

**Settlement Year 6 – Fourth Quarter
Progress Report to California Public Utilities Commission
Electric Vehicle Charging Station Project**

*For the period September 6, 2018 through December 5, 2018 (the Reporting Period)
Submitted January 5, 2019 by NRG Energy, Inc. on behalf of the Dynegy Parties¹*

EXECUTIVE SUMMARY

NRG and EVgo continue to implement the settlement agreement to enable electric vehicle (EV) deployment in California through the installation of charging infrastructure across the state. In conjunction with the California Public Utilities Commission (CPUC), the program has spurred a growing EV ecosystem that likely would not have been possible without this partnership. California now has seen more than half a million electric vehicles sold cumulatively in the state, and with more long range and lower priced vehicles coming onto the market, the public charging infrastructure for electric vehicles becomes even more important.

NRG and EVgo continue to engage regularly with the CPUC to discuss settlement progress and how the buildout can continue to support EV adoption in California. We thank the Commissioners and the staff for their shared commitment to building out public charging infrastructure to remove barriers to EV adoptions for more Californians across geographies and demographics.

Over the past year, NRG and EVgo have significantly expanded the availability and development of publicly available EV charging infrastructure. Major accomplishments of 2018 include:

Freedom Stations

- More than doubled annual electricity dispensed from Freedom Station chargers built under the Long-Term Settlement Agreement (CY 2017)
- 49.3 million EV miles powered and more than 11,200 MT CO₂e emissions avoided
- Installed a total of 391 direct current fast chargers (DCFCs) across 204 Freedom Stations
- Planned (contracted, designed and permitting) 20 stations that will add 40 more DCFCs to the public charging ecosystem
- 22% of stations installed in qualified low-income areas, as defined by income-ranked public use microdata area (PUMA)
- Executed contracts for the balance of regional requirements in the LA basin and San Diego County, including regional low-income PUMA targets

Make Ready

- Contracted for 6,896 Make-Ready Stubs, exceeding the minimum stub target (6,875)
- Installed 6,431 Make-Ready Stubs at 747 sites, enabling more Level 2 charging for Californians through the ready for EV program

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

- Completed the regional distribution requirements as well as public interest and workplace stub target

High Power Charging Plazas (HPCPs)

- Planned (contracted, designed and permitting) 17 high-power charging plazas with at least three DCFCs per station that will add more than 70 DCFCs to serve the charging needs of residents of multi-family housing
- Majority of plans include 80 kW chargers to be added to the public charging ecosystem
- Contracted with UCLA Luskin Center for Innovation to conduct research in 2019 to assess impact of HPCPs in enabling EV adoption for apartment dwellers and other Californians
- Developed plans for battery installations at five (5) charging stations

Technology Demonstration

- Unveiled high-power charging station in Baker, CA with (1) ABB 350 kW charger, (1) ABB 175 kW charger, (2) BTC 150 kW chargers, and (2) ABB 50 kW chargers, all beneath a solar canopy
- Completed second life battery installations at Union City California and Baker, CA
- The EV Storage Accelerator (EVSA) Project Team completed a paper on use cases for interconnection and transformer upgrade deferral
- The EVSA Project Team also developed an implementation plan with project stakeholders for the emergency power back-up use case and continued to monitor the fourth use case, quantifying the Value of Vehicle to Grid (V2G)
- First vehicle to grid bi-directional fast charging station interconnected in California with SDG&E

EV Opportunity Projects:

- Green Raiteros debuted its new headquarters, electric vehicles, and 10 Level 2 charging stations in Huron with a ribbon cutting in October to launch the ride sharing service increasing equitable transportation options in the Central Valley
- Executed contracts for seven (7) Electric Access Charging Hubs (EACH) located in disadvantaged communities and commenced construction on three (3) hubs
- Contracted with the Shared Use Mobility Center (SUMC) to conduct research on initial models for the EACH program and concluding analysis of the program implementation
- Contracted with the Citizen Group to lead outreach and education campaigns in partnership with a variety of community-based organizations (CBOs) for the EACH hubs in 2019

EVgo strongly believes that continuing to build out NRG settlement-obligated chargers will be the best way to deliver the critically important DC Fast Charging for the State of California in diverse geographies, especially for multifamily housing, low-income PUMAs, and disadvantaged communities.

INSTALLATION OF PUBLIC EV CHARGING STATIONS (FREEDOM STATIONS)

As of the Reporting Date, a total of 220 Freedom Station sites were either completed, under construction, or in development. This supports the build out of DCFCs beyond the settlement target of 200 through a Freedom Station Savings Event (as defined in the Agreement). EVgo projects completing at least 219 Freedom Station with the same budget for 200. One highly utilized Freedom Station is currently being upgraded to a high-power charging plaza, replacing two highly used 50kW chargers with four 80kW chargers to enable greater usage and availability for consumers. EVgo has already exceeded the minimum Freedom Station count of 200 and continues to build and develop stations afforded by cost savings and to meet the geographic distribution set forth in the Agreement.

During this Reporting Period, EVgo completed two (2) Freedom Station in the LA basin and one (1) site in the SF Bay for a total of 204 completed installations. Five stations were under construction as of the reporting date with the remaining eleven in engineering and design. In this quarter EVgo executed seven (7) host agreements for the balance of contracts to meet geographic distribution requirements in LA basin and San Diego County, including the low-income PUMA requirements. EVgo executed a total of 20 host agreements for eligible Freedom Stations in the calendar year.

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

<i>DC Fast Charging Station Progress</i>	Year- End 2013	Year- End 2014	Year- End 2015	Year- End 2016	Year- End 2017	2018			
						Q1	Q2	Q3	Q4
Sites under Construction	5	16	11	8	0	0	0	4	5
Sites Completed	10	56	105	161	200	200	200	201	204
Completed Sites w/ SAE Combo (CCS)		23	105	161	200	200	200	201	204
Completed Sites w/ working credit card readers		3	105	161	200	200	200	201	204
Completed sites with credit card readers and SAE combo (CCS)		2	105	161	200	200	200	201	204
Cumulative Settlement Target	40	100	160	200	200	200	200	201	204

Completed Freedom Stations as of the Reporting Date are listed in [Appendix A](#).

Further, EVgo funded twelve (12) additional station upgrades to Settlement stations, replacing a CHAdeMO-only DC quick charger (DCQC) with dual-standard (CHAdeMO and CCS Combo) fast chargers for a total of 33 swaps completed to date. This upgrade will result in greater charger availability, reduction of wait times, and a more equitable experience for drivers of either fast charging standard. The complete list of sites with DCQC swaps are listed in the table below.

	<u>Name</u>	<u>Street Address</u>	<u>City</u>	<u>PUMA</u>	<u>CES</u>
SF Bay	The Village at Corte Madera	1618 Redwood Hwy	Corte Madera	x	
	The Mall at Northgate	2150 Northgate Dr.	San Rafael		
	Gateway Plaza-Vallejo	173 Plaza Drive	Vallejo	x	
	Vacaville Premium Outlets	321 Nut Tree Road	Vacaville		
San Diego	Las Americas Premium Outlets	4211 Camino De La Plaza	San Diego	x	x
LA Basin	Larwin Square	654 East 1st Street	Tustin		
	Mall of Victor Valley	14370 Bear Valley Rd	Victorville	x	
	Stonewood Center	306 Stonewood Street	Downey		
	Camarillo Premium Outlets	900 1/2 Camarillo Center Dr.	Camarillo		
	Whole Foods Redondo Beach	405 N. PCH	Redondo		
	Gateway Plaza - Santa Fe Springs	10629 Carmenita Road	Santa Fe Springs		x
	Dunlap - Huntington Harbor	16821 Algonquin St	Huntington Beach		

Station Distribution

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 on completed stations as of the Reporting Date.

<i>Geography</i>	Required	Completed	Percentage	Remaining Requirement
LA Basin	110	97	88%	13
SF Bay Area	55	70	127%	Complete
San Joaquin Valley	15	15	100%	Complete
San Diego County	20	19	90%	1
Other PG&E ² Counties	-	3	-	-
Total:	200	204	102%	14

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, with additional contracted sites covering the obligations in San Diego and the Los Angeles basin, as described further below. Additional sites under contract exceeding the minimum counts will contribute to meeting requirements of the anticipated Freedom Station Savings event.

Site Development

During the Reporting Period, EVgo executed contracts for the balance of contracts (7) in the Los Angeles basin and San Diego County as well as additional sites in the San Francisco Bay Area. Efforts to initiate the utility application and permitting process concurrent with other work have

² The First Amendment to the Long-Term Contact Settlement and Release Section (A) 1 allows the excess of the minimum Freedom Station count to be installed in locations reasonably expected to benefit SCE, SDG&E and PG&E ratepayers. This table reflects the updated classification of those sites, formerly grouped in the San Francisco Bay Area. This update is also reflected in Appendix A.

proven to be effective in expediting EVgo’s timeline to enter the construction phase of a project. The table below summarizes the site development progress as of the Reporting Date.

