013		X	X
3 Whole Foods SF	2001 Market Street	San Francisco	11/7/2013		Х	X
4 Vacaville Premium Outlets	321 Nut Tree Road	Vacaville	11/20/2013		Х	Х
5 Livermore Premium Outlets	2774 Paragon Outlets Drive	Livermore	1/6/2014		Х	Х
6 Walgreens SF	1175 Columbus	San Francisco	2/26/2014		Х	Х
7 Public Market	5959 Shellmound St.	Emeryville	12/23/2013	Х	Х	Х
8 The Mall at Northgate	2150 Northgate Dr.	San Rafael	12/18/2013		Х	Х
9 The Village at Corte Madera	1618 Redwood Hwy	Corte Madera	3/18/2014	Х	Х	X
10 Whole Foods Cupertino	20955 Stevens Creek Blvd	Cupertino	4/22/2014		Х	Χ
11 Whole Foods Novato	790 De Long Ave	Novato	2/24/2014		X	X
12 Whole Foods Telegraph Ave	3000 Telegraph Ave	Berkeley	4/2/2014		Х	X
13 Whole Foods Berkeley	1025 Gilman	Berkeley	11/5/2014		X	Х
14 Whole Foods San Jose	777 The Alameda	San Jose	11/20/2014	х	х	х
15 Linda Mar	1227 Linda Mar Shopping Center	Pacifica	8/28/2014		х	Х
16 Whole Foods Lafayette	3502 Mt. Diablo Blvd	Lafayette	12/4/2014		x	х
17 Whole Foods Los Altos	4800 El Camino Real	Los Altos	6/5/2014		х	х
18 Rose Pavilion	3903 Santa Rita Rd.	Pleasanton	11/6/2014		х	х
19 Great Mall	447 Great Mall Dr	Milpitas	5/27/2014		x	х
20 Whole Foods Santa Rosa	733 Coddingtown Center	Santa Rosa	8/29/2014	х	X	X
21 Petaluma Outlets	2200 Petaluma Blvd North	Petaluma	8/11/2014	x	x	X
22 Nob Hill Foods Mountain View	1250 Grant Rd	Mountain View	7/24/2014		x	X
23 Crossroads	2316 Monument Blvd	Pleasant Hill	5/15/2014		X	X
24 Santa Rosa Plaza	1071 Santa Rosa Plaza	Santa Rosa	11/7/2014	Х	X	X
25 Napa Outlets	629 Factory Stores Drive	Napa	1/23/2015	^	×	^
26 Whole Foods Redwood City	1250 Jefferson Ave	Redwood City	3/13/2015		×	x
27 Gateway Plaza-Vallejo	173 Plaza Drive	Vallejo	4/24/2015	х	×	X
		•				
28 F&E Hayward	19691 Hesperian Blvd	Hayward	4/24/2015	Х	X	X
29 Stoneridge Mall	1700 Stoneridge Mall Rd	Pleasanton	4/30/2015		X	X
30 Whole Foods Dublin	5200 Dublin Boulevard	Dublin	5/21/2015		X	X
31 City of San Mateo	385 1st Ave	San Mateo	7/13/2015		Х	
32 Fresh & Easy Sunnyvale	1180 N Fair Oaks Ave	Sunnyvale	8/4/2015		х	
33 Nob Hill Watsonville	1912 Main Street	Watsonville	8/27/2015		Х	
34 Whole Foods Santa Cruz	911 Soquel Avenue	Santa Cruz	8/28/2015		Х	
Car Biana			34	8	34	29
San Diego	7007 Fo'- v- D d	C D'	0/40/2042			
1 Fashion Valley	7007 Friars Road	San Diego	9/18/2013		Х	Х
2 Las Americas Premium Outlets	4211 Camino De La Plaza	San Diego	10/29/2013	Х	Х	Х
3 Flower Hill Promenade	2600 Via De La Valle	Del Mar	12/20/2014		Х	Х
4 Carlsbad Premium Outlets	5620 Paseo Del Norte	Carlsbad	12/6/2013		Х	Х
5 Broadway Plaza	1166 Broadway	Chula Vista	1/6/2014	Х	Х	Х
6 SDG&E Innovation Center	4750 EV Clairemont Mesa Blvd	San Diego	3/9/2014		Х	Х
7 Rancho Penasquitos	13255 Black Mountain Rd	San Diego	3/31/2014		Х	Х
8 Del Norte Plaza	330 West El Norte Plaza	Escondido	3/9/2014	Х	X	X
9 Fenton Marketplace	2482 Friars Rd	San Diego	1/27/2015		Х	Х
10 San Diego Tech Center	9605 Scranton Rd	San Diego	2/25/2015		x	Х
11 Mira Mesa Mall	8110 - 8340 Mira Mesa Blvd	San Diego	3/31/2015		x	x
12 Melrose Village	1601 South Melrose Drive	Vista	5/21/2015		Х	х
			12	3	12	12
<u>LA Basin</u>						
1 Camarillo Premium Outlets	900 1/2 Camarillo Center Dr.	Camarillo	11/11/2013		x	Х
2 Walgreens Tarzana	5353 Mecca Ave.	Tarzana	3/24/2014		x	Х
3 Outlets at Orange	20 City Blvd W	Orange	4/21/2014		x	Х

