

# TABLE OF CONTENTS

<b>Executive Summary</b> .....	<b>ES-1</b>
<b>Introduction</b> .....	<b>I-1</b>
<b>CHAPTER 1 2002 Market Structure Changes</b> .....	<b>1-1</b>
1.1 New Market Power Mitigation Rules.....	1-1
1.1.1 <i>Market Mitigation Rules under West-wide Mitigation (Jan-Oct 2002)</i> .....	1-1
1.1.2 <i>Overview of November 1, 2002 Design Elements (Nov-Dec 2002)</i> .....	1-3
1.2 2002 Market Redesign (MDO2).....	1-7
1.2.1 <i>Overview of Phase IB Design Elements</i> .....	1-8
1.2.2 <i>Overview of Phase II Design Elements</i> .....	1-9
1.2.3 <i>Overview of Phase III Design Elements</i> .....	1-10
<b>CHAPTER 2 New Generation and Long-Term Contracts</b> .....	<b>2-1</b>
2.1 New Generation.....	2-1
2.1.1 <i>Retirements</i> .....	2-3
2.1.2 <i>Transmission Issues Associated with New Generation</i> .....	2-3
2.2 CERS Long-Term Power Purchase Agreements .....	2-4
2.2.1 <i>Contract Disputes</i> .....	2-8
2.2.2 <i>Contract Terminations</i> .....	2-8
2.2.3 <i>Contract Allocations among the Investor-Owned Utilities and Procurement     Decisions in R.01-10-024</i> .....	2-9
<b>CHAPTER 3 Summary of 2002 Market Performance</b> .....	<b>3-1</b>
3.1 Supply and Demand Conditions .....	3-2
3.1.1 <i>Loads and Scheduling</i> .....	3-2
3.1.2 <i>Demand Response</i> .....	3-4
3.1.3 <i>Supply Conditions</i> .....	3-5
3.2 Energy and Ancillary Service Costs .....	3-6

3.3	Out-of-Market Purchases .....	3-11
3.3.1	<i>2002</i> .....	3-11
3.3.2	<i>Comparison to Previous Years</i> .....	3-12
3.3.3	<i>Graphical Comparison</i> .....	3-13
3.4	Market Power and Competitiveness.....	3-14
3.4.1	<i>Markup Indices and 12-Month Competitiveness Index</i> .....	3-14
3.4.2	<i>Changes to CMCP Methodology</i> .....	3-15
3.4.3	<i>Measuring Competitive Behavior through Bidding Practices: The Bid-Cost Markup for Real-time Energy</i> .....	3-16
3.4.4	<i>Revenue Adequacy of New Generation</i> .....	3-23
<b>CHAPTER 4 Imbalance Energy Market Performance.....</b>		<b>4-1</b>
4.1	Real-Time Market Performance .....	4-3
4.2	Price Caps .....	4-4
4.3	Bid Sufficiency .....	4-5
<b>CHAPTER 5 Ancillary Service Markets.....</b>		<b>5-1</b>
5.1.1	<i>Summary of 2002 A/S Market Performance</i> .....	5-2
5.2	Demand for Ancillary Services .....	5-4
5.2.1	<i>Overall Demand for Ancillary Services</i> .....	5-4
5.2.2	<i>Demand for Regulation Reserves</i> .....	5-6
5.2.3	<i>Demand for Operating Reserve</i> .....	5-7
5.2.4	<i>Demand for Replacement Reserves</i> .....	5-8
5.3	Supply of Ancillary Service .....	5-9
5.3.1	<i>Overall Supply for Ancillary Services</i> .....	5-9
5.3.2	<i>Supply of Regulation Service</i> .....	5-10
5.3.3	<i>Supply of Operating Reserve and Replacement Reserve</i> .....	5-13
5.4	Conclusion .....	5-17

**CHAPTER 6 Congestion Management Market..... 6-1**

6.1 Summary of 2002 Inter-zonal Congestion Management Market..... 6-1

6.1.1 *Overview* ..... 6-1

6.1.2 *Inter-zonal Congestion Frequency Magnitude*..... 6-1

6.1.3 *Inter-zonal Congestion Usage Charge and Revenues* ..... 6-4

6.1.4 *Special Topic*..... 6-8

6.2 Overview of FTR Market Performance ..... 6-12

6.2.1 *2002 and 2003 FTR Auction results* ..... 6-12

6.2.2 *Concentration of FTR Ownership and Control*..... 6-14

6.2.3 *2002 FTR Market Performance* ..... 6-14

**CHAPTER 7 Local Area Reliability ..... 7-1**

7.1 Re-Dispatch Costs..... 7-1

7.1.1 *Incremental Energy Dispatches* ..... 7-1

7.1.2 *Decremental Energy Dispatches* ..... 7-1

7.2 Locational Market Power ..... 7-4

7.2.1 *Potential Market Power Approach (PMP)* ..... 7-4

7.3 Reliability Must Run ..... 7-5

7.3.1 *Estimating Intra-Zonal RMR Costs* ..... 7-6

**CHAPTER 8 Issues Under Review and Investigation..... 8-1**

8.1 Enron Scheduling and Trading Practices ..... 8-1

8.2 Locational Market Power Analysis..... 8-6

8.2.1 *Overview* ..... 8-6

8.2.2 *The “Dec Game”* ..... 8-7

8.3 FERC Refund Proceedings ..... 8-9

8.4 Support to Regulatory, Oversight and Enforcement Agencies..... 8-10

8.5 Economic Justification of Transmission ..... 8-10

8.5.1 *Introduction* ..... 8-10

8.5.2	<i>Major Challenges and Solutions</i> .....	8-10
8.5.3	<i>Key Modeling Methods</i> .....	8-12
8.5.4	<i>Conclusion</i> .....	8-16
8.6	Market Surveillance Committee (MSC) .....	8-17
8.6.1	<i>The Current Members</i> .....	8-17
8.6.2	<i>Accomplishments</i> .....	8-18
8.6.3	<i>MSC Opinions</i> .....	8-18
8.6.4	<i>MD02 Market Design</i> .....	8-20
8.6.5	<i>Transmission Methodology</i> .....	8-21
8.6.6	<i>MSC Meetings</i> .....	8-21
8.6.7	<i>Other MSC Activities</i> .....	8-21
<b>CHAPTER 9 Seams Issues</b> .....		<b>9-1</b>
9.1.1	<i>Market Monitoring Work Group</i> .....	9-1
9.1.2	<i>Congestion Management Alignment Work Group</i> .....	9-2
9.1.3	<i>Transmission Planning Work Group</i> .....	9-2
9.1.4	<i>Common Systems Interface Coordination Work Group</i> .....	9-2
9.1.5	<i>Pricing Reciprocity</i> .....	9-3