<i>Geography</i>	Remaining Requirement	Executed Contracts	Engineering	Permitting	Construction
LA Basin	13	13	3	5	5
SF Bay Area	Complete	2			
San Joaquin Valley	Complete				
San Diego County	1	1	1		
Other PG&E Counties	-				
Total:	14	16			

The construction stage for several projects has been prolonged due to accommodations made with site hosts, either to avoid disruption during the Thanksgiving, Christmas, and New Year holidays or coordination with a host’s parking lot redevelopment plans.

Low-Income PUMA Distribution

Forty-three Freedom Stations are in low-income PUMAs: 16 in the San Francisco Bay Area, 19 in the Los Angeles Basin, 4 in San Diego County, and 4 in the San Joaquin Valley. They represent 22% of all operational sites, exceeding the goal of 20% in this category. For the three remaining PUMA qualified sites in the LA Basin, EVgo has executed contracts for all of them, with one in permitting and the other two sites in engineering.

The table below summarizes the low-income PUMA distribution and progress as of the Reporting Date.

<i>Geography</i>	Build Obligation	PUMA Minimum Requirement	Operational PUMA	PUMA %
LA Basin	110	22	19*	17%
SF Bay Area	55	11	16	29%
San Joaquin Valley	15	3	4	27%
San Diego County	20	4	4	20%
Other Counties	-	-	-	-
CA- all	200	40	43	22%

* In the fourth quarter, EVgo completed construction of a station located in a low-income PUMA which is anticipated to be operational in Q1 2019 once utility interconnect is complete.

Assessing Freedom Station distribution by income classification of PUMAs is a device that the 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 (OEHHHA), on behalf of the California Environmental Protection Agency (CalEPA), developed the California Communities Environmental Health Screening Tool. CalEnviroScreen (CES) 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.

While not required by the Settlement, applying CalEnviroScreen to the Freedom Station distribution for information purposes, as requested by CPUC, shows nearly the same number of qualifying sites (43 out of 204), with a slightly different distribution than the PUMA communities. NRG and EVgo will continue to assess the distribution by both standards in subsequent reports to align the state's environmental justice standards with the settlement infrastructure.

INSTALLATION OF HIGH-POWER CHARGING PLAZAS (HPCPS)

As part of the Second Amendment to the Long-Term Contract Settlement, NRG and EVgo are committed to building ten (10) or more high-power charging plazas to serve the charging needs of residents of multi-family housing.

These charging plazas will meet the following criteria:

- At least three (3) 50kW (or higher) DC Fast Chargers
- Support both the CHAdeMO and SAE Standards
- Located in the top 50% of California Public Use Microdata Areas (PUMAs) ranked by percentage of residents in multi-family housing
- Distributed with a goal to serve drivers throughout the State of California, including in both Northern and Southern California
- These stations shall be distributed throughout the State of California, including 20% of stations installed in qualified low-income areas (by income-ranked PUMA)

EVgo has executed contracts for sixteen (16) high power charging plazas, with one additional plaza contract approved by City Council but pending final signature. Many of these plazas will exceed the minimum charger count and power levels. For example, these seventeen (17) planned charging plazas will include seventy-three (73) DC fast chargers, 16 of which are planned to be 50kW chargers, 54 of which will be 80kW chargers, and 3 of which will be 150kW chargers. EVgo projects a Savings Event for the high-power charging plazas, supporting as many as 20 charging plazas. EVgo remains in active contract negotiations for HPCP deployments, particularly targeting sites in the Los Angeles Basin and San Diego County.

Station Distribution

The table below summarizes the geographic distribution and progress as of the Reporting Date. The geographic distribution of HPCP is aimed to serve drivers and residents of multi-family housing throughout the State of California, including in both Northern and Southern California.

<i>Geography</i>	Requirement	Executed Contracts	Engineering	Permitting	Construction
LA Basin		4	1	2	1
SF Bay Area		8	1	5	2
San Joaquin Valley		-			
San Diego County		3	3		
Other PG&E Counties		1			1
Total:	10	16	5	7	4

EVgo continues to meet and overcome challenges during the permitting and construction phases of high-power charging plazas. For example, one delay for a charging plaza under construction was caused by a conflict related to the planned removal of a tree to meet ADA requirements. Ultimately, the result was an ADA exemption to protect the tree which required changes to the engineered drawings and the permitted plan. In another instance, coordination with multiple city departments or agencies claiming decision-making authority have both delayed contracting as well as permitting of sites with signed host agreements.

This collaborative effort with cities and utilities has played an essential role developing the market and working with public and private partners to identify paths forward on electric vehicle supply equipment (EVSE) projects in densely populated urban centers where public fast charging is critical, especially to open the marketplace for residents in multifamily housing with limited access to charging.

Low-Income PUMA Distribution

Three of the HPCP sites under contract are located within a low-income PUMA. There are additional sites in EVgo’s pipeline to deliver additional PUMA qualified sites.

Research Study

During the reporting period, EVgo contracted with UCLA’s Luskin Center for Innovation to evaluate the extent to which these charging plazas are serving the multi-family segment. This study is planned to commence following the energization of the first HPCP and run through 2019.

INSTALLATION OF ENERGY STORAGE

As part of the Second Amendment to the Long-Term Contract Settlement, NRG and EVgo can spend up to \$2.5 million towards the procurement and installation of batteries and related storage equipment.

EVgo has been building a commercial energy storage program over the past two years to continue the work started in the Stationary Storage Plus Electric Charging (SSPEC) technology demonstration project. EVgo has already successfully installed second life batteries at Union City and Baker, California, as part of the SSPEC project.

In 2018 EVgo has procured three small-scale (30 kW to 60 kW) and three large-scale energy storage systems (all three are 250 kW). EVgo has found sites for five energy storage systems and is currently looking for a site to place the last remaining large-scale energy storage system (250 kW/500 kWh).

Supply Chain / Procurement

To deploy energy storage beyond pilot projects EVgo performed a survey of commercial vendors in 2017 and moved forward with a smaller subset of vendors in 2018 into commercial contracts and purchase agreements.

The initial list of energy storage providers was diverse and evaluated on product deployment, sizing, and availability. Other considerations included, fostering EVgo's ability to gain detailed price discovery and understand full cost-benefit of developing storage deployment expertise in-house.

Supply chain challenges in the energy storage sector have impacted availability of equipment and therefore budget and timelines. In addition to most original equipment manufacturers estimating 6-month lead times to obtain new batteries, a supplier that EVgo contracted with in early 2018 to install equipment Q3/Q4 2018 was unable to deliver ordered products. EVgo has contracted and will continue to work with a diversity of suppliers to mitigate this risk.

It appears that new entrants will be entering the market in 2019 but historically, most of the energy storage installed to date has been in larger projects of 1 MW and above. EVgo encourages and looks forward to more commercial options at lower price points in 2019 and beyond.

For further details, see confidential [Appendix E](#).

Site Host Constraints

EVgo has found it surprisingly difficult to site the energy storage systems at charging stations and has found the ability to site the small-scale energy storage systems considerably easier than the large-scale energy storage systems.

The large-scale energy storage systems essentially come in shipping containers and are difficult to place in a nonobtrusive location. The small-scale energy storage systems are smaller and more modular which helps considerably. The large monolithic energy storage solutions are not ideal for siting at charging stations due to site host concerns about aesthetics as well as physical space constraints.

Another challenge to siting energy storage systems at DC fast charging stations is that there is no direct benefit to the site host. The site hosts who oftentimes want to be compensated for space utilized do not see any benefit to an energy storage system performing peak shaving or DC fast charging support on an electric meter dedicated for fast charging.

There are currently five energy storage systems in various phases of construction and EVgo expects to have at least four systems operational in 2019.

EVgo is interested in exploring how energy storage can play a role in supporting mobile EV charging. Similar to FreeWire’s solution and Volkswagen’s mobile charger announcement, EVgo generally sees value in a decrease in infrastructure costs and utility lead times to bring DC charging stations online more quickly in the future.

INSTALLATION OF MAKE READY STUBS AND MAKE READY ARRAYS

Status of Make-Readies Sites

Overall, EVgo has 792 Make-Ready Sites under contract, representing 6,896 Make-Ready Stubs. This build will exceed the minimum requirement of 6,875 Make-Ready Stubs required by the settlement. As of the Reporting Date, a total of 6,431 Make-Ready Stubs have been installed at 747 sites.

The table below summarizes the geographic distribution and progress as of the Reporting Date. EVgo has satisfied the regional distribution and has satisfied the public interest and workplace stub counts set forth in the Agreement. The multi-family housing installation minimum requirement was removed in the Second amendment, instead, 75% of make-ready stubs may be installed at EVgo’s discretion.

<i>Geography</i>	%	Build Obligation	Completed	Remaining
LA Basin	55%	2,269	2,434	-
SF Bay Area	27.5%	1,134	2,322	-
San Joaquin Valley	7.5%	309	318	-
San Diego County	10%	413	1,357	-
Total	60% of 6,875 OR 4,125	6,875	6,431	444

	% of total	Build Obligation	Completed	Remaining
Make Readies				
Workplace	15%	1031	2797	-
Public Interest	10%	688	699	-

Completed Make Readies as of the Reporting Date are listed in [Appendix B](#).

