

**PSEG Site**

**Early Site Permit Application**

**Part 3**

**Environmental Report**

**Revision 2**

**PSEG Site  
ESP Application  
Part 3, Environmental Report**

**MASTER TABLE OF CONTENTS**

<u>Section</u>	<u>Title</u>	<u>Page</u>
<b>CHAPTER 1 INTRODUCTION</b>		
1.0	INTRODUCTION.....	1.1-1
1.1	PROPOSED ACTION .....	1.1-1
1.2	THE PROPOSED PROJECT .....	1.2-1
1.3	STATUS OF REVIEWS, APPROVALS, AND CONSULTATIONS.....	1.3-1
1.4	METHODOLOGY .....	1.4-1
<b>CHAPTER 2 ENVIRONMENTAL DESCRIPTION</b>		
2.1	SITE LOCATION .....	2.1-1
2.2	LAND.....	2.2-1
2.3	WATER .....	2.3-1
2.4	ECOLOGY .....	2.4-1
2.5	SOCIOECONOMICS.....	2.5-1
2.6	GEOLOGY .....	2.6-1
2.7	METEOROLOGY AND AIR QUALITY .....	2.7-1
2.8	RELATED FEDERAL AND OTHER PROJECT ACTIVITIES.....	2.8-1
<b>CHAPTER 3 PLANT DESCRIPTION</b>		
3.0	INTRODUCTION.....	3.0-1
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	NON-RADIOACTIVE WASTE SYSTEMS.....	3.6-1
3.7	POWER TRANSMISSION SYSTEM.....	3.7-1
3.8	TRANSPORTATION OF RADIOACTIVE MATERIALS .....	3.8-1

**PSEG Site  
ESP Application  
Part 3, Environmental Report**

MASTER TABLE OF CONTENTS (CONTINUED)

<u>Section</u>	<u>Title</u>	<u>Page</u>
<b>CHAPTER 4 ENVIRONMENTAL IMPACTS OF CONSTRUCTION</b>		
4.0	INTRODUCTION.....	4.0-1
4.1	LAND USE IMPACTS .....	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
<b>CHAPTER 5 ENVIRONMENTAL IMPACTS OF OPERATION</b>		
5.0	INTRODUCTION.....	5.0-1
5.1	LAND USE IMPACTS .....	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 IMPACT OF WASTE.....	5.5-1
5.6	TRANSMISSION SYSTEM IMPACTS .....	5.6-1
5.7	URANIUM FUEL CYCLE AND TRANSPORTATION IMPACTS.....	5.7-1
5.8	SOCIOECONOMIC IMPACTS .....	5.8-1
<b>CHAPTER 6 ENVIRONMENTAL MEASUREMENTS AND MONITORING PROGRAMS</b>		
6.1	THERMAL MONITORING.....	6.1-1
6.2	RADIOLOGICAL ENVIRONMENTAL 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

**PSEG Site  
ESP Application  
Part 3, Environmental Report**

MASTER TABLE OF CONTENTS (CONTINUED)

<u>Section</u>	<u>Title</u>	<u>Page</u>
<b>CHAPTER 7</b>		
<b>ENVIRONMENTAL IMPACTS OF POSTULATED ACCIDENTS INVOLVING RADIOACTIVE MATERIALS</b>		
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
7A	TRAGIS AND RADTRAN INPUT AND OUTPUT .....	7A-1
<b>CHAPTER 8</b>		
<b>NEED FOR POWER</b>		
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	ASSESSMENT OF NEED FOR POWER.....	8.3-1
8.4	POWER SUPPLY.....	8.4-1
8A	NEW JERSEY UNIT LEVEL BREAKDOWN.....	8A-1
<b>CHAPTER 9</b>		
<b>ALTERNATIVES</b>		
9.1	NO-ACTION ALTERNATIVE.....	9.1-1
9.2	ENERGY ALTERNATIVES .....	9.2-1
9.3	ALTERNATIVE SITES .....	9.3-1
9.4	ALTERNATIVE PLANT AND TRANSMISSION SYSTEMS .....	9.4-1
<b>CHAPTER 10</b>		
<b>ENVIRONMENTAL CONSEQUENCES OF THE PROPOSED ACTION</b>		
10.0	INTRODUCTION.....	10.0-1
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 USE AND LONG TERM PRODUCTIVITY OF THE HUMAN ENVIRONMENT.....	10.3-1
10.4	BENEFIT-COST BALANCE .....	10.4-1
10.5	CUMULATIVE IMPACTS .....	10.5-1