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# **Overview of the Medium Penetration Wind-Diesel System in Selawik, Alaska**

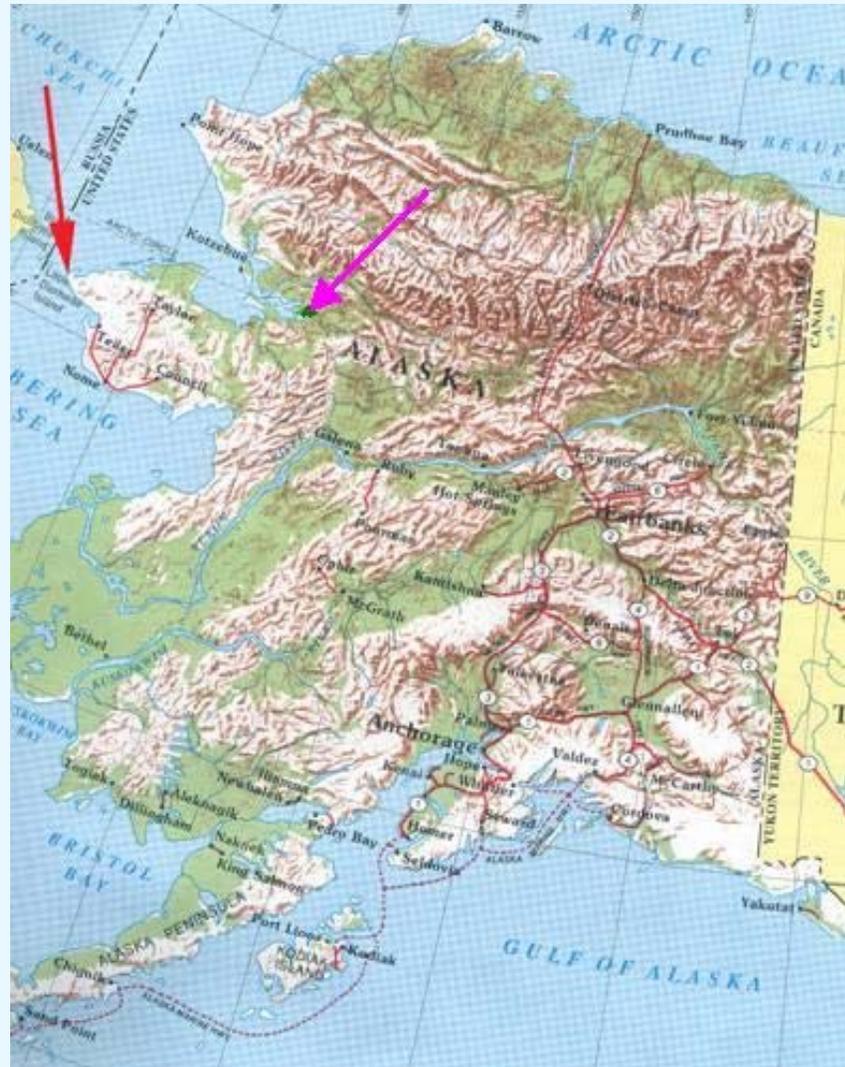
**Steve Drouilhet  
Sustainable Automation, LLC**



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- **Population ~ 600**
- **The Arctic Circle passes through it!**
- **Avg. load ~ 250 kW**

## Selawik, Alaska





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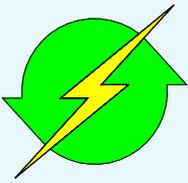




