**KIA MOTORS AMERICA PROVIDES ELECTRIC VEHICLES TO THE ADVANCED POWER AND ENERGY PROGRAM AT THE UNIVERSITY OF CALIFORNIA, IRVINE**

***Six Soul EVs Will Be Used to Help Develop and Demonstrate Vehicle-to-Grid Smart Charging Software Algorithms***

**IRVINE, Calif., June 2, 2016** – Kia Motors America (KMA) and Hyundai America Technical Center, Inc. today announced an expanded partnership with the Advanced Power and Energy Program (APEP) at the University of California, Irvine (UCI) to help develop and demonstrate Vehicle-to-Grid (V2G) advanced smart charging software algorithms. Kia will provide six Soul EVs with the shared goal of creating software algorithms for use in coordinating the charging of plug-in electric vehicles to support grid resource operation.

Vehicle-to-grid defines a system which enables battery electric vehicles (BEV) and plug-in hybrids (PHEV) to communicate with the power grid for bi-directional power flow while being grid-connected. This enables the vehicles to serve as energy storage to help manage energy demand.

“Grid-connected electric vehicles offer tremendous potential in terms of energy storage and dispersion during high-demand periods, and Kia is excited to collaborate with APEP in the study and development of advanced smart grid technologies,” said Orth Hedrick, vice president of product planning, KMA. “Kia’s green car roadmap calls for a dramatic expansion of electrified vehicles over the next five years, and we are proud of the role the Soul EV will play in helping UCI’s students and faculty develop new and better advanced smart charging technologies.”

Demonstration and evaluation of Soul EVs will increase understanding of how BEVs are managed on the electric grid, while identifying challenges and solutions for V2G deployment. Additionally, this test program will help predict BEV and PHEV charging behavior and further understanding of their impact on the grid.

“We are pleased to collaborate with Kia in conducting research on these important topics,” said Scott Samuelsen, Director of APEP. “The rapidly evolving coupling of vehicles and the electric grid requires planning based on informed decisions supported by the market-based, systems analyses provided by the Kia/APEP program.”

**About the 2016 Soul EV**

As the centerpiece of the Kia’s ‘Clean Mobility’ efforts, the Soul EV is the embodiment of the brand’s environmentally focused mission, transforming the hip urban crossover into Kia’s first mass-market, all-electric zero emissions vehicle to be sold in the U.S.  Combining the iconic design of the Soul with advanced eco-friendly technology has landed the Soul EV in a class all its own. Honored with an industry-first automotive environmental validation by Underwriters Laboratory (UL)[[1]](#endnote-1) for its innovative use of bio-based materials, the Soul EV also has an EPA estimated range rating of 93 miles with an MPGe of 92 miles highway and 120 miles city for a combined fuel economy of 105 miles[[2]](#endnote-2) .

The Soul EV makes charging easy by plugging into any standard 120v outlet or a conventional 240v EV charger.  Two charging ports are standard, including a SAE J1772 port for Level 1 and Level 2 AC, and a CHAdeMO DC fast-charging port (480v).  Found behind a sliding door located in the front grille, the dual ports offer flexibility and increase the Soul EV’s go-anywhere appeal, making it more convenient to charge inside the owner’s garage or when on the road.  Recharging times vary from 24 hours for a fully depleted battery using a standard 120v outlet and under five hours when plugged into a 240v outlet.  An 80-percent charge can be achieved from empty in as little as 33 minutes with a 50 kW-output DC fast charger.  Kia has partnered with three charger providers – Bosch, Leviton® and AeroVironment™ – which give Soul EV buyers an opportunity to select the unit best suited to their in-home needs.

The front-wheel-drive Soul EV is powered by a 109-hp (81.4kW) electric motor, producing a generous 210 lb.-ft. of instantaneous torque.  The liquid-cooled AC synchronous permanent magnet motor uses multi-layer magnets to help improve efficiency and reduce the whine common to most electric vehicles.  The motor delivers its power to the front wheels through a single-speed constant-ratio gear reduction unit.  The battery pack’s location beneath the floor results in a lower center of gravity, which helps ride and handling and ensures that the EV remains true to the Soul’s fun-to-drive reputation.  Additional cross bracing beneath the low-mounted battery contributes to a 5.9 percent improvement in torsional rigidity over the gasoline-powered Soul and offers protection to the battery.

In an effort to maximize efficiency and range, the Soul EV uses Kia’s third-generation regenerative braking system to capture up to 12 percent of the car’s kinetic energy, which is fed back into the battery while the Soul EV is coasting and braking.  Soul EV owners can choose between four drive mode combinations: “Drive” or “Brake” modes in Eco-mode “Off,” and “Drive” or “Brake” modes in Eco-mode “On” (the “Brake” or “B” setting with Eco-mode “On” producing the most regeneration).

**About Kia Motors America**  
 Kia Motors America (KMA) is the marketing and distribution arm of Kia Motors Corporation based in Seoul, South Korea. KMA proudly serves as the "Official Automotive Partner" of the NBA and LPGA and set an all-time annual sales record in 2015, surpassing the 600,000 unit mark for the first time in company history. KMA offers a complete line of vehicles, including the rear-drive K900[[3]](#endnote-3) flagship sedan, Cadenza premium sedan, Sorento CUV, Soul urban passenger vehicle, Soul Electric Vehicle[[4]](#endnote-4), Sportage compact CUV, Optima midsize sedan, Optima Hybrid, the Forte compact sedan, Forte5 and Forte Koup, Rio and Rio 5-door subcompacts and the Sedona minivan, through a network of more than 765 dealers across the United States. Kia’s U.S. manufacturing plant in West Point, Georgia, builds the Optima\* and Sorento\* and is responsible for the creation of more than 15,000 plant and supplier jobs.

Information about KMA and its full vehicle line-up is available at www.kia.com. For media information, including photography, visit www.kiamedia.com. To receive custom email notifications for press releases the moment they are published, subscribe at [www.kiamedia.com/us/en/newsalert](http://www.kiamedia.com/us/en/newsalert).

**About the Advanced Power and Energy Program**

The Advanced Power and Energy Program at the University of California, Irvine is an integrated program with a focus on the emerging nexus of electric power generation, distribution, sustainable transportation, water resources, infrastructure, and the environment.

APEP is uniquely successful in bridging research to commercial deployment by supporting and promoting sustainable energy endeavors through a “systems and market-based” approach which encompasses the formation, cultivation, and advancement of public-private strategic alliances.

A central part of the program is the creation of new knowledge brought about through fundamental and applied research, and the sharing of this knowledge through education and outreach. Industry and government agencies are actively engaged and vital to this effort.

**\* The Sorento and Optima GDI (EX, SX & Limited and certain LX Trims only) are assembled in the United States from U.S. and globally sourced parts.**

APEP attracts students passionate for studying at the interface of energy and the environment. They interact in a collaborative grouping of electrical, mechanical, civil, and chemical engineering, collaborating with industry, regulators, fellow peers, faculty, and research staff, and serving as the engine of the program while training to become the next generation of clean energy engineers, scientists, and executives.

# # #

1. UL and the UL logo are trademarks of UL LLC © 2016. All rights reserved. [↑](#endnote-ref-1)
2. Based on EPA estimates. Actual mileage will vary with options, driving conditions, driving habits and your vehicle’s condition [↑](#endnote-ref-2)
3. K900 available in select trims and in select markets with limited availability. [↑](#endnote-ref-3)
4. Soul EV in select markets with limited availability. [↑](#endnote-ref-4)