About two-thirds of EVgo’s remaining contracted stubs are on state-owned properties and have experienced delays related to this year’s wildfires. Make readies on state-owned properties require review by the State Fire Marshal; the State Fire Marshal extended the review process to 6 months, then formally put all construction projects On-Hold to re-allocate resources to address the wildfires.

Ordinarily, a make ready project from start to finish averages 3 to 4 month, including the review timeline for both the Property Owner approval and the State Fire Marshal plan check. The

projected timeline for completion at these sites is April/May to account for the revised review process.

Distribution of Make-Readies by CalEnviroScreen Criteria

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

Region	CES Qualified Sites			Percent of total sites			CES Qualified Stubs			Percent of total stubs		
	MDU	WP	All	MDU	WP	All	MDU	WP	All	MDU	WP	All
LA	48	33	82	33.1%	22.3%	27.1%	266	248	518	26.2%	20.2%	22.3%
SD	13	12	26	18.1%	18.8%	16.9%	129	111	248	20.5%	19.8%	18.3%
SF	7	20	37	5.7%	23.0%	14.0%	73	202	350	5.8%	27.7%	14.4%
SJV	0	14	14	0.0%	43.8%	40.0%	0	120	120	0.0%	42.6%	37.7%
Total	68	79	159	19.8%	23.9%	21.0%	468	681	1236	15.9%	24.3%	19.2%

Another way to consider make-readies distribution to disadvantaged communities or residents is to consider the percentage of multi-dwelling unit (MDU) properties (and stubs) that have deed-restricted housing units. By this standard, the results benefit disadvantage communities at 30.9% of total operational MDU stubs. 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. That being said, NRG and EVgo have found that a large number of low-income Californians do not have access to regular off-street parking; accordingly, public fast charging remains a critical priority for expanding EV access across demographics.

	Deed Restricted Sites	Percent of Total Operational MDU Sites	Deed Restricted Stubs	Percent of Total Operational MDU Stubs
LA	78	53.8%	523	51.5%
SD	16	22.2%	113	17.9%
SF	21	17.1%	270	21.5%
SJV	0	0.0%	0	0.0%
CA - All	115	33.5%	906	30.9%

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 customers completed 322,391 fast-charging sessions in the Reporting Period at Freedom Station sites, which dispensed over 4,914,381 kilowatt-hours of electricity.

This translates to 15.35 million miles driven on electricity in this quarter, displacing 631,993 gallons of gasoline (assuming 3.125 miles per kWh and 24.3 mpg).³ Accordingly, EVgo Freedom Station sites avoided 3,486.14 MT of CO₂.

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

³ 3.125 mi/kWh derived by AFDC from sales weighted average of 2016 model year vehicles with sales in 2015: 2015 sales from "U.S. Plug-in Electric Vehicle Sales by Model" (<http://www.afdc.energy.gov/data/vehicles.html>); MPGs based on 24.3 MPG CAFÉ Standard (http://www.afdc.energy.gov/vehicles/electric_emissions_sources.html).

TECHNOLOGY DEMONSTRATION PROGRAMS

Stationary Storage Plus Electric Charging (SSPEC)

Project Background

The Stationary Storage Plus Electric Charging (SSPEC) project uses stationary batteries in a technology demonstration application to reduce the cost of operating DC fast chargers (Level 3) and alleviate strain on the grid.

The SSPEC project has successfully:

1. Deployed a test site with microgrid components, including battery storage, solar generation, EV charging infrastructure, and site control technology
2. Tested various configurations of distributed energy resources and electric vehicle DC fast chargers
3. Analyzed results from operation of the SSPEC site and historical data from EVgo's charging station network to identify load profiles, potential sites, and utility territories which can benefit most from stationary storage and/or generation on site

Upon successful economic and operational demonstration, EVgo intends to commercialize these technologies and integrate them into its broader DC fast charger network as appropriate. For example, following the initial learnings from the installation at the EVgo University of California-San Diego site, EVgo has also deployed energy storage at its Union City location.

The SSPEC work will enable improved deployment of DC fast chargers by EVgo and third parties at a wider variety of locations. Stations deployed with stationary storage can mitigate demand chargers and potentially have a lower total cost of ownership to property owners and electric vehicle service providers (EVSPs) alike.

Q4 2018 Activities:

- Successful installation of 2nd and 3rd BMW Second Life Battery systems at EVgo high-power charging station in Baker, CA

Q1 2019 Upcoming Activities:

- Complete Princeton Power Systems (PPS) commissioning of (2) 30 kW / 44 kWh 2nd life energy storage systems at Baker, CA site pending SCE approval
- Receive SCE final Rule 21 Interconnection approval and permission to operate for 2nd and 3rd energy storage systems at Baker, California station
- Deploy OCPP 1.6 on BTC chargers at UCSD and implement new dynamic site demand cap functionality (delayed by a quarter due to OCPP 1.6 release schedule)
- Turn on fourth charger at SSPEC site (contingent upon chargers being upgraded to OCPP 1.6)

- Update call with UL on 1974 standard development

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 (PHEVs) and six Nissan LEAF battery electric vehicles (BEVs). The four primary goals of EVSA are to:

- 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 as well as the Revised EVSA Scope of Work – April 2018.

Q4 2018 Activities:

Use Cases: The EVSA Project Team continued to work on executing the outlined use cases. The first use case, Interconnection, was executed in full on April 24th. The second use case, Transformer Upgrade Deferral, was completed in late August 2018 with the final report to be released publicly in early 2019 following final review by the California Energy Commission.

The third use case, Emergency Power Back-Up, continued to be developed with project stakeholders. The cost-benefit analysis framework was outlined with the UCSD Project Team to qualify the value of electric service reliability coming from a diesel generator as compared to an electric vehicle. The Project Team conducted a site walk with the UCSD team to lay out the process for conducting the actual implementation and to better understand approvals required from the University prior to proceeding. It was decided the target implementation date would be sometime during UCSD's spring break in late March 2019.

The fourth use case, quantifying the Value of V2G, continued to make progress in Q4. All 8 of the project vehicles were successfully executing vehicle-to-grid responses based on the California Independent System Operators (CAISO) historical Automated Generation Control (AGC) signal sent from the Nuvve aggregator. The overall hardware/software system continued to be monitored for optimal operation and the bidding strategy continued to be fine-tuned based on vehicle availability. Energy and Environmental Economics (E3) reviewed data collected during September and October and provided the project team with preliminary valuation results of market participation for review. Over the next month the E3 and Nuvve Teams will be reviewing all data from September – December to include in the Interim project reports due in January 2019.

Deliverables: The Project Team submitted the following deliverables in confidential Appendix D-2 of the Q4 2018 quarterly report: (1) Charging Station Metrics Report. The following deliverables will be due to the CPUC in January 2019 following the completion of Q4 2018 data collection at the end of December 2018:

- Interim Report on Actual and Simulated Revenue from V2G
- Interim Data Analysis Report Module
- Interim Project Benefits Update

Administrative: The EVSA Project Team revised the Scope of Work for the EVSA project in Q3 2018 to conduct data collection until the end of Q2 2019, followed by final reporting completed in Q3 2019.

Q1 2019 Upcoming Activities:

Q1 2019 will focus on the completion of the following deliverables in the first few months: Interim Report on Actual and Simulated Revenue from V2G, Interim Data Analysis Report Module, Interim Project Benefits Update. Once the reports are finished, the focus will be on planning for the implementation of the third use case, emergency power back up.

For further details, see confidential [Appendix D-2](#).

Extreme High Power DC Charging Station

Project Background

Automakers are continuing to increase range of EVs by increasing battery capacities, e.g. the late-2016 release of the all-electric Chevy Bolt with 238 miles of range and announcements of soon-to-be-released vehicles of similar and longer range. Depending on the use case, e.g. along highway corridors, higher power levels of charging may be needed to deliver a satisfying customer experience. EVgo has already deployed a variety of DCFCs at different charging speeds and continues to monitor how the energy delivery rate interplays with customer needs. Despite the fact that no EV capable of taking 350kW charging is widely commercially available in the US today, automakers and others are interested in deploying and learning from 350kW systems

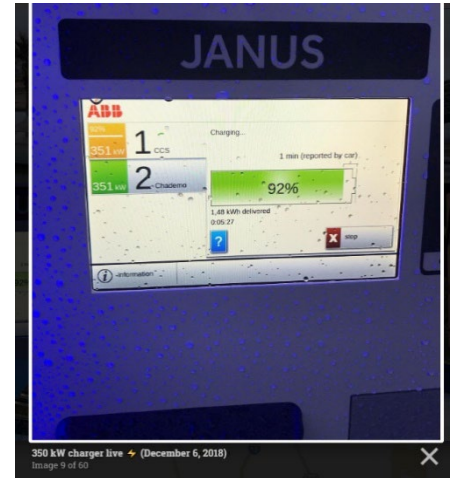
EVgo's Extreme High Power DC Charging Station Project is intended to bring auto OEMs, EVSE, and cable manufacturers together to demonstrate and facilitate testing and development of standards and equipment. The project will do the following:

- Deploy first of its kind electric vehicle supply equipment (EVSE) infrastructure capable of high-power DC charging (300+ amps).
- Test with auto original equipment manufacturers (OEMs) and EVSE providers to allow for test bed and development of standards.

