

Table of contents

| | | |
|----------|---|-----------|
| 1 | EXECUTIVE SUMMARY | 1 |
| 2 | MARKET OVERVIEW AND RECENT DEVELOPMENTS | 5 |
| 2.1 | MARKET OVERVIEW | 5 |
| 2.2 | RECENT DEVELOPMENTS..... | 6 |
| 2.2.1 | Ontario’s long term energy plans | 7 |
| 2.2.2 | Ontario’s Climate Change Action Plan..... | 8 |
| 2.2.3 | Cap and Trade Program..... | 9 |
| 2.2.4 | Revised Nuclear Refurbishment and Retirement Schedule and Agreement | 11 |
| 2.2.5 | FIT and microFIT Programs | 11 |
| 2.2.6 | Large Renewable Procurement | 12 |
| 2.2.7 | Demand Response Auction | 13 |
| 2.2.8 | Energy Storage | 13 |
| 2.2.9 | Capacity Exports | 14 |
| 3 | MODELING ASSUMPTIONS | 16 |
| 3.1 | MARKET TOPOLOGY | 16 |
| 3.2 | NATURAL GAS PRICE PROJECTIONS..... | 17 |
| 3.3 | EMISSIONS COSTS..... | 18 |
| 3.4 | COST OF GENERIC NEW ENTRY..... | 20 |
| 3.5 | HYDROLOGY | 20 |
| 3.6 | IMPORT AND EXPORT FLOWS | 22 |
| 3.7 | DEMAND | 23 |
| 3.8 | SUPPLY | 24 |
| 4 | 10-YEAR PRICE FORECAST | 28 |
| 4.1 | ENERGY MARKET PRICES | 28 |
| 4.2 | IMPLIED MARKET HEAT RATE | 29 |
| 5 | GLOBAL ADJUSTMENT | 30 |
| 5.1 | GLOBAL ADJUSTMENT OVERVIEW | 30 |
| 5.2 | LEI PROPRIETARY GLOBAL ADJUSTMENT SIMULATION MODEL..... | 31 |
| 5.3 | CONSUMER PRICE 10-YEAR FORECASTING RESULTS | 33 |
| 6 | APPENDIX A: OVERVIEW OF FORECASTING METHODOLOGY | 35 |
| 7 | APPENDIX B: ABOUT LEI AND ITS ONTARIO EXPERIENCE | 36 |

Table of figures

| | |
|--|----|
| FIGURE 1. ACRONYMS..... | 4 |
| FIGURE 2. INSTALLED CAPACITY AND GENERATION BY FUEL TYPE | 5 |
| FIGURE 3. INSTALLED CAPACITY AND GENERATION BY MARKET PARTICIPANT (2015) | 6 |
| FIGURE 4. HOEP AND GA PRICE IMPACTS | 7 |
| FIGURE 5. KEY ASPECTS OF ONTARIO’S LONG-TERM ENERGY PLAN (DECEMBER 2013) | 8 |
| FIGURE 6. MOECC EMISSION ALLOWANCE PER YEAR..... | 10 |
| FIGURE 7. REGIONAL TRANSMISSION INTERFACE LIMITS..... | 16 |
| FIGURE 8. FUEL PRICE PROJECTIONS (Q3 2016 vs. Q3 2015)..... | 18 |
| FIGURE 9. HISTORICAL WCI AUCTION RESULTS \$US (Nov 2012 – AUG 2016)..... | 18 |
| FIGURE 10. FORECAST CARBON ALLOWANCE PRICE (US\$/TON) | 19 |
| FIGURE 11. NETP – CCGT 2017 | 20 |

| | |
|--|----|
| FIGURE 12. AVERAGE MONTHLY ENERGY BUDGET FOR ALL EXISTING ONTARIO HYDROELECTRIC PLANTS | 21 |
| FIGURE 13. ONTARIO HYDROELECTRIC GENERATION (2006-2015) | 21 |
| FIGURE 14. PROJECTED NET EXPORTS/(IMPORTS) | 23 |
| FIGURE 15: GROSS AND NET PEAK DEMAND PROJECTIONS | 23 |
| FIGURE 16. FORECAST ANNUAL CONSUMPTION | 23 |
| FIGURE 17. NEW ENTRY (NAMEPLATE CAPACITY) ASSUMED IN THE ONTARIO MODELING..... | 24 |
| FIGURE 18. ASSUMED NUCLEAR REFURBISHMENT AND RETIREMENT SCHEDULE | 25 |
| FIGURE 19. REGION-WIDE DEMAND-SUPPLY BALANCE | 26 |
| FIGURE 20. INDICATIVE INTERNAL SUPPLY CURVE FOR ONTARIO (2020) | 27 |
| FIGURE 21. 10-YEAR FORECAST HOURLY ONTARIO ENERGY PRICES (\$US/MWH)..... | 28 |
| FIGURE 22. IMPLIED MARKET HEAT RATES | 29 |
| FIGURE 23. GA COMPOSITION BY CONTRACT PROVIDER (2015 \$CA MILLIONS)..... | 30 |
| FIGURE 24. HISTORICAL GLOBAL ADJUSTMENT MAY 2006 – SEP 2016 (\$CA)..... | 31 |
| FIGURE 25. ONTARIO SUPPLY BY FUEL TYPE (2017-2026) | 32 |
| FIGURE 26. CONTRACTUAL PRICE ASSUMPTIONS BY CONTRACT AND FUEL TYPE (\$CA)..... | 33 |
| FIGURE 27. FORECAST ONTARIO CONSUMER PRICE \$US/MWH (HOEP PLUS GA)..... | 34 |
| FIGURE 28. POOLMOD’S TWO-STAGE PROCESS..... | 35 |
| FIGURE 29. LEI ECONOMIC, FINANCIAL AND STRATEGIC MANAGEMENT ADVISORY EXPERTISE..... | 36 |