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# Traveling in Style





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# A River Runs Through It





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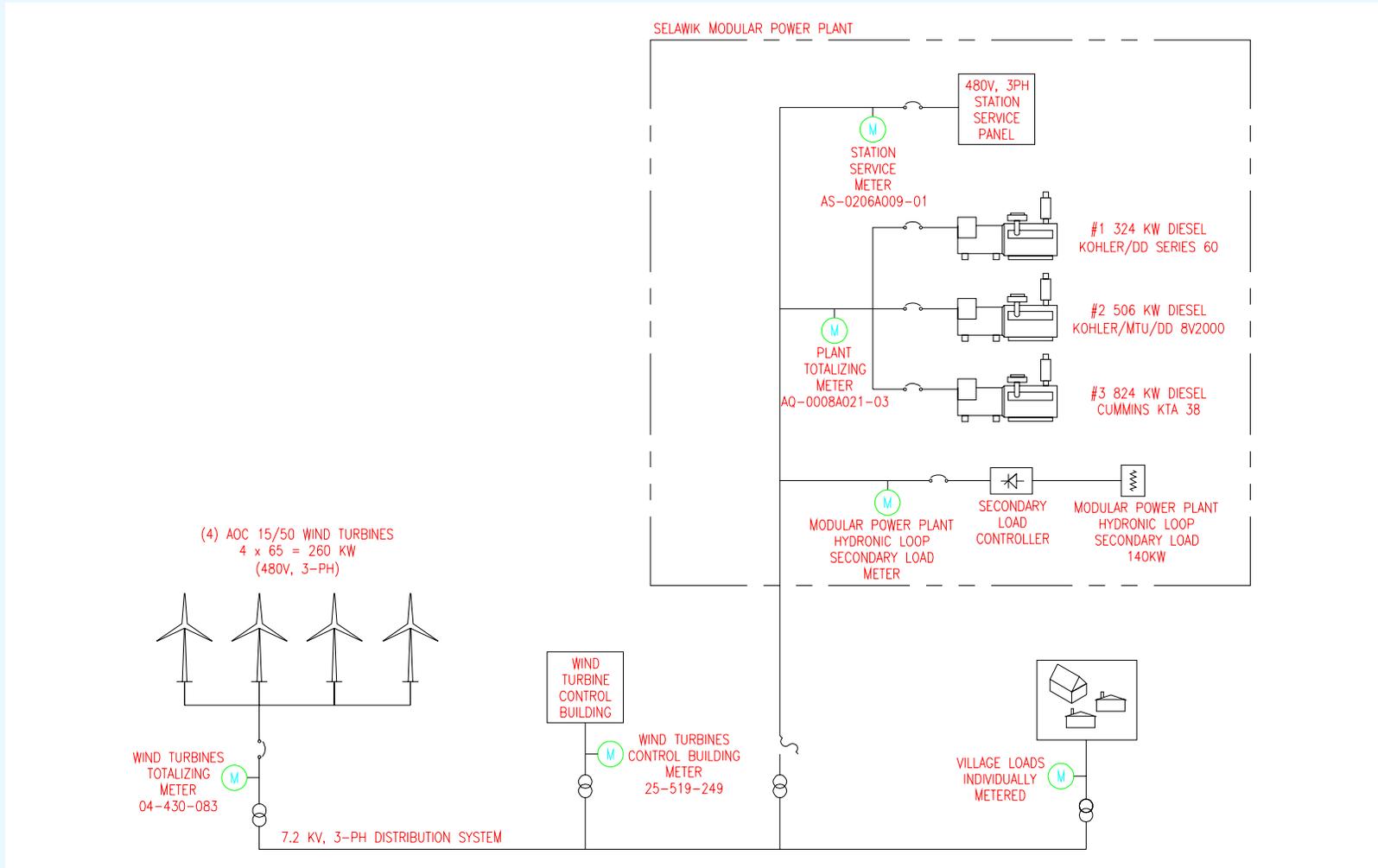
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# Selawik, Alaska Wind-Diesel System Architecture





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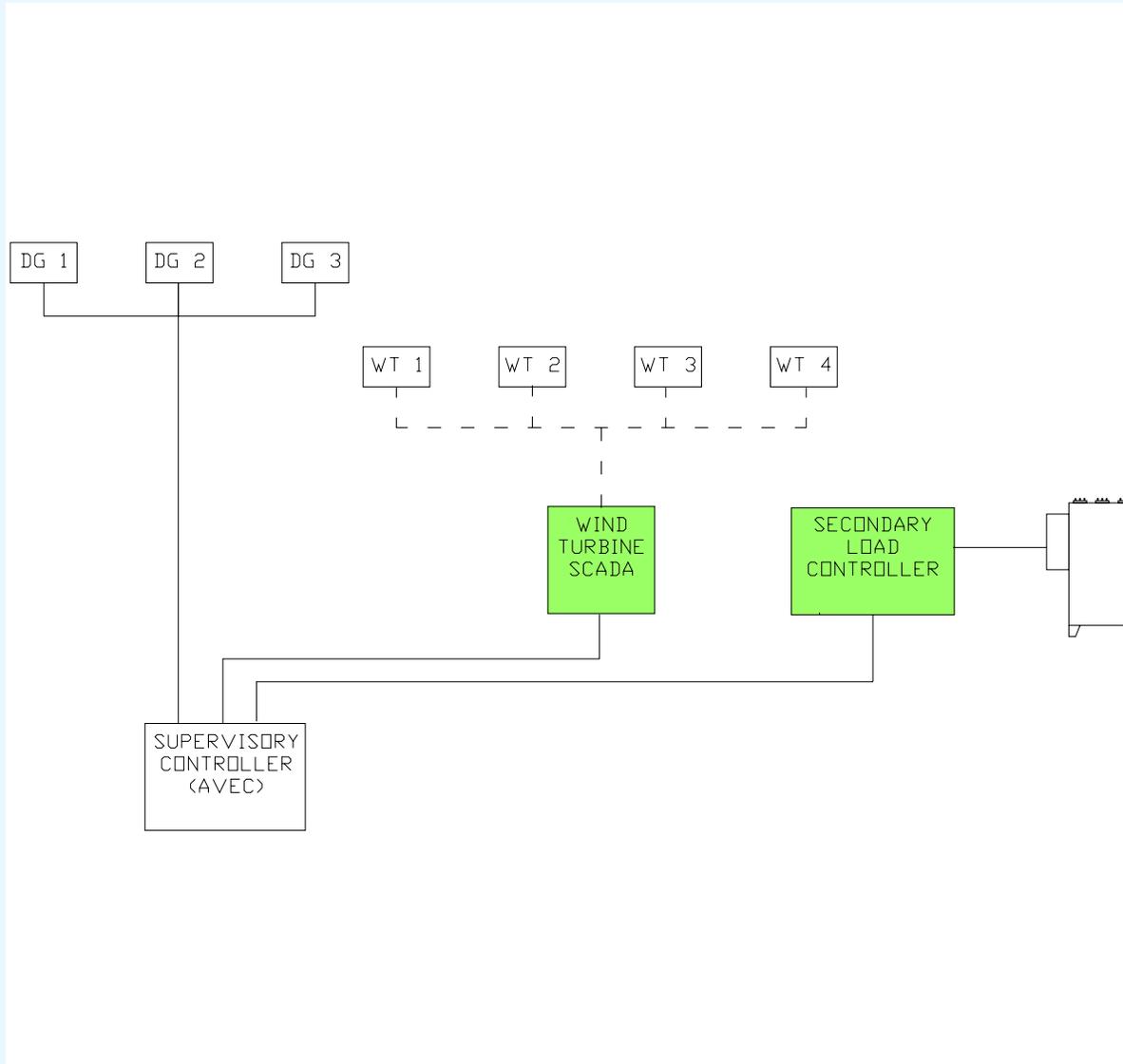


