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1		QUALIFICATION STATEMENT OF
2		PHILIP W. THOR
3		Witness for the Bonneville Power Administration
4	Q.	Please state your name, employer, and business address.
5	A.	My name is Philip W. Thor. I am employed by the Bonneville Power Administration
6		(BPA), 905 NE. 11th Avenue, Portland, Oregon.
7	Q.	In what capacity are you employed?
8	A.	I am a Public Utilities Specialist in the Federal Hydro Project group for the Power Business
9		Line.
10	Q.	Please state your educational background.
11	A.	I received a B.S. degree in Mechanical Engineering from Duke University in 1974.
12	Q.	Please summarize your professional experience.
13	A.	In July 1981, I began work at BPA in the area of Residential Energy Conservation. Prior to
14		coming to BPA, I held a field engineering position with the General Electric Company,
15		which involved installation and maintenance work in large thermal powerplants. I also
16		worked in the U.S. Department of Commerce for the Patent and Trademark Office, and at
17		the Department of Energy in Washington, DC.
18		After nine years with BPA's energy conservation programs, I became BPA's
19		Program Manager for the Columbia River System Operation Review (SOR), a multi-agency
20		analysis of the operation of the Federal Columbia River Power System. The SOR was
21		jointly conducted by BPA, the U.S. Army Corps of Engineers (COE), and the Bureau of
22		Reclamation. Its purpose was to develop a system operating strategy for the Federal
23		hydrosystem that accommodated all of the multiple uses of the river.
24		I served in this role from mid-1990 until the completion of the review in 1996. I
25		oversaw the identification of several alternative operating strategies, an analysis of their
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impacts on each river use and documentation of results, including comments from a broad spectrum of public interests.

Since 1996, I have continued to provide analysis, consultation and technical support toward system operation and the continued development of the hydrosystem in an effort to meet environmental needs, in particular fish migration. I am BPA's original representative to the System Configuration Team (SCT), which is part of the National Marine Fisheries Service's Forum Process suggested in the 1995 Biological Opinion. The SCT manages and prioritizes the COE's capital investments in fish passage facilities at the mainstem hydro projects. I have also served on the Technical Management Team, a regional team that manages in-season hydro operations and is a part of the Forum Process.

More recently, I participated in the 3 Sovereigns effort to identify future fish and wildlife scenarios, to estimate the operations impacts and capital investments needed for each of these scenarios, and to determine the projects costs for each scenario. I was a participant in the Future Fish and Wildlife discussions hosted by BPA that resulted in the Fish and Wildlife Funding Principles. I managed the compilation of the projected future costs that supported these discussions.

I am also participating in the COE's lower Snake River Juvenile Salmon Migration Feasibility Study which is examining whether the lower Snake River projects should be breached or not. I also oversee the budgeting and implementation of capital investments in the COE's powerhouses for the purpose of repairing, maintaining, or upgrading existing turbine-generator equipment.

Witness: Philip W. Thor