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FEDERAL ENERGY
REGULATORY COMMISSION

Ms. Magalie Salas
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Dear Honorable Secretary:

Attached please find a copy of my application for a Panel Member for Hydropower Licensing Study Dispute Resolution (Docket #AD04-4-000). Your approval will be appreciated.

Thank you.

Regards,

Shou-shan Fan 7/26/04

Shou-shan Fan

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Attachments: (1) Narrative Statements on Selected Key Experience
(2) Short Curriculum Vitae

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Short Curriculum Vitae

January 2004

Shou-shan Fan, Ph.D.

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Education

- Ph.D. in Civil Engineering with minors in Mathematics and Soil Mechanics, University of California, Berkeley, California, 1968
- Master in Civil Engineering, Colorado State University, Fort Collins, Colorado, 1960
- B.S. in Agricultural Hydraulics, National Northwestern College of Agriculture, China, 1946

Employment History

1. Current Position

- Adjunct Professor, Department of Civil/Environmental Engineering, Clarkson University, Potsdam, NY,
- Honorary Professor, Northwest Science & Tech. University of Agriculture & Forestry, China
- Member, Editorial Board, International Journal of Sedimentation Research

2. Current Position at American Society of Civil Engineers (ASCE)

- Chair, Award Committee, EWRI-Watershed Council
- Chair, EWRI-Task Committee on Mitigating Disasters with Modern Technology
- Member, Surface-Water Hydrology Committee, EWRI/Water Resources Council
- Member, EWRI- Water Infrastructure Security Enhancement (WISE) Standards

3. Previous Employment

- Special Assistant, Federal Energy Regulatory Commission (FERC), Department of Energy (DOE), Washington, D.C., 1986-1996
- Sr. Engineer, Office of Environmental Advisor, FERC/ DOE, Washington, D.C., 1975-1986
- Planning Engineer, Planning Department, Harza Engineering Company, Chicago, Illinois, 1960-1964
- Assistant Engineer, Sino-American Joint Commission on Rural Reconstruction, Taiwan, 1954-1958

4. Teaching Experience

1991- 2002 Adjunct Professor, Department of Civil Engineering, University of Wisconsin,
Milwaukee,, WI

1982 - 1983 Catholic University, Washington, D.C., Instructor in Harbor & Coastal .Engineering

1972 - 1974 Graduate School, Dept. of Agriculture, Washington, D.C., Invited Instructor

5. Testifying At Hearings

- Uncertainty of drought management, National Drought Policy Commission, Washington, DC, 1999
- Hydrologic study of a proposed Kootenai Falls Reservoir, FERC hearing, 1983
- Probable maximum precipitation and flood study, Ross Dam, Washington, FERC-hearing, 1974

Awards & Fellowships Received

1. Rickey Medal from the American Society of Civil Engineers (ASCE), 1991
2. On-the-Spot Award from the Federal Energy Regulatory Commission, 1991
3. Meritorious Service Award from the ASCE, 1987
4. Yu-You-Jen Fellowships (1942-46), Ministry of Education, China

Publications: over 111 technical papers and reports.

Shou-shan Fan, Ph.D.
Narrative Statements on Selected Key Experience

1. Experience in Environmental Planning, Management and Regulation

- 1.1 From 1975-80, when I was working at the Office of Environmental Advisor to Chairman, I was responsible to review and comment on other agencies' Environmental Impact Statements, technical reports, technical reports and proposed regulations related to energy developments at request of other Federal agencies.
- 1.2 During the same period, I participated in the FERC's planning studies of the cumulative environmental impacts of energy generation in the Connecticut River Basin. Later, I coauthored a staff report that was published by FERC.
- 1.3 In 1989, I was invited to author a chapter on Reservoirs for the Civil Engineering Guidelines for Planning and Designing Hydro Developments that was published by the American Society of Civil Engineers (ASCE).
- 1.4 As an experts in environmental engineering, I testified and prepared testimony and rebuttals at several Commission hearings.

2. Knowledge of the Environmental Influence on Hydrologic Systems

- 2.1 As indicated in the Section #1, I was assisting the FERC Chairman's Advisor on Environmental Quality to analyze the environmental impacts on hydrologic systems and to review the effects of the operation of energy-related projects undertaken by the other agencies.
- 2.2 In the review, my major concerns were: (a) environmental hazards and adverse impacts, such as: floods, droughts, marine pollution, etc.; (b) project safety and potential damages-dam breaking waves if dam fails, etc.
- 2.3 Also, I was responsible the following FERC programs closely related to the field of Hydrology: (1) development of the Probable Maximum Precipitation (PMP), Probable Maximum Flood (PMF); (2) application of models in routing flood through a complex hydrologic network (reservoirs, ec); (3) Estimation of erosion, sediment yield and inflow to a reservoir.
- 2.4 From 1986-96, I was elected to chair an Interagency Sedimentation Work Group consisting of the representatives from over 10 major agencies. I led the group to conduct an joint evaluation of 12 selected computer sedimentation models available in the U.S. A technical report (550 pages) was published.

- 2.5 From 1969-71, when I was a Oceanographer at the U.S. Coastal Engineering Research Center, I conducted researches on the effects of floods on the coastal environments. During the period, I was assigned to study data related problems (sampling, instrumentation, error detection, data treatment, data processing, storage and retrieval, etc.)**
- 2.6 From 1968-69, at the Illinois Water Survey, I was responsible for developing an Optimal Regional Water Supply model based on a conjunctive use of surface and groundwater available.**