Settlement Year 5 – First Quarter
Progress Report to California Public Utilities Commission
Electric Vehicle Charging Station Project

For the period December 6, 2016 through March 5, 2017 (the Reporting Period)
Submitted April 5, 2017 by NRG Energy, Inc. on behalf of the Dynegy Parties[1]

EXECUTIVE SUMMARY

As previously reported, NRG Energy, Inc. (NRG) continues to execute its obligations under the Agreement through EVgo Services LLC (EVgo).

As of March 5, 2017 (the Reporting Date), EVgo had a total of 177 Freedom Station sites either constructed or under development. During the Reporting Period, EVgo completed construction on 5 additional Freedom Station installations, for a total of 166 completed sites.

35 out of the 166 Freedom Station sites (21 percent) 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.

Freedom Stations are open for any electric vehicle and offer multiple forms of payment, including credit card. All stations support both the CHAdeMO and SAE CCS fast charging standards, and credit card swipe readers have been installed at all sites.

Utilization of the public charging infrastructure continues to increase. 143,643 fast charging sessions were reported in the quarter. Together, these sessions consumed 1,417,982 kWh of electricity

Overall, EVgo has 671 Make-Readies Sites under contract, representing 5,825 Make-Ready Stubs. Of these, 3,931 Make-Ready Stubs have been installed at 455 sites.

All Technology Demonstration funds have been allocated, and the three projects are underway. Both EV Opportunity programs were approved by CPUC staff early 2017. Specific updates for all five projects are provided below.

INSTALLATION OF PUBLIC EV CHARGING STATIONS (FREEDOM STATIONS)

As of the Reporting Date, a total of 177 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:

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

DC Fast Charging Station Progress	**Year-End 2013**	**Year-End 2014**	**Year-End 2015**	**Year-End 2016**	**2017** Q1
Sites with Permits Submitted	22	17	3	5	3
Sites with Permits Approved	3	17	7	2	4
Sites under Construction	5	16	11	8	4
Sites Completed	10	56	105	161	166
Completed Sites w/ SAE Combo		23	105	161	166
Completed Sites w/ working credit card readers		3	105	161	166
Completed sites with credit card readers and SAE combo		2	105	161	166
Cumulative Settlement Target	40	100	160	200	200

Installations

During the Reporting Period, EVgo completed construction on 5 additional Freedom Stations, for a total of 166 Freedom Stations. Completed Freedom Stations are listed in Appendix A, with new stations **in bold**.

The Agreement requires a minimum number of Freedom Stations in each of four geographic regions. The table below summarizes the geographic distribution requirements and progress as of the Reporting Date.

Geography	**Required**	**Completed**	**Percentage**	**Remaining Requirement**
LA Basin	110	75	68%	35
SF Bay Area	55	61	111%	Complete
San Joaquin Valley	15	15	100%	Complete
San Diego County	20	15	75%	5
Total:	200	166		40

As seen in the preceding table, the Minimum Freedom Station Count has been fully met or exceeded in the SF Bay Area and the San Joaquin Valley. Current exceedances will contribute to meeting requirements of the anticipated Freedom Station Savings event, as noted below.

Site Development

As of the Reporting Date, 4 additional Freedom Station sites were under construction,4 more were fully permitted and another 3 sites had been submitted for permitting.

Based on current projections, EVgo anticipates having a Freedom Station Savings Event (as such term is defined in the Agreement), and has begun site planning, development, construction and operation of additional Freedom Station sites and/or expanded capacity as required.

Low-Income PUMA Distribution

Thirty-five of the 166 Freedom Stations are located in low-income PUMAs: 15 in the San Francisco Bay Area, 12 in the Los Angeles Basin, 4 in San Diego County, and 4 in the San Joaquin Valley. They represent over 21% of all operational sites, exceeding the goal of 20% in this category.

Assessing Freedom Station distribution by income classification of PUMAs is a device that CPUC and NRG developed for the settlement agreement because no other standards existed at the time. Since then, the Office of Environmental Health Hazard Assessment (OEHHA), on behalf of the California Environmental Protection Agency (CalEPA), developed the California Communities Environmental Health Screening Tool. CalEnviroScreen is a screening methodology that can be used to help identify California communities that are disproportionately burdened by multiple sources of pollution. CalEPA has used the tool to designate California communities as disadvantaged pursuant to Senate Bill 535.

