

ZAP licenses PNNL's Smart Charger Controller Technology

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Engineer Michael Kintner-Meyer (front) and his team at Pacific Northwest National Laboratory developed the Smart Charger Controller technology (pictured) to manage peak demands in the electric grid once a mass of electric vehicles hit the road. Battelle, which operates PNNL for the DOE, has licensed the smart charger controller technology to electric vehicle manufacturer ZAP for use in its charging stations.

(PhysOrg.com) -- California car maker ZAP plans to use the Smart Charger Controller technology developed at the Department of Energy's Pacific Northwest National Laboratory in its charging stations internationally. The controller technology allows electric car owners to recharge their rides at times of lowest cost and least stress on the grid.

The plans came after ZAP entered into a non-exclusive license with

Battelle, which operates PNNL for the DOE.

"ZAP believes the patented smart car charging technology is an important feature to ensure the environmental viability of [electric cars](#)," said ZAP Founder and Director of Business Development, Gary Starr.

Vehicle owners program the controller by setting the time they want the battery to be fully charged and the controller does the rest. The controller uses a low-range wireless technology to communicate with the power grid and determine the best and cheapest time to recharge vehicles. By charging vehicles during off-peak times, the controller saves electric car owners money and helps maximize the capacity of the [electrical grid](#) during periods of peak demand.

"If millions of owners plug in their [electric vehicles](#) to recharge after work at the same time, it could cause stress on the grid," said PNNL engineer Michael Kintner-Meyer. "The Smart Charger Controller will prevent those peaks in demand from plug-in vehicles and enable our existing grid to be used more efficiently."

Battelle also granted ZAP the right to sublicense the technology to ZAP Hangzhou, a joint venture in China between ZAP and electric power meter producer the Holley Group. ZAP also plans to distribute the new technology through its investor and distribution partner Samyang Optics of Korea.

ZAP is one of the world's oldest consumer electric vehicle providers, having delivered over 117,000 of a broad range of electric vehicles to more than 75 countries since 1994.

Provided by Pacific Northwest National Laboratory

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