THE WSU-PNNL ADVANCED GRID INSTITUTE

AVISTA'S CONNECTED COMMUNITIES PROJECT – TO ENABLE DISPATCHABLE LOAD SERVICES TO UNDERREPRESENTED COMMUNITIES

~ by ~

JOHN GIBSON

Avista Corporation

Tuesday, September 27 • 11:00 AM – Noon (PT) • * EME 26 *****

OVERVIEW

Avista recognizes to address the challenges of clean energy transition will require a balance between energy supply and delivery. At Avista, we are working on operational strategies to dispatch flexible load and distributed energy resources to address delivery constraints. Also, the operational strategies will be partnered with customer programs to share improved system utilization while benefiting underrepresented communities. The U.S. Department of Energy Connected Communities programs works to advanced grid-interactive, efficient buildings within communities nationwide. The customer programs resulting from the project will be designed to incentivize customer assets to optimize their energy consumption, which will also reduce their carbon footprint and energy costs.

One of the funded projects for the DOE Connected Communities is in Spokane, Washington. AVISTA is working with Spokane Edo, McKinstry, Pacific Northwest National Laboratory (PNNL), Urbanova and WSU to upgrade up to 125 residential and commercial buildings with energy efficiency measures and DER to provide up to 2.25 megawatts of flexible load and grid benefits. This project will demonstrate non-wire alternatives in its retrofits to lower costs and create virtual power plants from existing buildings. Customer demographics will include vulnerable populations in Spokane's Opportunity Zones. This talk will discuss the Spokane project.

BIOS

John Zachary Gibson, P.E., is Director of Avista's Innovation Lab and Chief Research & Development Engineer at Avista, and leads the team that develops grid products and services for Avista's electric and natural gas customers.

With more than 25 years of experience in the electric utility industry, Gibson is currently leading the development of a shared energy model called an eco-district, which uses a centralized plant to supply energy to multiple buildings in an area referred to as the "five smartest blocks" in Spokane, Wash. This innovative model could transform how the electric grid of the future operates and help reinvent the utility business model.

Gibson holds a Bachelor of Science degree in electrical (BSEE) and civil engineering (BSCE), plus a Masters in Engineering Management. He is a registered Professional Engineer in the state of Washington.