

**DOCKET No. AD04-4-000, NOTICE REQUESTING APPLICATIONS FOR  
PANEL MEMBER LIST FOR HYDROPOWER LICENSING STUDY  
DISPUTE RESOLUTION**

**Martha Salk, Ph.D.  
Oak Ridge National Laboratory**

**1. Technical expertise, including education and experience in each resource area and sub-area for which the applicant wishes to be considered.**

Dr. Salk received a B.A., Phi Beta Kappa, in biology (with a minor in mathematics) from Albion College, Albion, Michigan, in 1967, graduating summa cum laude with departmental honors in biology. She received an M.S. in plant ecology from the University of Iowa in 1969. In 1975 she received a PhD in plant ecology from the University of Louisville (Thesis title: *Effects of selected pesticides on ten isolates of terrestrial algae*), winning the Dean's Award for Excellence in Graduate Work.

Since 1975, Dr. Salk has been employed at Oak Ridge National Laboratory in Oak Ridge, Tennessee. She has conducted research for National Environmental Policy Act (NEPA) and related projects to identify and assess the environmental impacts of energy technology and policy. Specific projects have included assessing the impacts of nuclear power plant license applications (U.S. Nuclear Regulatory Commission), hydroelectric and coal power plant construction and operation (U.S. Department of Energy and Federal Energy Regulatory Commission), and biomass (U.S. Department of Energy).

Dr. Salk's experience in each of the resource areas for which she wishes to be considered is discussed below.

**Terrestrial Resources (all subareas):**

Dr. Salk has extensive knowledge of and experience in all areas of terrestrial resource impacts analysis, including wildlife, botany, wetlands, threatened and endangered species, and floodplains. She began conducting assessments of the impacts of projects on terrestrial resources in 1975, with the preparation of the U.S. Nuclear Regulatory Commission's *Final Environmental Statement Related to Construction of Wolf Creek Generating Station Unit 1* (NUREG-75/096). Since 1975, she has conducted the assessment of impacts to terrestrial resources for the following FERC NEPA documents:

Federal Energy Regulatory Commission. 1999. *Final Environmental Impact Statement. Missouri-Madison Hydroelectric Project Relicensing* (FERC No. 2188), Montana. FERC/EIS-0115F.

Federal Energy Regulatory Commission. 2003. *Final Environmental Impact Statement. North Umpqua Hydroelectric Project* (FERC No. 1927), Oregon. FERC/EIS-0147F.

In addition she has participated in assessing the impacts to terrestrial resources for the following non-FERC NEPA documents:

U.S. Nuclear Regulatory Commission. 1976. *Draft Environmental Statement related to construction of Greene County Nuclear Power Plant*. NUREG-0045.

U.S. Nuclear Regulatory Commission. 1976. *Final Environmental Statement related to construction of Sterling Power Project Unit 1*. NUREG-0075.

U.S. Department of Energy. 1988. *Environmental Assessment. Underground Coal Gasification. Clean Fuels Proof-of-Concept Project*. DOE/EA-0342.

U.S. Department of Energy. 1988. *Programmatic Environmental Impact Analysis (PEIA). Innovative Clean Coal Technology Program*. DOE/PEIA-0002.

U.S. Department of Energy. 1989. *Environmental Assessment. Innovative Clean Coal Technology Program. Coke Oven Gas Cleaning Demonstration Project*. DOE/EA-0404.

U.S. Department of Energy. 1989. *Environmental Assessment. Innovative Clean Coal Technology Program. Circulating Fluidized Bed Boiler Repowering Demonstration Project*. DOE/EA-0415.

U.S. Department of Energy. 1989. *Programmatic Environmental Impact Statement (PEIS). Clean Coal Technology Demonstration Program*. DOE/EIS-0146.

U.S. Department of Energy. 1990. *Environmental Assessment. Innovative Clean Coal Technology Program. Advance Flue Gas Desulfurization Demonstration Project*. DOE/EA-0420.

U.S. Department of Energy. 1996. *Environmental Assessment. Lease of Parcel ED-1 of the Oak Ridge Reservation by the East Tennessee Economic Council*. DOE/EA-1113.

U.S. Department of Energy. 1997. *Environmental Assessment. Lease of land and facilities within the East Tennessee Technology Park, Oak Ridge, Tennessee*. DOE/EA-1175.

Department of the Army. 1998. *Final Environmental Impact Statement. Pilot testing of neutralization/biotreatment of mustard agent at Aberdeen Proving Ground, Maryland.*

U.S. Nuclear Regulatory Commission. 2002. *Final Environmental Statement for the Construction and Operation of an Independent Spent Fuel Storage Installation on the Reservation of the Skull Valley Band of Goshute Indians and the Related Transportation Facility in Tooele County, Utah.* NUREG-1714.

She prepared the following report at the request of FERC:

Salk, M. S., and R. M. Reed. 2001. *Trends in old-growth forest and associated species on federal and non-federal lands in the Pacific Northwest.* Report prepared for the Federal Energy Regulatory Commission.

### **Cultural Resources:**

Dr. Salk has a working knowledge of the impacts of major facilities on cultural resources through her extensive involvement in preparing documents related to compliance with cultural resource laws and regulations (see Section 3, below) and reviewing and commenting on numerous NEPA documents.

### **2. Knowledge of the effects of construction and operation of hydroelectric projects.**

Dr. Salk has developed her knowledge of the effects of construction and operation of hydroelectric projects through conducting assessments for several NEPA documents for FERC, as detailed above.

