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

For The Period January 1- September 30, 1999

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ALASKA DIVISION OF ENERGY

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Summary of Work Performed:

1. The Notice-To-Proceed for the feasibility study was finalized in the first week of March, 1999.
2. Lockard and the Dames and Moore consultants traveled to Unalaska (Dutch Harbor) on 3/24/99 to identify potential sites and discuss the project with local officials. The consultants also traveled to Naknek that week.
3. The Dames and Moore feasibility study of wind energy development in Naknek and Unalaska was completed on May 24, 1999. It included a discussion of the potential sites in each community, the local wind resources, technical and environmental considerations, economic analysis and recommendations. Five turbine models were considered for each feasible site and a preliminary cost estimate for each at each site was presented. The appendices include wind data, turbine data, estimated power output data, cost estimates and aerial photographs. Copies were distributed to the Golden Field Office, the Naknek and Unalaska utility directors, and a variety of interested parties.
4. David Lockard (the Alaska Division of Energy Project Manager), Doug Hooker, Tim Howell, Joyce Beck and Tom Anderson (the Battelle Labs contractor responsible for the environmental assessment) conducted several conference calls in May, June and July to address the environmental issues involved in beginning the environmental assessment. They contacted the U.S. Fish and Wildlife Service's Alaska avian expert, Greg Balogh, to gather preliminary opinions on the feasibility of the sites identified in the Dames and Moore study. They also included Karin Sinclair, an avian expert at NREL, in a teleconference to try to determine if there are any existing studies that may prove valuable in predicting avian interaction with the proposed turbines in Naknek and Unalaska. Neither Greg nor Karin could provide information or reference studies that would be useful in predicting avian-wind turbine interactions at the proposed sites.
5. Tim Howell, USDOE NEPA Compliance Officer, wrote a 8-10-99 letter to the Anchorage office of the U.S. Fish and Wildlife Service requesting an opinion with respect to wind turbine-avian interactions on the viability of the three sites under consideration for wind project development. The 9-16-99 F&W response was not conclusive, however stated that all three sites pose some risk to protected avian species. It also said that the Naknek site poses the greatest risk to migratory birds.
6. Based on the F&W letter, Howell and Anderson planned a site visit trip to Nome and Unalaska in October.

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