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			Date		SAE Combo	<u>CC</u> Reader
4 Westminster Mall	1025 Westminster Mall	Westminster	5/30/2014		X	X
5 Brea Mall	200 Brea Mall	Brea	5/2/2014		X	x
6 Los Cerritos Center	200 Los Cerritos Mall	Cerritos	6/4/2014		x	x
7 Stonewood Center	306 Stonewood Street	Downey	3/28/2014		x	x
8 Larwin Square	654 East 1st Street	Tustin	3/31/2014		x	X
9 Walgreens Huntington Beach	19501 Beach Boulevard	Huntington Beach	8/14/2014		x	X
10 Corona Hills Plaza	360 McKinley Street	Corona	9/2/2014		x	X
11 Hines Warner Center	5700 Canoga Ave	Woodland Hills	3/28/2014		x	X
12 Cabazon Outlets	48400 Seminole Drive	Cabazon	4/23/2014	Х	x	X
13 Country Fair SC	12013 Central Avenue	Chino	5/20/2014		x	X
14 Inland Center	500 Inland Center Drive	San Bernardino	6/2/2014	х	x	X
15 Oaks Mall	350 W Hillcrest Drive	Thousand Oaks	4/30/2014	^	X	X
16 Pacific View Mall	3301-1 East Main Street	Ventura	4/23/2014		X	X
17 Pavilions Place	1600 Beach Blvd	Westminster	9/19/2014		x	X
18 Bristol Plaza	3361 South Bristol St	Santa Ana	11/20/2014		x	X
19 Shops at Mission Viejo	555 Shops At Mission Viejo	Mission Viejo	5/16/2014		×	X
	,	•				
20 City of Hermosa Beach Parking	1334 Hermosa Avenue	Hermosa Beach	7/23/2014		Х	Х
21 Dunlap - Huntington Harbor	16821 Algonquin St	Huntington Beach	9/2/2014		Х	х
22 8000 Sunset Strip	8000 Sunset Strip	Los Angeles	10/27/2014		Х	х
23 Tarragona	1000 N. Western Avenue	San Pedro	11/19/2014		Х	Х
24 Morongo Casino	49500 Seminole Drive	Cabazon	3/4/2015	Х	Х	
25 Plaza Rio Vista	67800 Vista Chino	Cathedral City	3/5/2015	Х	Х	х
26 Savi Ranch- Yorba Linda	23030 1/2 Eastpark Dr	Yorba Linda	12/30/2014		Х	Х
27 F&E Manhattan Beach	700-C Rosecrans Ave	Manhattan Beach	1/13/2015		Х	Х
28 Ontario Mills	1 Mills Circle	Ontario	3/4/2015		Х	Х
29 F&E Long Beach	3300 Atlantic Avenue	Long Beach	1/28/2015		Х	х
30 F&E Norwalk	10930 Rosecrans Ave	Norwalk	2/25/2015		Х	х
31 F&E Signal Hill	2475 Cherry Ave	Signal Hill	1/28/2015	х	Х	х
32 Gelson's Calabasas	22277 Mulholland Hwy	Calabasas	3/20/2015		Х	
33 Playa Vista Community Center	5510 Lincoln Blvd	Los Angeles	3/30/2015		Х	x
34 F&E Calimesa #1238	1126 Calimesa	Calimesa	4/7/2015	Х	Х	x
35 Mall of Victor Valley	14370 Bear Valley Rd	Victorville	4/7/2015	х	Х	x
36 Gelsons Sherman Oaks	4520 Van Nuys Blvd	Sherman Oaks	4/22/2015		X	
37 Anaheim Plaza	510 N Euclid St.	Anaheim	5/6/2015		X	х
38 F&E Rosemead #1445	9026 E. Valley Blvd	Rosemead	5/13/2015	Х	Х	x
39 Sassounian Huntington Beach	21190 Beach Blvd	Huntington Beach	5/21/2015		Х	x
40 Lincoln Place Apartments	1050 Frederick Street	Venice	9/1/2014		X	
41 Whole Foods Redondo Beach	405 PCH	Redondo	7/10/2015		X	х
42 Canyon Country Plaza	19242 Soledad Canyon	Santa Clarita	7/20/2015		X	X
San Joaquin Valley			42	8	42	38
1 Applegate Ranch	1000 Commerce Avenue	Atwater	9/30/2014		x	х
2 West Valley Mall	3200 N Naglee Road	Tracy	2/6/2015		X	X
3 Fashion Fair Mall	563 E. Shaw Ave.	Fresno	4/1/2015	х	x	×
4 Vine Fuels Salida	4530 Kiernan Avenue	Salida	8/5/2015	^		^
- viile i deis sailda	-330 Meman Avenue	Janua	5/5/2013		Х	3

Totals 92 20 92 82

Appendix B

Make-Readies Detail

See attached [CONFIDENTIAL].

The following information is confidential and protected material and may only be provided to those parties and their Eligible Reviewers that have executed a protective order in the FERC proceeding approving the Agreement and the settlement of the EL02-60/62 Proceeding. NRG retains an exclusive, non-public, proprietary right to such information for eighteen (18) months after the date of submittal to the CPUC, and during such time such information shall not to the extent permitted by law be subject to disclosure under FOIA or CAPRA.

Material Redacted in Public, Non-Confidential Version

Appendix C

Raw Usage Data

See attached [CONFIDENTIAL].

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