### **3. Working knowledge of relevant laws.**

Dr. Salk has gained extensive knowledge of the National Environmental Policy Act through conducting assessments for NEPA documents for FERC and other federal agencies, as detailed above. Dr. Salk also has extensive knowledge of the following laws and their implementing regulations: Endangered Species Act, Clean Water Act, Coastal Zone Management Act, Wild and Scenic Rivers Act, National Historic Preservation Act, American Indian Religious Freedom Act, and numerous other applicable laws and regulations. She has particularly extensive knowledge of requirements for complying with Section 7 of the Endangered Species Act developed through preparing or reviewing Biological Assessments and Biological Opinions and providing technical assistance on consultations for numerous projects for several federal agencies. She has also written or presented the following articles on NEPA practice for professional staff:

Salk, M. S., V. R. Tolbert, and J. A. Dickerman. "Guidelines and techniques for improving the NEPA process," *Environmental Management*. **23**, 467-476, 1999.

Salk, M. S., and L. N. McCold. "NEPA and the Endangered Species Act: Complementary approaches or regulatory excess?" presented at the National Association of Environmental Professionals' Annual Conference, Baltimore, MD., April 29–May 2, 1991.

Dr. Salk was involved in the initial preparation of the following guidance manuals related to environmental laws and regulations for the Department of Energy:

Powers, C. Don, M. S. Salk, and C. T. Hunsaker [preparers (ORNL)]. 1983. Draft *Guidance Manual for Department of Energy Compliance with the Coastal Zone Management Act*. U.S. Department of Energy, Office of Environmental Compliance. Washington, D.C. 97 pp.

Salk, M. S. [preparer (ORNL)]. 1983. Revision of: Glen Cada [preparer (ORNL)]. 1982. *Guidance Manual for Department of Energy Compliance with Corps of Engineers Permits on Dredging and Filling Activities*. DOE/EP-0060. U.S. Department of Energy, Office of Environmental Compliance, Washington, D.C. 17 pp.

Salk, M. S. [preparer (ORNL)]. 1983. *Guidance Manual for Department of Energy Compliance with the Endangered Species Act*. (Second Edition of DOE/EP-0058, M. S. Salk, R. M. Reed, and C. D. Powers 1982.) DOE/EP-0058/1. U.S. Department of Energy, Office of Environmental Compliance, Washington, D.C. 61 pp.

Sharples, F. E., and M. S. Salk [preparers (ORNL)], *Guidance Manual for Department of Energy Compliance with the National Historic Preservation Act*. DOE/EP-0098. U.S. Department of Energy, Office of Environmental Compliance, Washington, DC, 1983.

Sharples, F. E., and M. S. Salk, *The American Indian Religious Freedom Act: Guidance for compliance by federal agencies*. First Revision. ORNL/6166/R1, 1988.

Dr. Salk has also been involved in preparation of the following documents related to various environmental laws and regulations that are posted on the DOE Environmental Policy and Guidance Web site (<http://www.eh.doe.gov/oepa/>):

Information Brief on "Eligibility of Indian Tribes to Administer Programs under the Clean Water and Safe Drinking Water Acts." DOE/EH-412/0011/0298 (February 1998)

Update entitled, "NPDES Storm Water Permitting Regulations." (1998)

"EH-41 Wetlands Update." (1998)

Update entitled, "Issuance, Reissuance, and Modification of Nationwide Permits - Final Notification."(1998)

Updates entitled, "ENDANGERED SPECIES ACT: WHAT'S NEW!" (1998) and "ENDANGERED SPECIES ACT: Update II!" (1999)

Information Brief on "Endangered Species Act." DOE/EH-412/0012/0699. (1999)

Information Brief on "Regulation of Storm Water Discharges under the National Pollutant Discharge Elimination System." DOE/EH-412/0015/0301. (2001)

Revised Information Brief on "Management of Cultural Resources at Department of Energy Facilities." DOE/EH-412/0005r. (2001). [Revision of EH-232-0005/0893 (August 1993)]

Revised Information Brief on "National Historic Preservation Act." DOE/EH-412/0002r. (2002). [Revision of EH-232-0002/0692 (June 1992)]

Revised Information Brief on "State and Tribal Historic Preservation Officers." DOE/EH-412/0007r. (2002). [Revision of EH-232-0007/1193 (November 1993)]

Information Brief on "The Supreme Court's *SWANCC* Decision." DOE/EH-412/0016. (2002).

She has also been involved in drafting a revision of "Environmental Guidelines for Development of Cultural Resource Management Plans." DOE/EH-0501.

#### **4. Ability to promote constructive communication about a disputed study.**

Dr. Salk has gained extensive experience in promoting constructive communication among interested parties by her involvement in NEPA projects for FERC and other federal agencies.

**Applicant contact information:**

Martha S. Salk  
Oak Ridge National Laboratory  
P.O. Box 2008  
Bldg. 1505, MS-6036  
Oak Ridge, TN 37831-6036  
e-mail: salkms@ornl.gov  
telephone: 865-574-7315

**Names and contact information of three references:**

1. Jim Loar  
Oak Ridge National Laboratory  
P.O. Box 2008  
Bldg. 1505, MS-6036  
Oak Ridge, TN 37831  
e-mail: loarjm@ornl.gov  
telephone: 865-574-7323
  
2. Lois Thompson  
U.S. Department of Energy  
1000 Independence Avenue, S.W.  
Washington, DC 20426  
e-mail: lois.thompson@eh.doe.gov  
telephone: 202-586-9581
  
3. Greg Zimmerman  
Oak Ridge National Laboratory  
P.O. Box 2008  
Bldg. 1509, MS-6335  
Oak Ridge, TN 37831-6335  
e-mail: zimmermangp@ornl.gov  
telephone: 865-574-5815



Submission Contents

Response of Dr. Martha Salk, Oak Ridge National Laboratory, to Docket  
AD04-4-000 Notice

AD04\_4.doc..... 1-7