

1.4 Identification of Agents and Contractors

1.4.1 Applicant – Initial ABWR Design Certification

GE has engaged in the development, design, construction, and operation of boiling water reactors since 1955. Table 1.4-1 lists the GE reactors completed, under construction, or on order. As can be seen, GE has substantial experience, knowledge, and capability to design, manufacture, and furnish technical assistance for the installation and startup of reactors.

1.4.2 Applicant - Aircraft Impact Rule Amendment to Design Certification

STP Nuclear Operating Company (STPNOC) is responsible for the overall design and design certification of the ABWR Amendment for addressing the aircraft impact rule (10 CFR 50.150) for the ABWR. STPNOC is the licensed operator of the South Texas Project Electric Generating Station (STP) Units 1 & 2, and is responsible for the licensing and development of STP Units 3 & 4, including the detailed design of two planned ABWR units. STPNOC has had extensive experience with the design of nuclear structures, systems and components in the course of fulfilling its responsibilities for the licensing, operation, maintenance, and modification of STP Units 1&2 since 1997, and the licensing and development of STP Units 3&4 since 2006.

Under the direction of STPNOC, a number of highly qualified organizations provide design and analysis in support of the ABWR Amendment for the aircraft impact rule. Each has a specific responsibility to STPNOC as defined by various contracts and agreements. Throughout the design process, lines of communication have been established among all participants. Design information is generated using common formats, electronic tools, and software. Common requirement and compliance documentation has been established and followed.

The major contributors are identified in Subsection 1.4.3.

1.4.3 Other Contractors and Participants

1.4.3.1 Toshiba Power Systems Company

Toshiba Power Systems Company has overall project management responsibility for the design for the ABWR aircraft impact rule amendment. The execution of the design for the ABWR aircraft impact rule amendment is provided by the subcontractors described below.

Toshiba has extensive experience in the design, construction, and commissioning of the Advanced Boiling Water Reactor (ABWR) worldwide, having participated in the development of the common engineering documents, design of the ABWR systems, and construction of three ABWRs in Japan. The first ABWR, Kashiwazaki-Kariwa Unit No. 6, commenced commercial operation in 1996, followed by Unit No.7 in 1997, and Hamaoka Unit No. 5 in January 2005. Subsequently, Toshiba assumed responsibility for the Engineering, Procurement, and Construction (EPC) of STP Units 3&4.

1.4.3.2 Westinghouse Electric Corporation

Westinghouse Electric Corporation (WEC) is a subcontractor to Toshiba with primary responsibility for the design for the ABWR aircraft impact rule amendment. WEC has significant experience in the design, construction, inspection and maintenance of domestic and international nuclear power plants. Westinghouse has designed, developed, and manufactured nuclear facilities since the 1950s, beginning with the world's first large central station nuclear plant (Shippingport), which produced power from 1957.

Westinghouse has designed and delivered more than 100 commercial nuclear power plants with a combined electrical generating capacity in excess of 90,000 MW. The company's manufacturing facilities include the commercial nuclear fuel fabrication facility at Columbia, South Carolina; and nuclear component manufacturing facilities at Blairsville, Pennsylvania; and Newington, New Hampshire.

Westinghouse has been involved with advanced light water reactor plant design efforts for over fifteen years. Westinghouse has substantial proven experience, knowledge, and capability to design, manufacture, and furnish technical assistance for the installation, startup and service of nuclear power plants.

1.4.3.3 Sargent & Lundy

Sargent & Lundy is a subcontractor to Toshiba for portions of the design for the ABWR aircraft impact rule amendment. For more than 100 years, Sargent & Lundy has provided comprehensive consulting, engineering, design, and analysis for electric power generation and power delivery projects worldwide. Its nuclear power experience includes acting as the Architect-Engineer for Dresden 2 & 3 (1971), Quad Cities 1 & 2 (1972), La Salle 1 & 2 (1982), Byron 1 & 2 (1987) and Braidwood 1 & 2 (1988). Sargent & Lundy has a large, highly experienced staff solely dedicated to the energy business.