

QUARTERLY TECHNICAL PROGRESS REPORT:
WIND-FUEL CELL HYBRID PROJECT IN RURAL ALASKA

For The Period October 1 – December 31, 1999

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ALASKA DIVISION OF ENERGY

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Summary of Work Performed:

1. On October 5th, Tim Howell of the Golden Field Office and Tom Anderson of Battelle Labs arrived in Anchorage. They met with David Lockard, Project Manager, and Percy Frisby, Director of the Alaska Rural Energy Programs Group, to discuss the project.
2. On October 6th, Tim, Tom and David flew to Nome to inspect the proposed wind turbine site and meet with John Handeland, Director of the Nome Joint Utility System. They visited the proposed site as well as several private, residential-sized wind turbines operating in the Nome area. John said that the cost of the 2-mile line extension to the project site would be approximately \$160,000 and that the utility would expect to amortize the cost of the line extension over 10-15 years.
3. Tim and Tom flew to Unalaska on October 7th to meet with Mike Golat, City of Unalaska Public Utility Director, and to inspect the proposed wind turbine sites at Pyramid Creek and Pyramid Valley.
4. Tim sent a scoping letter on December 17th to a variety of local, state and federal agencies requesting comments on the proposed wind turbine project. The federal Fish and Wildlife and the state Fish and Game Departments both expressed concerns about the coastal site in Unalaska. The Corps of Engineers said they would have no jurisdiction unless fill material were placed in wetlands as part of the project.
5. David discussed this project with Marc Schwartz and Gerry Nix at NREL. Marc provided David with a list of wind prospectors and meteorologists.
6. Tom raised the question of FAA permits for structures over 200' tall. Gerry provided information on NREL's experience with FAA permitting on other projects. David summarized the potential turbine choices and heights in a spreadsheet and initiated contact with the Alaska region FAA office regarding the permitting process.
7. David responded to a list of design questions from Tom regarding the project foundations, power output, and size for use in developing the environmental assessment.
8. David tried to get wind data for the Nome Anvil Mountain White Alice site from the Corps of Engineers and the Air Force, but was not able to find any.
9. David solicited quotes from vendors of wind monitoring equipment and provided cost information to Doug Hooker, federal grant manager in preparation for ordering the equipment.