Applying CalEnviroScreen to the Freedom Station distribution for information purposes, as requested by CPUC, shows nearly the same number of qualifying sites (36 out of 166), but with a slightly different distribution than the PUMA communities. The results are presented in the table below. NRG and EVgo will continue to assess the distribution by this standard in coming reports to align the state's environmental justice standards with the settlement infrastructure.

	Operational Sites	PUMA	CalEnviro Screen
LA	75	12	15
SF	61	15	14
SD	15	4	3
SJV	15	4	4
CA- all	166	35 (21.1%)	36 (21.7%)

SAE Combo Rollout Complete

All Freedom Stations support both the SAE combo (CCS) and the CHAdeMo connector standards. This fleet of CCS chargers represents the largest known deployment in the world.

Credit Card Payment Upgrades Complete

All Freedom Stations and all chargers at Freedom Stations are able to accept credit cards via a swipe-card reader. Additional payment mechanisms include RFID cards for EVgo, EZ Charge, BMW ChargeNow, Kia Charge Up. EZ Charge and Kia Charge Up cards are compatible with chargers networked by EVgo, Greenlots, Blink and AeroVironment. BMW ChargeNow cards also access chargers networked by Chargepoint. Additionally, all EVgo stations are accessible via phone center with customer service phone numbers printed on the stations.

INSTALLATION OF MAKE READY STUBS AND MAKE READY ARRAYS

Status of Make-Readies Sites

Overall, EVgo has 671 Make-Readies Sites under contract, representing 5,825Make-Ready Stubs. Of these, 3,931 Make-Ready Stubs have been installed at 455 sites, as set forth in Appendix B.

NRG and EVgo have had particular success reaching disadvantaged communities with this program. For information purposes, CPUC staff requested an analysis of distribution based on the Cal Enviro Screen (CES) standard, which did not exist at the time the settlement was enacted. The distribution is reported in the chart below.

Distribution of Make-Readies by California Enviro-Screen Criteria

	CES Qualified Sites			Percent of total sites			CES Qualified Stubs		Percent of total stubs		
	MDU	WP	All	MDU	WP	All	MDU	WP	MDU	WP	All
LA	15	23	38	17.2%	28.4%	22.6%	109	157	18.1%	25.0%	21.6%
SF	4	21	25	5.6%	26.3%	16.4%	44	216	5.3%	32.8%	17.5%
SD	9	4	13	15.0%	10.5%	13.3%	76	30	15.7%	9.3%	13.2%
SJV	0	9	9	0.0%	47.4%	42.9%	0	82	0.0%	47.1%	41.8%
Total	28	57	85	12.7%	26.1%	19.4%	229	485	11.8%	27.2%	19.2%

Another way to consider make-readies distribution to disadvantaged communities or residents is to consider the percentage of multifamily properties (and stubs) that have deed-restricted housing units. By this standard, the results look more beneficial. This is due in part to inclusionary housing requirements in many California communities, where mixed-income housing in single properties is a norm. Thus, residents of low-income housing units as measured by the median income in the region have reasonable access to the stubs built in this program.

	Deed Restricted Sites	Percent of total operational MDU sites	Deed Restricted Stubs	Percent of total operational MDU stubs
LA	35	40.2%	194	32.2%
SF	16	22.2%	218	26.5%
SD	15	25.0%	100	20.6%
SJV	0	0.0%	0	0.0%
CA- All	66	29.9%	512	26.5%

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

USAGE DATA

EVgo completed 143,643 fast-charging sessions in the Reporting Period at Freedom Station sites and dispensed over 1,417,982 kilowatt-hours of electricity.

This translates to 4.4 million miles driven on electricity in this quarter, displacing 182,354 gallons of gasoline (assuming 3 miles per kWh and 30 mpg).

Confidential Appendix C, the original raw usage data for the Reporting Period, will be submitted to the CPUC separately in electronic format.

TECHNOLOGY DEMONSTRATION PROGRAMS

Stationary Storage Plus Electric Charging (SSPEC)

Project Summary

The Stationary Storage Plus Electric Charging (or SSPEC) project will investigate how incorporating stationary batteries with DC Level 3 electric vehicle (EV) charging infrastructure can reduce the cost of developing, constructing, and operating public Fast Chargers without the use of incentives. The project will do this by:

1. Deploying a test site with microgrid components, including battery storage, solar generation, EV charging infrastructure, and control technology.
2. Running a number of tests with various configurations of devices at the SSPEC site.
3. Analyzing results from the SSPEC site and historical data from EVgo's charging station network to identify load profiles, deployment sites, and utility territories which can benefit most from backup batteries and/or generation on site.