Q4 2018 Activities

EVgo's high-power charging station in Baker, CA became operational in Q2 2018. The site has been open for public charging since June 18, 2018 with (2) ABB Terra 53 50 kW chargers and a 150kW ABB prototype charger.

Final charger installation after "Phase II" of the project which happened in Q4 includes (2) ABB 50 kW chargers, (2) BTC 150 kW chargers, (1) ABB 175 kW charger, and (1) ABB 350 kW charger. The station came online Dec. 6th, 2018 to be the first operational, publicly available 350 kW charger in California and is currently available for public charging as well as to OEM partners for vehicle testing.



*Image 1: EVgo charging station at World's Tallest Thermometer in Baker, CA (Dec. 2018)
350 kW charger on PlugShare (Dec 6, 2018)*

Since June EVgo has worked with our charger manufacturer partners (ABB and BTC) and electrical contractor (MaxGen Energy Services) to complete a “Phase II” of EVgo’s station at the World’s Tallest Thermometer in Baker, California.

In between June and November 2018 design and engineering was completed for “Phase II” of the project. In “Phase I,” the station was originally designed for ABB prototype charge posts which were only capable of 150 kW, it took re-engineering the cable runs and confirming physical space availability to make sure we could fit the production high-power charging equipment from ABB and BTC at the site.

Originally ABB had communicated that they had a product in development that would allow two separate charge posts to each have one dedicated charge cabinet (capable of 175 kW of power output) while a third charge cabinet could “swing” power to whichever charge post “asked” for power above 175 kW up to 350 kW.

ABB’s “dynamic” power cabinet product was not available at time of procurement so instead (2) ABB high-power charge posts (with liquid-cooled CCS cables capable of up to 400 Amps and air-cooled CHAdeMO cable capable of up to 200 Amps) are fed from (3) 175 kW ABB charge cabinets in a 2:1 and 1:1 configuration.

The charge post in a “2:1” configuration is tied to (2) 175 kW ABB charge cabinets and is capable of 350 kW max charging. The other charge post in a “1:1” configuration is tied to (1) 175 kW ABB charge cabinet and is capable of 175 kW max charging.



Image 2: ABB 175 kW charger (1:1 configuration configuration)



Image 3: ABB 350 kW charger (2:1 configuration)



Image 4: ABB power cabinets. 1 cabinet feeds the 175 kW charger, 2 cabinets feed the 350 kW charger.



Image 5: ABB charge post interior.



Image 6: ABB 175 kW power cabinet interior.



Image 7: ABB charge post nameplate.



Image 8: ABB charge cabinet nameplate.

The BTC 150 kW chargers also utilize the “cabinet / dispenser” model and are both arranged in a 1:1 configuration. The BTC charge dispensers (charge post = charge dispenser) also utilize liquid-cooled cables and are capable of output up to 350 Amps on CCS (200 Amps on CHAdEMO) and up to 950 Volts CCS (500 Volts on CHAdEMO).



Image 9: BTC 150 kW charger.



Image 10: BTC 150 kW charger nameplate.

The BTC chargers are able to be software configured to control charge amperage anywhere from 125 Amps all the way up to 350 Amps which is a useful feature as we move into testing different vehicles' real-world charging capabilities.

The BTC chargers were originally set at 125 Amps (equivalent to a 50 kW charger) and are currently set at 150 Amps (equivalent to a 60 kW charger) as we gather charge session data. We expect to increase the amperage limit over time and gather charging session data at different amperage limit levels to compare.



Image 11: BTC charge dispenser interior.



Image 12: Liquid-cooled cable connector nameplate.



Image 13: BTC 150 kW power cabinet interior.

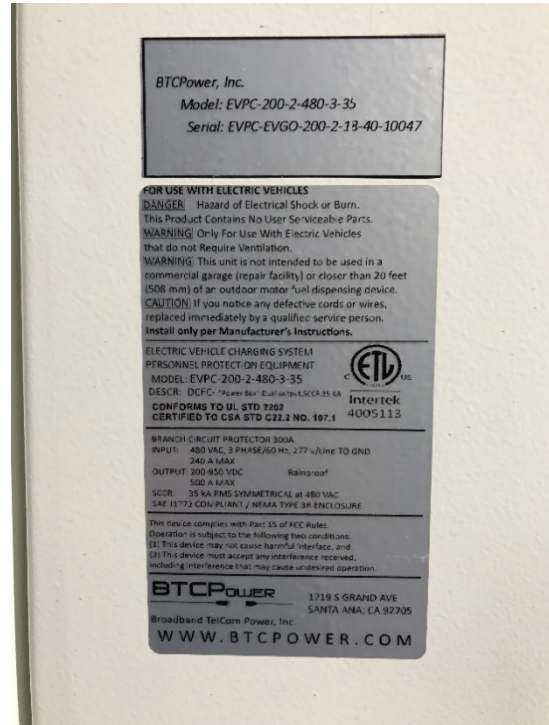


Image 14: BTC charge cabinet nameplate.

It is worth noting in *Image 13* the BTC power cabinet is modular and can hold up to four, 50 kW “cassettes” for a total power of 200 kW. The BTC power cabinets at EVgo’s Baker, CA site are

currently filled with three 50 kW cassettes for a total power output of 150 kW. EVgo encourages all manufacturers to continue to develop flexible and modular charger designs and is actively working with technology providers to encourage innovation in design and deployment.

The charging station in Baker, California at the World's Tallest Thermometer is currently operational with all 6 chargers available to the public. As a useful guide for those visiting the station, the chargers can be identified by name labels near their screens:

- Astrid: 50 kW
- Niska: 50 kW
- Chance: 150 kW
- Ollie: 150 kW
- Ivo: 175 kW
- Janus: 350 kW

Additional energy resources at EVgo's Baker charging station include a 20 kW solar canopy and a 60 kW / 88 kWh energy storage system. EVgo will be studying the value and performance of these additional energy resources at the site in conjunction with its Stationary Storage Plus Electric Charging (SSPEC) technology demonstration project.

The project goals for the upcoming quarters will be to gather charging data from a variety of vehicles from different manufacturers in order to determine different charge rates achieved by different combinations of vehicles and charger power levels.

As the industry continues to accelerate this data will help inform what the appropriate charger power level is to install given vehicles on the road and will help verify manufacturers claims as to vehicles ability to charge at certain rates.



Image 15: Chevy Bolt charging at 52 kW on ABB 175 kW charger from commissioning test.

EVgo would like to thank the CPUC and project partners ABB, BTC, and MaxGen Energy Services for their continued support for development and research toward more publicly available high-power charging. EVgo's Baker charging station with a variety of charging levels offers the perfect real-world test site for EV driver enthusiasts and OEM partners alike to test their vehicles charging capabilities.

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 underserved 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.

The two approved Opportunity Programs, Green Raiteros and Equal Access Charging Hub (EACH), were established in 2017. Summaries of these programs, progress to date, and ongoing project schedules are included herein.

Green Raiteros

Project Background

The Green Raiteros Pilot Project is being executed in partnership with the San Joaquin Valley Latino Equity Advocacy & Policy Institute (the LEAP Institute), the Fresno County Rural Transit Authority (FCRTA), and the Shared Use Mobility Center (SUMC). The Green Raiteros Pilot builds on an existing grassroots ridesharing program comprised of retired Valley farmworkers who offer rides for people without access to transportation to and from work, medical appointments, or other needs. Green Raiteros expands access to carbon-free mobility—and given limited public transportation, sometimes any mobility at all—in the Central Valley by strategically and sustainably introducing EVs to the Raiteros’ services.

2018 has built on the accomplishments of 2017 and major milestone included: site construction permitting and development of the Raiteros headquarters in Huron, CA; launching of the Green Raiteros EVride sharing service; acquisition of two EVs; a finalized business plan; hiring the first Operations Manager; operational development of trip services, driver training and engagement expanded to surrounding communities.

Q4 2018 Activities

Green Raiteros launched its ride sharing service in Huron with its open house in September to in show the neighbors the community conference room, the newly purchased electric vehicles and where the (10) Level 2 charging stations are installed. The SNAP App beta testing and (8) informational sessions were conducted in Huron and nearby communities. The advisory board expanded along with operational systems being rolled out at the new headquarters.

On October 12th, Green Raiteros held a Ribbon Cutting Ceremony, a milestone celebrating the successful culmination of major building renovation, programmatic groundwork and significant capacity building. EVgo representatives were on hand to support the community and demonstrate EVgo Fast Start, a modular and mobile platform to support short term deployments of fast charging infrastructure.

