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BMW Initiates Next Phase of its BMW ChargeForward Program with Pacific Gas and Electric Company to Study Advanced Electric Vehicle Charging.

BMW i3, BMW i8 and iPerformance Vehicle Owners in Northern California are Encouraged to Apply at www.BMWChargeForward.com.

Los Angeles – November 14, 2016; 9:00 am PT / 12:00 pm ET ... In an effort to further understand and expand the possibilities of smart charging for electric vehicles (EVs) and plug-in hybrid electric vehicles (PHEVs), BMW of North America today announced the second phase of its BMW ChargeForward program. BMW i3, BMW i8 and iPerformance owners in the Greater San Francisco Bay Area who are Pacific Gas and Electric Company (PG&E) customers are invited to apply for participation in a 24-month program focused on managed EV and PHEV charging. Funding for this second phase was secured through a competitive bid for a California Energy Commission (CEC) grant.

The first phase of the program demonstrated the viability of creating grid value by optimizing smart charging of EVs. BMW developed innovative solutions that utilize the existing vehicle communication system both to create value for customers and to help optimize the electric grid through demand response, which improves grid reliability, lowers costs and helps the environment by incentivizing customers to reduce usage during periods

of high peak demand. BMW was the first to showcase this technology in a real-world application. Conducted with PG&E from July 2015 through December 2016, BMW enabled nearly 100 BMW i3 owners located in the San Francisco Bay Area to earn an incentive by offering flexibility in the time by which their vehicle was charged.

Building on the functionality tested in the first phase of the BMW ChargeForward initiative, the new phase will explore the ability to optimize charging events, whether the vehicle is charging at home or on the go. The goal is to expand and test new smart charging functionality to generate greater benefits to the grid (including optimizing across multiple charging events, shifting charging across grid locations, adjusting charging according to the level of renewables on the grid, and exploring the benefits of optimizing charging in response to a variety of grid signals) and to EV and PHEV drivers (by way of participation incentives). As in the first phase of the pilot, BMW will ensure participant-drivers' expressed mobility needs are always met, while using remaining flexibility to create grid value.

"BMW envisions a future where electric vehicles are part of a mobility and energy lifestyle and are instrumental for supporting increased renewable energy on a more efficient grid. We are very encouraged by the level of activity and participation throughout the first phase of the program with PG&E. In this next phase, we will leverage smart charging to expand the range of possible additional grid services that are expected to lower the total cost of electric vehicle ownership," said Cliff Fietzek, Manager, Connected eMobility, BMW of North America. "By managing charging when a BMW i or iPerformance vehicle is plugged in – wherever the vehicle is plugged in – BMW can ensure that vehicles are efficiently charged to meet driver's communicated mobility needs while helping the grid reach greater levels of efficiency and sustainability."

Phase One Findings.

During the first phase of ChargeForward, PG&E sent signals to BMW requesting a load reduction on the grid of up to 100 kilowatts (kW). In response to these demand response signals, BMW selected vehicles for delayed charging (up to one hour delay per day), based on drivers' communicated mobility needs. Driver-participants could also choose to opt-out of participation as desired if they needed to begin charging their BMW i3 immediately. BMW supplemented the smart charging of these vehicles with a solar-powered battery system made from BMW Group 2nd life EV batteries to support the grid during these demand

response events, as necessary. Results from the first phase of the pilot with the BMW i3 include:

- Nearly 100 BMW PG&E customers in the Greater San Francisco Bay Area who own BMW i3 EVs participated in the pilot.
- Satisfaction has been high with 92 percent of participants indicating they are very satisfied with the pilot and 86 percent indicating they would likely recommend it to family or friends.
- A total of 192 demand response events took place between July 2015 and October 2016, with events scheduled through the end of 2016.
- In 94 percent of the demand response events through October 2016, BMW successfully reached the full grid load reduction of 100 kW requested by PG&E.
- By August 2016, more than 19,000 kilowatt-hours (kWh) were shifted as a result of ChargeForward events, avoiding costly and carbon-intensive electricity generation.

BMW ChargeForward Phase Two Program Participation.

BMW seeks more than 250 BMW i3, BMW i8 and iPerformance drivers located in the Greater San Francisco Bay Area to participate in this pilot by completing an application at www.BMWChargeForward.com, starting today, November 14, 2016. Throughout the 24-month pilot, BMW will manage the at-home and on-the-go charging of selected BMW i3, BMW i8 and iPerformance vehicles, to optimize grid reliability and support renewable energy integration.

Through BMW ConnectedDrive, which enables connectivity between cars, drivers and their surroundings, and a special BMW ChargeForward smartphone app, participating BMW drivers will be able to opt-out of any smart charging request, based on their driving preferences. If a customer does not opt-out, the vehicle charging can be shifted to meet the needs of the energy grid.

Participants can earn up to \$900 for participating in this 24-month pilot, with all participants receiving a \$300 initial incentive soon after program launch. The total amount earned over the two years depends upon individual participation in charging events. Customers may also have the opportunity to earn additional incentives for participating in short-term charging tests, or sub-pilot projects, that may occur during the 24-month period.

BMW ChargeForward pilot goals.

The goal of the pilot is to make smart charging more beneficial to the grid and more rewarding to participating drivers. ChargeForward is expected to help improve grid reliability and support the integration of renewable energy on the grid – extending the BMW Group's commitment to sustainability under the BMW brand. By sharing the benefits of this optimization with drivers through incentives, smart charging also helps reduce the total cost of EV ownership, thus encouraging electric vehicle adoption.

BMW brings its extensive e-mobility history full circle.

The BMW Group took a significant step in shaping the future of sustainable mobility in 2009, with the MINI E pilot project, and continued this work in 2012 with the launch of the BMW ActiveE Field Trial. Experience from these field trials paved the way for the first born-electric production BMW EV, the BMW i3. The first phase pilot employs BMW Group 2nd life vehicle batteries from the MINI E Field Trial to support on-the-road customer BMW i3 vehicles in order to advance the benefits of sustainable electric mobility. The second phase of BMW ChargeForward will incorporate a stationary home battery storage system for a limited number of homes, as part of its exploration of smart vehicle charging in the context of homes with diverse energy resources. As in the current pilot, these storage systems will include BMW 2nd life batteries, demonstrating BMW's commitment to sustainability throughout the product lifecycle.

BMW Group In America

BMW of North America, LLC has been present in the United States since 1975. Rolls-Royce Motor Cars NA, LLC began distributing vehicles in 2003. The BMW Group in the United States has grown to include marketing, sales, and financial service organizations for the BMW brand of motor vehicles, including motorcycles, the MINI brand, and the Rolls-Royce brand of Motor Cars; Designworks, a strategic design consultancy based in California; a technology office in Silicon Valley and various other operations throughout the country. BMW Manufacturing Co., LLC in South Carolina is part of BMW Group's global manufacturing network and is the exclusive manufacturing plant for all X5 and X3 Sports Activity Vehicles and X6 and X4 Sports Activity Coupes. The BMW Group sales organization is represented in the U.S. through networks of 341 BMW passenger car and BMW Sports Activity Vehicle centers, 153 BMW motorcycle retailers, 126 MINI passenger car dealers,

and 36 Rolls-Royce Motor Car dealers. BMW (US) Holding Corp., the BMW Group's sales headquarters for North America, is located in Woodcliff Lake, New Jersey.

Information about BMW Group products is available to consumers via the Internet at:
www.bmwgroupna.com.

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