

## Table of contents

<b>1</b>	<b>MARKET OVERVIEW AND RECENT DEVELOPMENTS .....</b>	<b>5</b>
1.1	MARKET OVERVIEW .....	5
1.2	RECENT DEVELOPMENTS.....	7
1.2.1	<i>Energy and capacity market</i> .....	7
1.2.2	<i>New development and retirements</i> .....	9
1.2.3	<i>Update on transmission developments</i> .....	11
1.2.4	<i>Environmental regulations</i> .....	14
1.2.5	<i>Recent federal policy announcements</i> .....	15
<b>2</b>	<b>MODELING ASSUMPTIONS .....</b>	<b>16</b>
2.1	MARKET TOPOLOGY.....	16
2.2	FUEL PRICE PROJECTIONS.....	16
2.3	EMISSIONS COSTS .....	19
2.4	COST OF GENERIC NEW ENTRY .....	20
2.5	IMPORT AND EXPORT FLOWS .....	21
2.6	RPS REQUIREMENTS .....	22
2.7	SUPPLY AND DEMAND .....	23
2.7.1	<i>New entry</i> .....	24
2.7.2	<i>Retirements</i> .....	25
2.7.3	<i>Supply curve analysis</i> .....	26
<b>3</b>	<b>10-YEAR PRICE FORECAST .....</b>	<b>27</b>
3.1	ELECTRICITY MARKET PRICES .....	27
3.2	IMPLIED MARKET HEAT RATES.....	28
3.3	CAPACITY MARKET PRICES .....	28
<b>4</b>	<b>APPENDIX A: OVERVIEW OF FORECASTING METHODOLOGY .....</b>	<b>31</b>
<b>5</b>	<b>APPENDIX B: INTRODUCTION TO LEI AND ITS WORK IN THE MISO MARKET .....</b>	<b>32</b>

## List of figures

FIGURE 1. INSTALLED CAPACITY AND GENERATION BY TECHNOLOGY TYPE, 2016.....	6
FIGURE 2. INSTALLED CAPACITY AND GENERATION BY MARKET PLAYER, 2016 .....	6
FIGURE 3. SUMMARY OF RECENT DEVELOPMENTS AND POTENTIAL PRICE IMPACTS.....	7
FIGURE 4. SUMMARY OF RECENT RETIREMENTS .....	11
FIGURE 5. MTEP 17 COSTS OF ACTIVE PROJECT BY REGION (AS OF JUNE 30 <sup>TH</sup> , 2017).....	11
FIGURE 6. MULTI-VALUE PROJECT STATUS.....	14
FIGURE 7. MARKET TOPOLOGY .....	16
FIGURE 8. FOSSIL FUEL PRICE PROJECTION (NOMINAL \$/MMBTU) .....	17
FIGURE 9. PROJECTED DELIVERED NATURAL GAS COST AT MISO’S RELEVANT FOUR GAS HUBS (NOMINAL \$/MMBTU).....	18
FIGURE 10. EMISSIONS COST PROJECTIONS (NOMINAL \$/TON) .....	19
FIGURE 11. CARBON ALLOWANCE PRICES FORECAST (NOMINAL \$/TON) .....	20
FIGURE 12. COST OF GENERIC NEW ENTRY ASSUMPTIONS .....	21
FIGURE 13. MODELED NET IMPORTS, GWH .....	22
FIGURE 14. RPS REQUIREMENTS IN MISO .....	22

FIGURE 15. REGION-WIDE DEMAND-SUPPLY BALANCE .....23  
FIGURE 16. FORECASTED PEAK DEMAND AND ANNUAL CONSUMPTION PER ZONE (MW AND TWH) .....24  
FIGURE 17. CUMULATIVE GENERIC RENEWABLES NEW ENTRY (MW).....24  
FIGURE 18. GENERATING PLANTS UNDER CONSTRUCTION .....25  
FIGURE 19. INCREMENTAL RETIRED CAPACITY .....26  
FIGURE 20. SUPPLY CURVE FOR MISO (2022) .....26  
FIGURE 21. FORECAST ENERGY MARKET PRICES, 2018 THROUGH 2027 (NOMINAL \$/MWH).....27  
FIGURE 22. FORECAST IMPLIED HEAT RATE, 2018 THROUGH 2027 .....28  
FIGURE 23. FORECASTED TARGET CAPACITY PRICES FOR MISO (\$/KW-MONTH).....29  
FIGURE 24. POOLMOD’S TWO-STAGE PROCESS.....31