

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

APR 11 1980

U.S. Department of Commerce  
National Oceanic and Atmospheric  
Administration  
Environmental Data Service  
National Climatic Center  
Attn: D 531  
Ashville, NC 28801

Gentlemen:

Subject: Interagency Agreement No. NRC-01-80-018

Pursuant to the Economy Act of 1932, as amended, 31 U.S.C. 686, the U.S. Nuclear Regulatory Commission (NRC) desires to enter into an agreement whereby the National Climatic Center (NCC) will search, retrieve and analyze "fastest-mile" wind speed data, archived by the NCC, to determine the extreme fastest-mile wind speeds and associated expected return periods for the Great Lakes region of the United States utilizing all available records for this parameter collected during the past one-hundred years. Accordingly, the parties hereto mutually agree to the following terms of this agreement:

Article I - Scope of Work

The NCC shall perform the specific work as provided for in the enclosed Statement of Work (Reference: NCC letters of July 20, 1979, and February 22, 1980), Attachment I.

Article II - Period of Performance

The period of performance for the work required hereunder shall commence on the date of acceptance of this agreement and shall continue for a period of two (2) years thereafter to completion.

Article III - Reports

A type written, reproducible original and two (2) copies of all reports shall be submitted directly to the Contracting Officer. The type of reports and schedule for submission thereof are provided below:

- A. The NCC shall submit monthly progress reports to the NRC in letter form using the date of acceptance of this agreement as the starting date of the first month. These reports are due ten days after the

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end of each report period and shall include, but are not limited to, a summary of progress achieved during the report period, problems encountered, proposed solutions to those problems, and a description of effort expended, i.e. time and cost.

- B. The final report submitted to the NRC shall be camera-ready and prepared in accordance with NRC Manual Chapter 3202. (One (1) copy provided.) This report is due by the last day of the period of performance.

Article IV - Estimated Cost and Obligation of Funds

- A. The estimated cost of the work to be performed under this agreement is \$96,000.00.
- B. The amount presently obligated for the performance of work under this agreement is \$96,000.00.
- C. NRC Accounting Data:

B & R Symbol: 10-19-03-02  
FIN: B10240

Article V - Billing Instructions

All requests for payment shall be submitted on Standard Form 1081 in an original and three (3) copies to the following address:

U. S. Nuclear Regulatory Commission  
Office of the Controller  
Washington, DC 20555

One (1) additional copy of the Standard Form 1081 shall be submitted simultaneously with the above copies to the following address:

U. S. Nuclear Regulatory Commission  
Division of Contracts  
Research Contracts Branch  
Washington, DC 20555

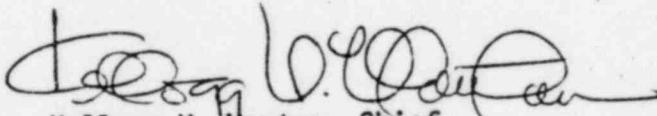
All requests for payment must reference the NRC contract (Interagency Agreement) number, i.e. NRC-01-80-018.

Article VI - NRC Contacts

- A. Technical: Robert Kornasiewicz  
Office of Standards Development  
Phone: 301/443-5976 FTS: 433-5976
- B. Contracts: Raymond P. Gustave  
Division of Contracts  
Phone: 301/427-4365 FTS: 427-4365

Please indicate your concurrence with the provisions of this agreement by executing and returning three (3) copies to the undersigned. The fourth copy should be retained for your files.

Sincerely,



Kellogg V. Morton, Chief  
Research Contracts Branch  
Division of Contracts  
Office of Administration

Enclosure:  
As stated

ACCEPTED:

U. S. Department of Commerce  
National Oceanic and Atmospheric Administration  
Environmental Data and Information Service  
National Climatic Center

BY: Thomas D. Potter

Thomas D. Potter

TITLE: Director

DATE: 28 APR 1980

## STATEMENT OF WORK

### A. Objective

The Scope of Work of this task is unclassified and shall result in a study titled, "Extreme Fastest-Mile Wind Speed Study for the Great Lakes Region." The Contractor is to search, retrieve and analyze "fastest-mile" wind speed data, archived by the National Climatic Center, to determine the extreme fastest-mile wind speeds and associated expected return periods, utilizing all available records for this parameter collected during the past 100 years at locations in the Great Lakes region of the U.S. Specifically, the following states should be considered: Minnesota, Wisconsin, Illinois, Michigan, Indiana, Ohio, Pennsylvania, New York, and Iowa.

The information will be used to develop graphical analyses for expected return periods and geographical charts of expected extreme, "fastest-mile wind speeds in coastal areas for use in the design considerations of nuclear power plant structures, components and systems."

### B. Specific Tasks

1. Data preparation consisting of the extraction of extreme fastest-mile wind data from records archived at the National Climatic Center for stations in the states specified above.
2. Perform extreme value analyses for all stations.
3. Perform graphical analyses of the data to include the preparation of three analyses for extreme fastest-mile winds for .90, .98, and .99 probability levels (10, 50, and 100 year return periods).
4. Extract the one minute wind, <sup>CONCURRENT WITH THE FASTEST MILE</sup> in addition to the fastest-mile for all station-years of record.