Upon successful economic and operational demonstration, EVgo intends to commercialize these technologies and integrate them into its broader Freedom Station rollout. Ultimately, EVgo believes that the SSPEC work will enable faster deployment of DC fast chargers by EVgo and third parties at a wider variety of locations. Moreover, these stations will have a lower total cost of ownership to property owners and electric vehicle service providers (EVSPs) alike.

Current Quarter Activities

Q1 2017 was primarily focused on completing the integration of the devices that were installed onsite in the second half of 2016. Most of the issues that were outlined in the final 2016 report have been addressed but there are still other challenges. The site has continued to experience intermittent outages however these events have decreased in frequency. Q2

2017 will continue to refine the incorporation of these devices.

The SSPEC project is now in Phase III of the program, battery systems have been ordered and locations have been identified to deploy them at. One site in Phase III will be a retrofit and one site will be designed into the location. Additionally, reports on the UCSD site controller system and on battery storage grid services are commissioned for the Q3 CPUC report.

For further details, see confidential Appendix D-1.

EV Storage Accelerator (EVSA)

Project Summary

The EV Storage Accelerator (EVSA) aims to demonstrate vehicle-to-grid (V2G) technology as a low cost energy storage resource. The project will use nine vehicles for the demonstration, three Honda Accord Plug-in Hybrid electric vehicles (PHEV) and six Nissan LEAF Plug-in electric vehicles (PEV). The four primary goals of EVSA are:

- Create a test environment for two major automakers, Nissan and Honda, to gain experience with V2G technologies and prepare them for a further commitment to the technology,
- Advance product readiness for bidirectional inverters, including listing standards and product certification
- Identify use cases for V2G and test vehicles against those use cases.
- Inform public policy around the system, ratepayer and customer benefits of V2G.

For a more detailed report on the scope of work and related activities, please refer to the *Final Scope of Work – October 2015*.

Current Quarter Activities

In the past quarter, all six Princeton Power V2G stations were installed. Three of the stations have received final inspection from UCSD and two await final inspection. The sixth and final station at Trade Street will receive inspection once the meter is installed and approved through the interconnection application process with SDG&E.

One of the three bi-directional Honda Accord PHEVs was transported from UCSD to NREL where it is undergoing testing for power quality, harmonics, responses to abnormal conditions and unintentional islanding. The second Honda Accord is currently sitting in the P703 parking lot at UCSD. The third Accord is at Honda's Torrance campus ready to be transported to campus. The six Nissan LEAFs were purchased and transported to the UCSD campus in February.

The EVSA team continued to work to finalize its agreements with project stakeholders and individual participants.

Subsequent Quarter Activities

Inspection of five of the six Princeton Power stations will be completed by UCSD by the end of March 2017. The list of drivers for the program and the associated documentation will be finalized in early April, at which time the EVSA team will on-board five of the six Nissan LEAF drivers. The remaining sixth station at Trade Street will not receive approval from UCSD until late Q2 due to the 10-week interconnection application process with SDG&E that must be completed. The outstanding contracts with Honda will be finalized, the third Honda Accord will be delivered to campus and the two drivers to be assigned to the Honda Accords with also be on-boarded. The vehicles will start to use the charging stations and data will start to be collected.

The outstanding contract with SDG&E will be finalized and the installation of the charging station at the SDG&E Century Park campus will commence.

For further details, see confidential Appendix D-2.

Extreme High Power DC Charging Station

Project Summary

Automakers are increasing range of EVs by increasing battery capacity in the near future. To maintain a consistent customer/EV driver experience regarding charge duration and SOC (State of Charge) completion percentage, DC EVSE infrastructure must increase the power dispensing. This project is intended to bring auto OEMs, EVSE, and cable manufacturers together to demonstrate and facilitate testing and development of standards and equipment. The project will do the following:

- Deploy first of its kind EVSE infrastructure capable of high power (300 + amps) of VDC power to EVSEs on site
- Test with auto OEMs and EVSE providers to allow for test bed and development of standards

Current Quarter Activities

EVgo has installed and commissioned the prototype 150 kW EVSE from ABB at Lucky's Fremont. This EVSE is capable of charging vehicles with an operating voltage range from 200-900+ VDC. This charger will also be backwards compatible with EVs of today (50kW). The charger also underwent NRTL field evaluation with labeling expected in the next few weeks. Following that listing EVgo will get the local jurisdiction to inspect and sign of the site to go live. Today this equipment will only be used by OEMs and other partners for testing but will be opened up to the public in the future. EVgo is finalizing all design features for the high power charging station at the World's Tallest Thermometer in Baker, California. EVgo will be submitting for permit and is expected to receive permit approval and utility final design in the next quarter.

