



**The Bowman Centre
For Sustainable Energy**

Energy Generation Cost Evaluations

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The IESO's P2D document included a rigorous economic assessment of the ever-widening array of electricity generation options available to power Ontario's emerging 21st century economy. The assessment is in [Appendix A](#) (details) and [Appendix D](#) (summary tables from Appendix A).

It is notable that the cost to bring new natural gas fueled generation on stream during the period 2023 to 2027 per the Moratorium document is absent from the tables. After 2027 no new gas fired generation will be added. However, existing gas fired units with their fixed and variable op costs as well as capital retirement costs will continue to retirement.

The Appendix A worksheet "8. Cost Analysis" does not include a column for Levelized Cost of Electricity for each generation option. LCOE is a commonly used and useful indicator for evaluating and comparing power plant life cycle electricity generation costs.

Lazard's and Fraunhofer both report that wind and solar including storage are cheaper than fossil fueled generation. By including storage, the availability and reliability risks associated with wind and solar can be mitigated.

[Levelized Cost of Electricity: Renewables Clearly Superior to Conventional Power Plants Due to Rising CO2 Prices - Fraunhofer ISE](#) and [Lazard PowerPoint Presentation \(lazard.com\)](#)

Also, why is row 3, Appendix A, Worksheet 8. Cost Analysis" hidden?

Recommendation.

Please update Appendix A and D to include LCOE and add natural gas fired power generation to the economic analysis.

Levelized Cost of Energy Comparison—Unsubsidized Analysis

Selected renewable energy generation technologies are cost-competitive with conventional generation technologies under certain circumstances