<https://www.evgo.com/about/news/green-raiteros-connects-rural-californians-vital-services/>



Image 1: Rey Leon, Founder / Executive Director of the The LEAP Institute Speaking at the Dedication Event



Image 2: Community Event Covered by UniVision



Image 3: Community Member with Level 2 charger installed at the Huron headquarters



Image 4: Field Representative Chongtoun Mouavangsou, presenting Leon, with Certificate of Recognition

Speakers included:

Rey Leon, Founder / Executive Director, The LEAP Institute
Reyes Barboza Jr, Director of Operations, Green Raiteros

Monica Torres, Business Operations Manager, EVgo
Esmeralda Soria, President of Fresno City Council
Chongtoua Mouavangsou Field Representative at California State Assembly on behalf of
Joaquin Arambula
Esperanza Vielma, Board Member, LEAP Institute
Michelle Romero, National Director, Green For All

The Green Raiteros program continues to progress steadily in the following areas:

Administrative:

Organizational and operational insurance policies for the program are in force. The LEAP Institute hired an accounting specialist familiar with the accounting and billing procedures typical in volunteer transportation programs that provide non-emergency medical transport. This will be key to securing contracts with clinics and other health care providers and rapidly increasing the volume of billable rides moving forward.

Staffing:

As of October, the Green Raiteros Operations Director commenced the search and hiring process for additional employees - 10 candidates were interviewed and ultimately as of December, 3 candidates have been hired and are currently in training to fill Transportation Coordination, Dispatch and Marketing/Outreach positions for Green Raiteros.

Operations:

With two electric vehicles in the network, Operations staff continue to recruit drivers and educate prospective drivers and the broader community on electric vehicle technology. Staff have attended over a dozen community events, public hearings, and community engagements to advance awareness of the Green Raiteros program. Including ongoing partnerships with volunteer feeder programs like Lideres Campesinas - an all women organization that advance women's leadership and support in the region.

- Volunteer Driver Trainings - since October, operations staff have organized 3 group driver trainings and recruitment events and over 20 one-on-one driver recruitment meetings.
- Client Medical Trips - 16 completed and more scheduled
- Green Raiteros Clients - 12 completed in-take forms; more in process
- Medical Trip distribution: Hanford (9), Fresno (5), Bakersfield (1), Madera (1)
- Clinic Research - Operations staff compiled spreadsheets of facilities from trip database and existing GIS inventories across the GR service counties (Fresno, Kings, Tulare) in order to begin establishing contract relationships.

Scheduling and Training Tools:

SNAP, the driver scheduling software, now allows dispatch to collect rides and upload into the SNAP database directly (in addition to drivers adding trips manually), allowing drivers to have a download of their daily trips appear directly on their app every morning. The additional customizations that have been added to SNAP are Spanish translation and Safety Checklist. The latter upon opening will prompt the driver to go through a "safety checklist" for their vehicle

asking them to check tires, brakes, headlights/taillights, windshield wipers, seatbelts, and confirm first aid kit on board. SNAP software support has been continuously responsive to the Green Raiteros Ops team during Q4 - helping to set up the software on Samsung Galaxy tablets that drivers have in the vehicle and making sure administrators have seamless access to the back-end web portal for ongoing database maintenance. SNAP has also offered additional training on their 2.0 version which will be available in June 2019.

Electric Vehicles Charging:

The newly opened Romualdo M. & Imelda C. Leon Community and Mobility Center has (10) installed operational Level 2 Electric Vehicle Charging stations open to the local Huron community and the EV driving public with extended office hours in downtown Huron, CA. Challenges with PG&E have delayed the chargers being able to be on full amperage. The planned Level 3 install of (2) fast chargers in downtown Fresno is in permitting review with the City of Fresno and PG&E.

Partnerships:

Many of the original partnerships and organizational relationships such as CEERT and Shared Use Mobility Center focused on incubating the Green Raiteros program have naturally relinquished or phased out while new partnerships have emerged. Mobility Development Partners, Purepecha Construction, Fresno State College Office of Community and Economic Development, and Turn Key Trips (a software company focused on volunteer transportation trip scheduling and dispatch) are a few of the examples of relationships focusing on scaling up the Green Raiteros operation. On a parallel track, Green Raiteros continues to cultivate funders and financial institutions such as The California Endowment, Beneficial State Bank Foundation, The 11th Hour Project, and San Joaquin Valley Air Resource Board to continue advancement of EV uptake and clean shared mobility networks. Where the Green Raiteros advisory group had previously focused on providing advice on the start-up tasks for the organization, the new focus of GRAC meetings in Q4 has been to coordinate the Green Raiteros service with other existing transit options and building relationships with clinics, medical facilities, and other service related business and relationship development to set Green Raiteros on a path to scale up to close gaps and add value to existing service providers through contracting and service agreements. In November Green Raiteros started talks with Beneficial State Bank (BSB) Foundation regarding a partnership to promote BSB's electric vehicle financing program with the goal of having Green Raiteros as a community liaison through education and awareness efforts to put Raiteros/as on path to be cognizant of subsidies and financing options through which they could upgrade to EV ownership.

Challenges:

The adaptive re-use of a building nearly 50 years old extended the general contractor's efforts stabilizing the building, upgrading, and in some case installing mechanical systems for the first time, retrofitting and upgrading electric service, conduit, and wiring - all of which extended the project period by 6 months. Challenges related to PG&E scheduling for the new electric service

continue to cause delays in providing the level of service to support the charging of more than 2 vehicles at a time – EVgo expects resolution in Q1 2019.

Operations staff spent an extraordinary amount of time in Q4 with facility and organizational set-up, impacting Green Raitero's initial ability to aggressively recruit new drivers and clinic contracts. This is expected to ramp up very quickly through late December and January with the recent addition of new staff and the training of new drivers that have recently been recruited.

Q1 2019 Planned Activities

The beginning of the year will see the winding down of EVgo's funding to Green Raiteros and a transition to a fully operational business with the first employee hired celebrating a one-year anniversary, additional employees onboarded, more volunteers being recruited, and ridership tripling. The Transformative Climate Communities grant will be rolling out new stations throughout Fresno county to facilitate Green Raiteros to be able to extend their range and reach. Additional grant writers will be retained to continue to find new sources of funding for expansion in neighboring counties. Support will be in place for the upgraded SNAP app as it rolls out in 2019 with its extensive training modules. The Office of Community and Economic Development (OCED) at Fresno State University will elevate the marketing reach of the Green Raiteros program. OCED will contribute to this proposed project by coordinating the multi-cultural media outreach and marketing material development activities. Where in the past Green Raiteros focused on attending community events, speaking at public hearings, and engaging the community on a door-to-door grassroots campaign, OCED will add another layer of marketing assistance through Ad and PSA campaigns tailored to Spanish language radio and television in the Valley as well as in local circulars and publications.

EACH

Project Background

The focus of the Electric Access Charging Hub (EACH) project is to create EV access and job opportunities in underserved communities. EVgo is developing seven EV-charging hubs in low-income communities of the San Francisco Bay Area, Los Angeles, and San Diego that will serve the public as well as electric carshare and rideshare vehicles. The EACH project aims to support EV carsharing and ridesharing, create job opportunities, provide publicly available EV fast charging, and spur the adoption of electric vehicles in underserved neighborhoods.

2018 was marked by major advances in program development; central to this was finalizing site host agreements for all 7 hubs located in disadvantaged communities and City Council approval for an 8th. Advances in the EACH program also stemmed from engagement from project advisor the Shared-Use Mobility Center (SUMC), who worked to identify potential partners, community stakeholders and culminated in a state of the industry memo to EVgo: highlighting recommendations on carshare partnership models, site suitability, and potential alignment with additional funding sources. Further, EVgo laid the groundwork for marketing and outreach and

program evaluation in 2019 by contracting with the Citizen Group and SUMC, respectively, who will execute in line with the hub openings.

Q4 2018 Activities

In the past quarter, EVgo commenced construction of three Electric Access Charging Hubs, and finalized contracts for all 7 hubs located in disadvantaged communities. As of the reporting date EVgo had city council approval to build an 8th location should funding be available. EVgo will continue to evaluate whether an 8th location can be built under the EV Opportunity budget. If the budget does not accommodate the 8th location, EVgo plans to build the site under the high-power charging plaza program which is focused on locating 3 or more 50 kW chargers in the top 50% of California Public Use Microdata Areas (PUMAs) ranked by percentage of residents in multi-family housing.

Additionally, EVgo selected and contracted with a marketing firm, the Citizen Group, to run an outreach and education campaign. Citizen Group presented a keen understanding of the critical steps to layout a campaign for the EACH program in disadvantaged communities. Citizen Group's Charging for Change campaign will include community-based events, collaboration with community-based organizations, as well as creative outreach that is considerate of the multilingual and multicultural neighborhoods that this program will reach.

Stakeholder Engagement: The key messages raised by stakeholder groups regarding disadvantaged communities were woven into outcome metrics in the planned final evaluation by SUMC and the creative brief developed by Citizen Group. In addition, EVgo's efforts to find supportive organizations such as Plug In America are being evaluated for collaboration opportunities for a broader reach of the EACH program through their established programs. The marketing and outreach campaign portion of the EACH program is planning to use multiple tools for outreach such as new channels and established electric vehicle organizations channels in addition to pursuing opportunities to collaborate with local CBOs.