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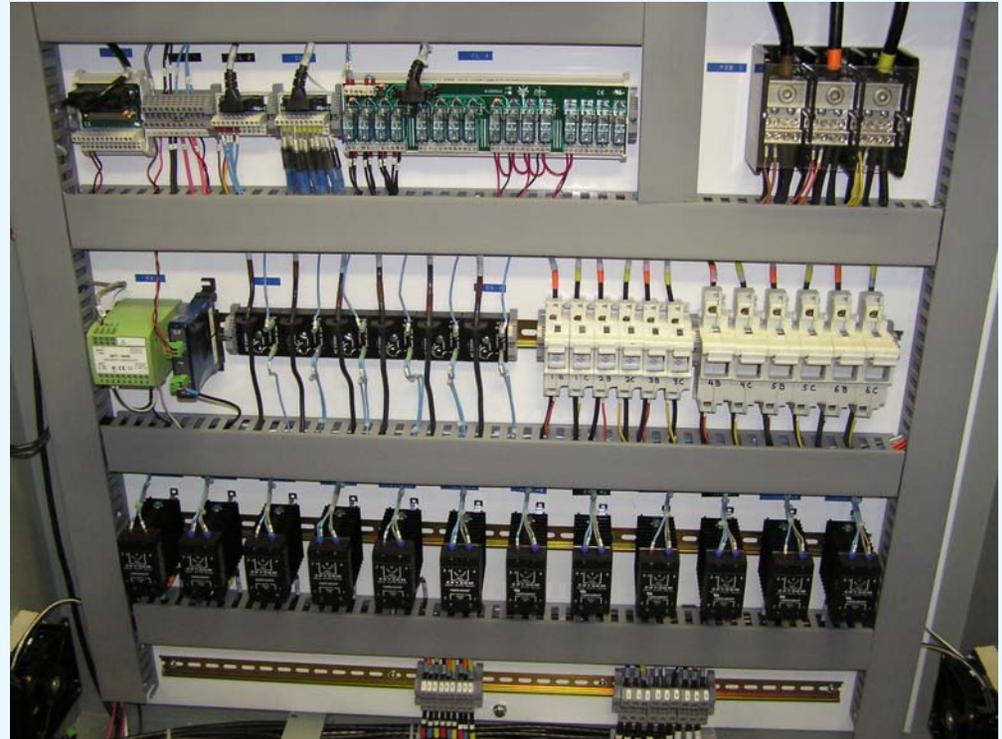
# Wales Wind-diesel System Communication And Control





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# Secondary Load Controller





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# Wind Turbine SCADA System





## **Current Activities**

- **All project partners putting the finishing touches on their respective components in preparation for the windy winter season:**
  - **AVEC refining the control algorithms used in the diesel supervisory controller.**
  - **Sustainable Automation enhancing the wind turbine data logging and reporting capabilities of its SCADA.**
  - **AOC addressing any issues with the wind turbines that would limit availability.**

# The End (Users)

