

## Table of Contents

1.0.	Introduction .....	1.1-1
1.1	The Proposed Project.....	1.1-1
1.2	Status of Reviews, Approvals, and Consultations.....	1.2-1
1.3S	Methodology.....	1.3S-1
2.0.	Environmental Description .....	2.1-1
2.1	Site Location.....	2.1-1
2.2	Land .....	2.2-1
2.3	Water.....	2.3.1-1
2.3.1	Hydrology .....	2.3.1-1
2.3.2	Water Use .....	2.3.2-1
2.3.3	Water Quality.....	2.3.3-1
2.4	Ecology.....	2.4-1
2.5	Socioeconomics .....	2.5-1
2.6	Geology .....	2.6-1
2.7	Meteorology, Air Quality, and Noise.....	2.7-1
2.8	Related Federal Project Activities .....	2.8-1
2.9S	Existing Plant Parameters and Site Characteristics .....	2.9S-1
3.0.	Plant Description .....	3.1-1
3.1	External Appearance and Plant Layout.....	3.1-1
3.2	Reactor Power Conversion System .....	3.2-1
3.3	Plant Water Use .....	3.3-1
3.4	Cooling System .....	3.4-1
3.5	Radioactive Waste Management System .....	3.5-1
3.6	Nonradioactive Waste Systems .....	3.6-1
3.7	Power Transmission System.....	3.7-1
3.8	Transportation of Radioactive Materials.....	3.8-1
3.9S	Construction Activities.....	3.9S-1
3.10S	Workforce Characterization.....	3.10S-1
4.0.	Environmental Impacts of Construction .....	4.1-1
4.1	Land-Use Impacts (Construction).....	4.1-1
4.2	Water-Related Impacts.....	4.2-1
4.3	Ecological Impacts .....	4.3-1
4.4	Socioeconomic Impacts .....	4.4-1
4.5	Radiation Exposure to Construction Workers .....	4.5-1
4.6	Measures and Controls to Limit Adverse Impacts During Construction .....	4.6-1
4.7S	Nonradiological Health Impacts.....	4.7S-1
5.0.	Operation Impacts .....	5.1-1
5.1	Land Use Impacts (Operation) .....	5.1-1
5.2	Water-Related Impacts.....	5.2-1
5.3	Cooling System Impacts.....	5.3-1
5.4	Radiological Impacts of Normal Operation .....	5.4-1
5.5	Environmental Impacts of Waste.....	5.5-1
5.6	Environmental Impacts of Transmission Systems.....	5.6-1
5.7	Uranium Fuel Cycle Impacts .....	5.7-1

5.8	Socioeconomic Impacts .....	5.8-1
5.9	Decommissioning .....	5.9-1
5.10	Measures and Controls to Limit Adverse Impacts During Operations.....	5.10-1
5.11	Impacts of Transportation of Radioactive Materials .....	5.11-1
5.12S	Nonradiological Health Impacts.....	5.12S-1
6.0.	Environmental Measurements and Monitoring Programs .....	6.1-1
6.1	Thermal Monitoring .....	6.1-1
6.2	Radiological Monitoring .....	6.2-1
6.3	Hydrological Monitoring.....	6.3-1
6.4	Meteorological Monitoring .....	6.4-1
6.5	Ecological Monitoring .....	6.5-1
6.6	Chemical Monitoring.....	6.6-1
6.7	Summary of Monitoring Programs.....	6.7-1
7.0	Environmental Impacts of Postulated Accidents Involving Radioactive Materials ....	7.1-1
7.1	Design Basis Accidents.....	7.1-1
7.2	Severe Accidents .....	7.2-1
7.3	Severe Accident Mitigation Alternatives .....	7.3-1
7.4	Transportation Accidents.....	7.4-1
7.5S	Design Basis Accident or Severe Accident Impact on Other STP Units .....	7.5S-1
8.0	Need for Power .....	8.0-1
8.1	Description of Power System .....	8.1-1
8.2	Power Demand.....	8.2-1
8.3	Power Supply .....	8.3-1
8.4	Assessment of Need for Power .....	8.4-1
9.0.	Alternatives to the Proposed Action .....	9.1-1
9.1	No-Action Alternative.....	9.1-1
9.2	Energy Alternatives .....	9.2-1
9.3	Alternate Site Analysis .....	9.3-1
9.4	Alternative Plant and Transmission Systems .....	9.4-1
10.0	Environmental Consequences of the Proposed Action .....	10.1-1
10.1	Unavoidable Adverse Environmental Impacts.....	10.1-1
10.2	Irreversible and Irretrievable Commitments of Resources .....	10.2-1
10.3	Relationship between Short-Term Uses and Long-Term Productivity of the Human Environment.....	10.3-1
10.4	Benefit-Cost Balance.....	10.4-1
10.5S	Cumulative Impacts.....	10.5S-1