Program Evaluation: Shared Use Mobility Center (SUMC) submitted their board overview of the research study – 12-month picture covering customer awareness, community engagement, vehicles access, charging access, charging behavior, travel behavior, hub utilization and GHG/environmental impact. EVgo and SUMC started a process to define how these areas will be measured, what are the specific KPIs, what data will be needed, what will be the data sources and what are the specific needs from the stakeholders and partners. The EACH program can serve as a policy pilot as the shared economy and shared mobility continue to create trends that policy makers, community organizers and businesses are recognizing as having transformational change in neighborhoods.

Site Development: All sites are in permitting phase and three stations are in construction.

Region	Hubs
LA	3
SD	1
SF	4
Total	8

Carshare and Rideshare Partnerships: A key element of the EACH program is to develop carshare and rideshare partnerships that will help expand access to disadvantaged communities served by the EACH hubs. EVgo continued to reach out to additional rideshare and carshare companies with whom the company has previously worked as well as new companies to continue to expand the reach in each community where EACH sites are planned.

2019 Q1 Activities

In Q1 2019, EVgo expects that the Charging for Change marketing campaign by Citizen Group to be in place and schedules for launching station openings, community events, and educational outreach at each specific site coordinated with stakeholders. EVgo expects all sites to finish construction with only energization as the outstanding completion hurdle. EVgo intends to announce partnerships with carshare and rideshare companies during rollout of EACH site opening in the various disadvantaged communities. Finally, the program evaluation will begin and key performance indicators will be tallied to evaluate the EACH Project.

Appendix A

Freedom Station Table

See attached.

APPENDIX A - Freedom Station Detail
Dated as of: December 5, 2018

<u>Name</u>	<u>Street Address</u>	<u>City</u>	<u>Region</u>	<u>Operational Date</u>	<u>PUMA</u>
SF Bay Area					
1 Westlake Shopping Center	75 Southgate Ave.	Daly City	SF Bay Area	6/24/2013	
2 Whole Foods Fremont	3111 Mowry Ave.	Fremont	SF Bay Area	9/25/2013	
3 Whole Foods SF	2001 Market Street	San Francisco	SF Bay Area	11/7/2013	
4 Vacaville Premium Outlets	321 Nut Tree Road	Vacaville	SF Bay Area	11/20/2013	
5 Livermore Premium Outlets	2774 Paragon Outlets Drive	Livermore	SF Bay Area	1/6/2014	
6 Walgreens SF	1175 Columbus	San Francisco	SF Bay Area	2/26/2014	
7 Public Market	5959 Shellmound St.	Emeryville	SF Bay Area	12/23/2013	x
8 The Mall at Northgate	2150 Northgate Dr.	San Rafael	SF Bay Area	12/18/2013	
9 The Village at Corte Madera	1618 Redwood Hwy	Corte Madera	SF Bay Area	3/25/2014	x
10 Whole Foods Cupertino	20955 Stevens Creek Blvd	Cupertino	SF Bay Area	4/29/2014	
11 Whole Foods Novato	790 De Long Ave	Novato	SF Bay Area	3/3/2014	
12 Whole Foods Telegraph Ave	3000 Telegraph Ave	Berkeley	SF Bay Area	4/2/2014	
13 Whole Foods Berkeley	1025 Gilman	Berkeley	SF Bay Area	11/12/2014	
14 Whole Foods San Jose	777 The Alameda	San Jose	SF Bay Area	12/5/2014	x
15 Linda Mar	1227 Linda Mar Shopping Center	Pacifica	SF Bay Area	8/29/2014	
16 Whole Foods Lafayette	3502 Mt. Diablo Blvd	Lafayette	SF Bay Area	12/5/2014	
17 Whole Foods Los Altos	4800 El Camino Real	Los Altos	SF Bay Area	6/5/2014	
18 Rose Pavilion	3903 Santa Rita Rd.	Pleasanton	SF Bay Area	11/11/2014	
19 Great Mall	447 Great Mall Dr	Milpitas	SF Bay Area	6/24/2014	
20 Whole Foods Santa Rosa	733 Coddington Center	Santa Rosa	SF Bay Area	12/1/2014	x
21 Petaluma Outlets	2200 Petaluma Blvd North	Petaluma	SF Bay Area	2/11/2014	x
22 Nob Hill Foods Mountain View	1250 Grant Rd	Mountain View	SF Bay Area	7/15/2014	
23 Crossroads	2316 Monument Blvd	Pleasant Hill	SF Bay Area	5/28/2014	
24 Santa Rosa Plaza	1071 Santa Rosa Plaza	Santa Rosa	SF Bay Area	12/1/2014	x
25 Napa Outlets	629 Factory Stores Drive	Napa	SF Bay Area	1/30/2015	
26 Whole Foods Redwood City	1250 Jefferson Ave	Redwood City	SF Bay Area	3/13/2015	
27 Gateway Plaza-Vallejo	173 Plaza Drive	Vallejo	SF Bay Area	4/24/2015	x
28 F&E Hayward	19691 Hesperian Blvd	Hayward	SF Bay Area	4/24/2015	x
29 Stoneridge Mall	1700 Stoneridge Mall Rd	Pleasanton	SF Bay Area	4/30/2015	
30 Whole Foods Dublin	5200 Dublin Boulevard	Dublin	SF Bay Area	5/21/2015	
31 City of San Mateo	385 1st Ave	San Mateo	SF Bay Area	7/13/2015	
32 Fresh & Easy Sunnyvale	1180 N Fair Oaks Ave	Sunnyvale	SF Bay Area	8/4/2015	
33 Nob Hill Watsonville	1912 Main Street	Watsonville	SF Bay Area	8/27/2015	
34 Whole Foods Santa Cruz	911 Soquel Avenue	Santa Cruz	SF Bay Area	8/28/2015	
35 Whole Foods San Francisco (Potrero Hill)	50 Rhode Island St	San Francisco	SF Bay Area	10/9/2015	x
36 Gilroy Premium Outlets	681 Leavesley Rd	Gilroy	SF Bay Area	11/16/2015	
37 San Francisco Premium Outlets	2774 Livermore Outlets Drive	Livermore	SF Bay Area	11/17/2015	
38 Lucky Fremont	5000 Mowry Ave.	Fremont	SF Bay Area	12/2/2015	
39 Lucky Daly City #707	6843 Mission Blvd.	Daly City	SF Bay Area	12/31/2015	
40 Legacy - Nineteen800	19800 Vallico Parkway	Cupertino	SF Bay Area	1/21/2016	
41 Whole Foods Oakland	230 Bay Place	Oakland	SF Bay Area	3/1/2016	x
42 University of California - UC Hastings	333 Larkin Street	San Francisco	SF Bay Area	3/4/2016	x
43 San Carlos Library	610 Elm St	San Carlos	SF Bay Area	7/21/2016	
44 Lucky Los Altos	2175 Grant Rd	Los Altos	SF Bay Area	8/18/2016	
45 Whole Foods San Francisco (Ocean Ave)	1150 Ocean Ave	San Francisco	SF Bay Area	9/21/2016	
46 Lucky Capitola #702	1475 41st Ave	Capitola	SF Bay Area	10/6/2016	
47 Fairfield - Verdant Freedom Station	3700 Casa Verde St	San Jose	SF Bay Area	10/18/2016	
48 Lucky Napa (Trancas St) #731	1312 Trancas St	Napa	SF Bay Area	10/18/2016	
49 Whole Foods San Francisco (Franklin)	1765 California St	San Francisco	SF Bay Area	10/24/2016	x
50 Whole Foods San Francisco (SOMA)	399 4th St	San Francisco	SF Bay Area	10/24/2016	x
51 Whole Foods Walnut Creek (Ygnacio Rd)	2941 Ygnacio Valley Rd	Walnut Creek	SF Bay Area	10/31/2016	
52 Walmart 5139 Dixon	235 E Dorset Dr	Dixon	SF Bay Area	11/1/2016	
53 Walmart 2553 Windsor	6650 Hembree Ln	Windsor	SF Bay Area	11/2/2016	x
54 Walmart 5884 San Jose	5095 Almaden Expy	San Jose	SF Bay Area	11/4/2016	
55 Raley's Brentwood #336	2400 Sand Creek Rd	Brentwood	SF Bay Area	11/16/2016	
56 Lucky Sebastopol #777	776 Gravenstein Hwy N	Sebastopol	SF Bay Area	12/1/2016	x
57 Lucky Martinez #725	1145 Arnold Dr	Martinez	SF Bay Area	12/1/2016	
58 Nob Hill Alameda #632	2531 Blanding Ave	Alameda	SF Bay Area	12/2/2016	
59 Marsh Manor Shopping Center	3640 Florence St	Redwood City	SF Bay Area	12/2/2016	
60 New Leaf Half Moon Bay	150 San Mateo Rd	Half Moon Bay	SF Bay Area	1/9/2017	
61 Cupertino Village	10869 N Wolfe Rd	Cupertino	SF Bay Area	12/19/2016	
62 Walmart 5435 San Jose (Story Rd)	777 Story Rd	San Jose	SF Bay Area	6/14/2017	
63 City of Union City - Smith St. Lot	3960 SMITH ST	Union City	SF Bay Area	11/30/2017	
64 Lucky San Jose #758	565 W Capitol Expy	San Jose	SF Bay Area	11/28/2017	
65 ABB San Jose Headquarters	3055 Orchard Dr.	San Jose	SF Bay Area	11/22/2017	
66 New Seasons Sunnyvale	760 E El Camino Real	Sunnyvale	SF Bay Area	11/7/2017	