EV OPPORTUNITY PROJECTS

The EV Opportunity Program under the Agreement consists of $4 million toward "…Enhancing the appreciation of the social benefits of electric vehicles and creating opportunities for residents of under-served communities to benefit from expanded use of electric vehicles." More specifically, the EV Opportunity Program Amount may be used to fund: a) the deployment of electric vehicle charging infrastructure to support electric vehicle car-sharing projects, in particular in low-income areas within the State of California, b) an EV job training program and c) other projects consistent with the objectives of Section 4(d)(ii) of the Agreement.

In Q4 of 2016, EVgo submitted two proposals for the CPUC's review. The first was the Green Raiteros Pilot Project in partnership with the San Joaquin Valley Latino Environmental Advancement Project (Valley LEAP) and the Fresno County Rural Transit Authority (FCRTA), the Shared Use Mobility Center (SUMC), and West Hills Community College. The Green Raiteros Pilot will build on an existing, grassroots ridesharing program – the Raiteros – and will help expand access to carbon-free mobility in the Central Valley by strategically and sustainably introducing EVs to the Raiteros' services. EVgo also worked with Valley LEAP to apply for the 11th Hour Project Just Transit Challenge, a fund dedicated to reduce emissions while increasing equitable transportation options. If awarded, this funding opportunity will be used to acquire two 2017 Chevy Bolt's for the Green Raiteros Pilot Program.

The Green Raiteros Pilot Project was approved on January 25, 2017.

The second proposal submitted was Electric Access Charging Hub (EACH) Program. In an effort to create EV access and job opportunities to underserved communities, EVgo will develop seven EV-charging hubs in low-income communities of the San Francisco Bay Area, Los Angeles, and San Diego. To that end, EVgo will provide charging depots for carsharing services (i.e., Zipcar or Carma City Car Share) in low income areas. The EACH project aims to support EV carsharing, create job opportunities, provide publicly available EV fast charging, and spur the adoption of electric vehicles in underserved neighborhoods.

The EACH proposal was approved on February 17, 2017.

Appendix A

Freedom Station Table

See attached.

Appendix B

Make-Readies Detail

See attached.

Appendix C

Raw Usage Data

SEPARATELY PROVIDED TO THE CPUC.

[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.

Appendix D-1
Quarterly Progress Report

CONFIDENTIAL
Progress Report to California Public Utilities Commission

EVgo Services LLC
Electric Vehicle Charging Station Project – Technology Demonstration Funds

Project Title:	**Stationary Storage Plus Electric Charging (SSPEC)** ***(Formerly the Battery Energy Storage System or BESS and Modular Micro-Grid DC Charging)***
Covering Period:	**January 1st, 2017 through March 31th, 2017**

EVgo Contacts:
Adam Mandel
Project Lead
Phone: (310) 954-2908
Email: Adam.Mandel@EVgo.com

CPUC Technical Monitor:
Name: Amy Mesrobian
CPUC Energy Division
Analyst, Electric Vehicles
Office: (415) 703-3175
Email: ak1@cpuc.ca.gov

Material Redacted in Public, Non-Confidential Version

Appendix D-2

Quarterly Progress Report

CONFIDENTIAL

Progress Report to California Public Utilities Commission
EVgo Services LLC
Electric Vehicle Charging Station Project – Technology Demonstration Funds

Project Title: **EV Storage Accelerator**
Covering Period: **January 1st, 2017 through March 31st, 2017**

EVgo Contacts:
Terry O'Day
Vice President
Phone: (310) 954-2929
Email: terry.oday@evgo.com

Kelsey G. Johnson
Project Manager, EVgo Contractor
Phone: (760) 271-6048
Email: kelsey.johnson1204@gmail.com

CPUC Technical Monitor:
Name: Carolyn Sisto
CPUC Energy Division
Analyst, Electric Vehicles
Office: (415) 703-3175
Email: Carolyn.Sisto@cpuc.ca.gov

Material Redacted in Public, Non-Confidential Version