PUD studies new rates, zoning to slow ‘data-miner’ power drain

by Christine Pratt
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WENATCHEE — Chelan County PUD officials say that a new category of electric rate, together with a rezoning effort by the county and its cities, could prevent power-hungry “data-mining” operations from threatening the utility’s ability to keep rates low for everyone.

“This is one of the most important things we have to do today at this utility,” Andrew Wendell, the PUD director of customer services, said Monday.

Energy-intense “data miners” set up rooms of high-capacity computers that perform complex calculations around the clock. Many of them use their systems to compete for rights to process sales transactions made using digital forms of currency, like Bitcoin.

The mining and other intensive data-processing operations can be 100 times more energy intense than any of the PUD’s typical commercial or industrial customers, like a supermarket or fruit packer, Wendell told commissioners Monday.

Utility officials are studying how to design a new rate system based on how big customers put their power to use and, possibly, what contribution they make to the local economy via increased commerce, job creation or other benefit.

New rates, the PUD’s chief attorney Erik Wahlquist told commissioners, could mitigate the risk to the low rates already in place for the rest of the county.

Cheap land, electricity and PUD fiber optics have made North Central Washington a destination for data processing since 2006 when Microsoft bought land in Quincy for a sprawling computer data center with elaborate cooling systems, hundreds of miles of wiring, and backup sources of power and Internet access.
The mining operations can be much smaller, more nimble and transitory, Wendell said. They can set up in a residential neighborhood or in freight containers that can be quickly moved if the miner finds a cheaper lease elsewhere or simply goes out of business, Wendell said.

PUD officials are already faced with examples in Cashmere and Malaga where these small data-intense mining operations paid for electricity system upgrades, and then moved out, Wendell said. That leaves PUD is faced with either spending money to remove upgrades, since no-one else in the area needs them, or paying to maintain them without a customer to bill.
Commissioner Dennis Bolz called these side effects the “tailings” of the data-mining operation that could affect quality of life in neighborhoods, and could get worse.

“What we’re seeing here is the tip of the iceberg,” Bolz said, citing estimates he’d heard of future expansion of technology. “Who gets stuck with the tailings piles?”
Rezoning by cities and Chelan County to prevent these data-intensive operations from moving into neighborhoods could be another potential solution, Wendell said. Preliminary talks are underway.

PUD officials will continue studying rate and zoning alternatives and report back to commissioners June 15.
The PUD imposed a moratorium in December on new applications for large amounts of power. The moratorium is necessary, they said, to give staffers time to study the impact of 34 inquiries for electricity received last year, mostly for data center and mining operations that altogether totaled 220 average megawatts. The PUD needs only 180 megawatts of electricity to power the entire county. Five applications for a total 9.5 megawatts of power were already complete before the moratorium was approved, Wendell said. Of those, three went on line in 2014 and two are projected this year.
Utility officials worry that this rate of growth could quickly consume the surplus electricity the PUD generates and sells at higher prices on the regional power market. Part of the revenue from this sale of power is used to keep rates low by offsetting the cost of supplying local homes and businesses with power.
PUD staffers expected to lift the moratorium by this summer. Wendell said they’ll likely need more time.
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