APPENDIX A - Freedom Station Detail
Dated as of: December 5, 2018

<u>Name</u>	<u>Street Address</u>	<u>City</u>	<u>Region</u>	<u>Operational Date</u>	<u>PUMA</u>	
67 Walmart #2697 Antioch	4893 Lone Tree Way	Antioch	SF Bay Area	10/30/2017	x	
68 Walmart #1651 American Canyon	7011 Main St	American Canyon	SF Bay Area	10/26/2017		
69 City of St. Helena	1304 Oak Ave	Saint Helena	SF Bay Area	12/21/2017		
70 Town of Colma	1198 El Camino Real	Colma	SF Bay Area	12/12/2018		
					70	16
<u>San Diego</u>						
1 Fashion Valley	7007 Friars Road	San Diego	San Diego	9/18/2013		
2 Las Americas Premium Outlets	4211 Camino De La Plaza	San Diego	San Diego	10/29/2013	x	
3 Flower Hill Promenade	2600 Via De La Valle	Del Mar	San Diego	12/20/2014		
4 Carlsbad Premium Outlets	5620 Paseo Del Norte	Carlsbad	San Diego	12/6/2013		
5 Broadway Plaza	1166 Broadway	Chula Vista	San Diego	1/6/2014	x	
6 SDG&E Innovation Center	4750 EV Clairemont Mesa Blvd	San Diego	San Diego	3/9/2014		
7 Rancho Penasquitos	13255 Black Mountain Rd	San Diego	San Diego	3/31/2014		
8 Del Norte Plaza	330 West El Norte Plaza	Escondido	San Diego	3/9/2014	x	
9 Fenton Marketplace	2482 Friars Rd	San Diego	San Diego	2/5/2015		
10 San Diego Tech Center	9605 Scranton Rd	San Diego	San Diego	2/27/2015		
11 Mira Mesa Mall	8110 - 8340 Mira Mesa Blvd	San Diego	San Diego	3/31/2015		
12 Melrose Village	1601 South Melrose Drive	Vista	San Diego	5/21/2015		
13 Walmart - San Diego # 2479	3412 College Ave	San Diego	San Diego	11/3/2016	x	
14 Walmart - Chula Vista #3516	1360 Eastlake Pkwy	Chula Vista	San Diego	11/10/2016		
15 Lazy Acres - Encinitas	150 Encinitas Blvd	Encinitas	San Diego	12/9/2016		
16 Santee Trolley	9846 Mission Gorge Rd	Santee	San Diego	6/8/2017		
17 Walmart - Oceanside #2245	705 College Blvd	Oceanside	San Diego	12/5/2017		
18 Lazy Acres - Hillcrest	422 W Washington St	San Diego	San Diego	9/27/2017		
19 Camino Town and Country	2227 S El Camino Real	Oceanside	San Diego	8/28/108		
					19	4
<u>LA Basin</u>						
1 Camarillo Premium Outlets	900 1/2 Camarillo Center Dr.	Camarillo	LA Basin	11/11/2013		
2 Walgreens Tarzana	5353 Mecca Ave.	Tarzana	LA Basin	3/24/2014		
3 Outlets at Orange	20 City Blvd W	Orange	LA Basin	4/21/2014		
4 Westminster Mall	1025 Westminster Mall	Westminster	LA Basin	5/30/2014		
5 Brea Mall	200 Brea Mall	Brea	LA Basin	5/2/2014		
6 Los Cerritos Center	200 Los Cerritos Mall	Cerritos	LA Basin	6/4/2014		
7 Stonewood Center	306 Stonewood Street	Downey	LA Basin	3/28/2014		
8 Larwin Square	654 East 1st Street	Tustin	LA Basin	3/31/2014		
9 Walgreens Huntington Beach	19501 Beach Boulevard	Huntington Beach	LA Basin	8/14/2014		
10 Corona Hills Plaza	360 McKinley Street	Corona	LA Basin	9/2/2014		
11 Hines Warner Center	5700 Canoga Ave	Woodland Hills	LA Basin	3/28/2014		
12 Cabazon Outlets	48400 Seminole Drive	Cabazon	LA Basin	4/23/2014	x	
13 Country Fair SC	12013 Central Avenue	Chino	LA Basin	5/20/2014		
14 Inland Center	500 Inland Center Drive	San Bernardino	LA Basin	6/2/2014	x	
15 Oaks Mall	350 W Hillcrest Drive	Thousand Oaks	LA Basin	4/30/2014		
16 Pacific View Mall	3301 East Main Street	Ventura	LA Basin	4/23/2014		
17 Pavilions Place	1600 Beach Blvd	Westminster	LA Basin	9/19/2014		
18 Bristol Plaza	3361 South Bristol St	Santa Ana	LA Basin	12/2/2014		
19 Shops at Mission Viejo	555 Shops At Mission Viejo	Mission Viejo	LA Basin	6/2/2014		
20 City of Hermosa Beach Parking	1334 Hermosa Avenue	Hermosa Beach	LA Basin	7/30/2014		
21 Dunlap - Huntington Harbor	16821 Algonquin St	Huntington Beach	LA Basin	9/15/2014		
22 8000 Sunset Strip	8000 Sunset Strip	Los Angeles	LA Basin	2/19/2015		
23 Tarragona	1000 N. Western Avenue	San Pedro	LA Basin	8/13/2014		
24 Morongo Casino	49500 Seminole Drive	Cabazon	LA Basin	3/4/2015	x	
25 Plaza Rio Vista	67800 Vista Chino	Cathedral City	LA Basin	3/5/2015	x	
26 Savi Ranch- Yorba Linda	23030 1/2 Eastpark Dr	Yorba Linda	LA Basin	1/30/2015		
27 F&E Manhattan Beach	1700-C Rosecrans Ave	Manhattan Beach	LA Basin	2/5/2015		
28 Ontario Mills	1 Mills Circle	Ontario	LA Basin	3/4/2015		
29 F&E Long Beach	3300 Atlantic Avenue	Long Beach	LA Basin	1/28/2015		
30 F&E Norwalk	10930 Rosecrans Ave	Norwalk	LA Basin	2/25/2015		
31 F&E Signal Hill	2475 Cherry Ave	Signal Hill	LA Basin	2/5/2015	x	
32 Gelson's Calabasas	22277 Mulholland Hwy	Calabasas	LA Basin	3/20/2015		
33 Playa Vista Community Center	5510 Lincoln Blvd	Los Angeles	LA Basin	3/30/2015		
34 F&E Calimesa #1238	1126 Calimesa	Calimesa	LA Basin	4/7/2015	x	
35 Mall of Victor Valley	14370 Bear Valley Rd	Victorville	LA Basin	4/7/2015	x	
36 Gelsons Sherman Oaks	4520 Van Nuys Blvd	Sherman Oaks	LA Basin	4/22/2015		
37 Anaheim Plaza	510 N Euclid St.	Anaheim	LA Basin	5/6/2015		
38 F&E Rosemead #1445	9026 E. Valley Blvd	Rosemead	LA Basin	5/13/2015	x	
39 Sassounian Huntington Beach	21190 Beach Blvd	Huntington Beach	LA Basin	5/21/2015		
40 Lincoln Place Apartments	1050 Frederick Street	Venice	LA Basin	9/1/2014		

