I. THE HEADLINE: ECONOMIC GROWTH FUELED BY SUSTAINABILITY

On July 18, officials from Pacific Power (a unit of PacifiCorp), Facebook, Crook County and the City of Prineville joined Oregon Governor Kate Brown to announce an innovative partnership that allows the large-scale purchase of renewable power by a corporate buyer to become a catalyst for broad customer benefits. This new project enables the development of 437 MW of new solar power, an amount equal to the energy use at three existing (and two planned) data center buildings in Prineville, Oregon. The renewable resources include two projects totaling 100 MW in the Prineville area, with the remaining four projects located in southern Utah. The resulting solar portfolio is anticipated to be online by the end of 2020.

The partnership consists of six power purchase agreements (PPAs) between PacifiCorp and solar developers, plus one Renewable Energy Credit (REC) contract between Facebook and PacifiCorp. The REC contract is enabled by an existing utility tariff that allows for voluntary bulk REC purchases. In addition to supporting new renewable power, the partnership also adds lower-cost system power for all PacifiCorp customers throughout its six-state operations (Washington, Oregon, California, Utah, Wyoming, and Idaho). PacifiCorp views this contract structure as a template for other renewable energy partnerships – and is exploring how to further leverage the ways corporate buyers can “green the grid.”

This collaboration helps fuel Prineville’s growing data center industry, supports the city’s economic growth, and brings new cost-effective resources onto Pacific Power’s system while fulfilling Facebook’s long-term sustainability goals. “This partnership bolsters Prineville’s 21st century model for a small-town,” Governor Brown said. “With projects like these, we continue to demonstrate that Oregon is ready for the clean energy economy of the future.”

II. THE PROJECT STORY

PacifiCorp’s goal for the Prineville Data Center project was to enable Facebook to match its load with RECs from solar projects that deliver energy to PacifiCorp’s system, while sharing the economic benefits of lower-cost energy among all PacifiCorp customers. Ensuring the project did not increase costs for customers in PacifiCorp’s territory was a challenge that needed to be overcome through the project’s structure and contracting.

The Western U.S. does not have an organized wholesale electricity market like much of the rest of the nation. These market conditions make it challenging for vertically-integrated utilities to buy low-cost renewables. As a result, utilities have struggled with how to supply large renewable energy buyers with products that do not cause cost-shifting to other retail customers of the utility. Rather than simply purchasing renewable energy in an open market, PacifiCorp must contract with individual solar developers to develop new projects that would be integrated into their power supply system. PacifiCorp, as a largely rural system across six Western states, is particularly sensitive to this cost-shifting dynamic.

The innovative arrangement is structured through six PPAs with solar developers as well as a REC contract agreement between Facebook and PacifiCorp. Through the additional financing secured through the purchase of the RECs associated with the solar projects, Facebook was able to “buy down” the cost of these six renewable PPAs: this innovative contract structure enables Facebook to support the additional renewable energy in the region, while also providing lower-cost energy to serve the entire PacifiCorp system.
Facebook is able to claim the renewable attributes including the emissions-reduction benefits of RECs from new specified solar resources, equivalent to its data center load. While Facebook is able to claim ownership of the renewable energy benefits, lower-cost energy is brought to the entire PacifiCorp system. Facebook’s leadership in seeking renewable energy solutions for its data center operations has enabled new solar development in economically struggling counties in Oregon and Utah, while also providing a system power benefit that lowers costs for all the customers who share the system.

PacifiCorp’s efforts to overcome barriers to large scale purchases has been ongoing and accelerated with the development of this deal. Since 2004, PacifiCorp has offered large Oregon customers the ability to purchase RECs in bulk through Oregon Schedule 272. Facebook opened its first data center in Prineville, a rural area of central Oregon, in 2011. In early 2017, PacifiCorp modified Oregon Schedule 272 to allow customers the ability to specify which resource to purchase RECs from, a way to clarify the additionality of the purchases. Discussions to address Facebook’s data center load ramped up in late 2017 and the project was announced in 2018.

III. THE BOTTOM LINE

By combining PacifiCorp PPAs with the REC transaction, large-load customers like Facebook can leverage their purchasing power to benefit the entire PacifiCorp system, at least cost, by supporting the development of new renewable resources in the region. While PacifiCorp’s bulk-purchase REC option has been employed before, the addition of 437 MW represents the largest transaction to date enabled under this schedule—and the Facebook transaction is the first time it has been used to buy-down new resources. PacifiCorp sees this model as an effective solution to address large loads and provide broader customer benefit into the future.