APPENDIX A - Freedom Station Detail
Dated as of: December 5, 2018

<u>Name</u>	<u>Street Address</u>	<u>City</u>	<u>Region</u>	<u>Operational Date</u>	<u>PUMA</u>
41 Whole Foods Redondo Beach	405 N. PCH	Redondo	LA Basin	7/10/2015	
42 Canyon Country Plaza	19242 Soledad Canyon	Santa Clarita	LA Basin	7/20/2015	
43 Esplanade Shopping Center	195 W. Esplanade Dr	Oxnard	LA Basin	9/29/2015	
44 Ince Garage	9290 Culver Blvd	Culver City	LA Basin	10/13/2015	
45 F&E Ontario #1164	2275 S. Euclid Ave	Ontario	LA Basin	11/23/2015	
46 Gateway Plaza - Santa Fe Springs	10629 Carmenita Road	Santa Fe Springs	LA Basin	12/4/2015	
47 Lakewood Center	500 Lakewood Center Mall	Lakewood	LA Basin	1/8/2016	
48 Del Amo Fashion Center	3525 West Carson Street	Torrance	LA Basin	1/19/2016	
49 2Rodeo - CBRE	2 Rodeo	Beverly Hills	LA Basin	3/3/2016	
50 Ocean View Plaza	638 Camino De Los Mares	San Clemente	LA Basin	4/4/2016	
51 The Current	707 E. Ocean Blvd.	Long Beach	LA Basin	4/26/2016	x
52 Promenade at Downey	8830 Apollo Way	Downey	LA Basin	4/26/2016	
53 Santa Fe Trail Plaza	10601 Valley Blvd	El Monte	LA Basin	6/2/2016	x
54 Puente Hills Town Center	17342 Colima Road	Rowland Heights	LA Basin	6/3/2016	
55 Serfas Service Station, LLC	800 Serfas Club Dr.	Corona	LA Basin	6/14/2016	
56 Las Palmas Shopping Center - Paragon	42370 Bob Hope Dr	Rancho Mirage	LA Basin	7/28/2016	x
57 Lake Elsinore Outlet Mall	17600 Collier Ave	Lake Elsinore	LA Basin	8/11/2016	
58 Town Center Gateway - Menifee	30340 Haun Rd	Menifee	LA Basin	9/16/2016	
59 Walmart Murrieta #2952	41200 Murrieta Hot Springs Rd	Murrieta	LA Basin	10/14/2016	
60 Walmart Garden Grove #4171	11822 Gilbert St	Garden Grove	LA Basin	10/24/2016	
61 Walmart Glendora #1941	1950 Auto Centre Dr	Glendora	LA Basin	11/1/2016	
62 Walmart Duarte store #2401	1600 Mountain Ave	Duarte	LA Basin	11/2/2016	
63 Walmart Baldwin Park # 3522	3250 Big Dalton Ave	Baldwin Park	LA Basin	11/2/2016	
64 Walmart Corona #2842	1290 E Ontario Ave	Corona	LA Basin	11/9/2016	
65 Walmart Ontario #3796	1333 N Mountain Ave	Ontario	LA Basin	11/17/2016	
66 Walmart Upland #1992	1540 W Foothill Blvd	Upland	LA Basin	11/17/2016	
67 Walmart City of Industry #2251	17150 Gale Ave	City of Industry	LA Basin	11/17/2016	
68 Bridgeport Marketplace	23841 Newhall Ranch Rd	Valencia	LA Basin	11/18/2016	
69 The Americana at Brand	889 Americana Way	Glendale	LA Basin	11/23/2016	
70 Temecula Brixmor - Vail Ranch Center	31685 Highway 79 South	Temecula	LA Basin	12/2/2016	
71 Walmart Simi Valley # 5685	2801 Cochran St	Simi Valley	LA Basin	12/2/2016	
72 Walmart Highland #1914	4210 East Highland Ave	Highland	LA Basin	12/4/2016	x
73 Promenade on the Peninsula	550 Deep Valley Drive	Rolling Hills Estates	LA Basin	12/4/2016	
74 Oceanwest Deli	2600 Michelson Dr	Irvine	LA Basin	1/12/2017	
75 Walmart #1693 Redlands	2050 W Redlands Blvd	Redlands	LA Basin	1/6/2017	
76 Walmart La Habra #3248	1340 S Beach Blvd	La Habra	LA Basin	4/6/2017	
77 San Dimas Plaza	877 W Arrow Hwy	San Dimas	LA Basin	4/12/2017	
78 Walmart Huntington Beach #2636	8230 Talbert Ave	Huntington Beach	LA Basin	5/17/2017	
79 WinCo - Moreno Valley	12882 Day St	Moreno Valley	LA Basin	6/1/2017	
80 IQ Air - La Mirada	14351 Firestone Blvd	La Mirada	LA Basin	8/14/2017	
81 Walmart #5072 Torrance	19503 Normandie Ave	Torrance	LA Basin	12/5/2017	
82 Newport Beach City Hall	100 Civic Center Dr	Newport Beach	LA Basin	11/22/2017	
83 Walmart #2495 Westminster	13331 Beach Blvd	Westminster	LA Basin	11/15/2017	
84 Walmart #2288 Pomona	80 Rio Rancho Rd	Pomona	LA Basin	11/15/2017	x
85 Walmart #3276 San Bernardino	4001 Hallmark Pkwy	San Bernardino	LA Basin	11/9/2017	x
86 Walmart # 1756 Fontana	17251 Foothill Blvd	Fontana	LA Basin	10/30/2017	x
87 Walmart #1747 Perris	1800 N Perris Blvd	Perris	LA Basin	10/30/2017	x
88 Walmart #2028 Riverside	5200 Van Buren Blvd	Riverside	LA Basin	10/30/2017	
89 Walmart #3464 Chino	3943 Grand Ave	Chino	LA Basin	10/4/2017	
90 Walmart #1853 Hemet	1231 S Sanderson Ave	Hemet	LA Basin	9/9/2017	x
91 Walmart #5425 San Jacinto	1861 S San Jacinto Ave	San Jacinto	LA Basin	9/9/2017	x
92 Rialto Marketplace	1310 S Riverside Ave	Rialto	LA Basin	1/9/2018	
93 Bristol Farms West Hollywood	9039 Beverly Blvd	West Hollywood	LA Basin	1/17/2018	
94 Newport Coast Community Center	6401 San Joaquin Hills Rd	Newport Beach	LA Basin	1/10/2018	
95 6060 Wilshire Blvd	6060 Wilshire Blvd	Los Angeles	LA Basin	8/28/2018	
96 Lazy Acres - Hermosa Beach	2510 Pacific Coast Highway	Hermosa Beach	LA Basin	10/5/2018	
97 Hollywest Promenade	5455 Hollywood Blvd	Los Angeles	LA Basin	pending energization	x

97 19

San Joaquin Valley

1 Applegate Ranch	1000 Commerce Avenue	Atwater	SJV	10/28/2014	
2 West Valley Mall	3200 N Naglee Road	Tracy	SJV	2/6/2015	
3 Fashion Fair Mall	563 E. Shaw Ave.	Fresno	SJV	4/1/2015	x
4 Vine Fuels Salida	4530 Kiernan Avenue	Salida	SJV	8/5/2015	
5 Clovis Commons	695 W Herndon Avenue	Clovis	SJV	9/16/2015	
6 Whole Foods Fresno	650 W Shaw Ave	Fresno	SJV	9/17/2015	
7 Vine Fuels - Ceres	1240 E Whitmore Ave.	Ceres	SJV	10/26/2015	
8 Vintage Faire Mall	3401 Dale Road	Modesto	SJV	11/9/2015	x

APPENDIX A - Freedom Station Detail

Dated as of: December 5, 2018

<u>Name</u>	<u>Street Address</u>	<u>City</u>	<u>Region</u>	<u>Operational Date</u>	<u>PUMA</u>
9 City of Clovis	748 5th St.	Clovis	SJV	11/20/2015	
10 Swan Court Hotel	2950 Pea Soup Anderson Blvd.	Selma	SJV	2/2/2016	x
11 City of Visalia	320 E Acequia Ave.	Visalia	SJV	7/22/2016	
12 Save Mart Chowchilla #103	1225 E Robertson Blvd	Chowchilla	SJV	8/12/2016	
13 Walmart Bakersfield #1574 (Colony St.)	6225 Colony St	Bakersfield	SJV	11/2/2016	x
14 Save Mart Madera (Howard Rd) #77	1504 Howard Rd	Madera	SJV	11/7/2016	
15 Walmart 5215 Delano	530 Woollomes Ave	Delano	SJV	11/9/2016	
				15	4
<u>Other (PG&E)</u>					
1 Raley's Rancho Cordova #440	4030 Sunrise Blvd	Rancho Cordova	Sacramento	5/10/2017	
2 Lucky Hollister #719	291 Mccray St	Hollister	San Benito	8/8/2017	
3 Lucky Sand City #772	2000 California Ave	Sand City	Monterey	11/17/2017	
				3	
Totals				204	43

Appendix B

Make-Readies Detail

See attached.

747 Avalon Silicon Valley

1257 Lakeside Dr

Sunnyvale PGE SF

Multi-Family

AvalonBay Communities, Inc.

6/22/2016

40

6/30/2016

12/30/2017

No

No

Total:

6431

114

158

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: October 1st, 2018 through December 31st, 2018

EVgo Contacts:
Bill Ehrlich
Technology
Development Manager
Phone: (651) 324-9127
Email: Bill.Ehrlich@EVgo.com

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

The following information is confidential and protected material and may only be provided to those parties that have executed a protective order in the FERC proceeding approving the Long-Term Contract Settlement Agreement and the settlement of the EL02-60/62 Proceeding, Section 4(e)(ii)(4)(B). 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 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: September 1st, 2018 through December 31st, 2018

EVgo Contacts:

Bill Ehrlich
Principal Investigator
Phone: (651) 324-9127
Email: bill.ehrlich@evgo.com

Name: Audrey Neuman
CPUC Energy Division
Analyst, Transportation Electrification
Office: (415) 703-5953
Email: Audrey.neuman@cpuc.ca.gov

Kelsey G. Johnson
Project Manager, Nuvve
Phone: (760) 271-6048
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CPUC Technical Monitor:

The following information is confidential and protected material and may only be provided to those parties that have executed a protective order in the FERC proceeding approving the Long-Term Contract Settlement Agreement and the settlement of the EL02-60/62 Proceeding Section 4(e)(ii)(4)(B). 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 E

Material Redacted in Public, Non-Confidential Version