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INVESTORS SERVICE

CREDIT OPINION
27 June 2018

Update

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RATINGS

Independent Electricity System Operator

Domicile	Ontario, Canada
Long Term Rating	Aa2
Type	LT Issuer Rating - Dom Curr
Outlook	Negative

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Independent Electricity System Operator

Update following outlook change to negative

Summary

The Independent Electricity System Operator's (IESO) credit profile is identical to that of the Province of Ontario (Aa2 negative). In accordance with Moody's Government Related Issuers Methodology (GRI), IESO's rating results from a combination of the IESO's baseline credit assessment (bca) of a1 which is identical to the bca of the Province and the very high probability of extraordinary support. Key drivers of the IESO's credit quality are: 1) close linkage to the Province through government control and the IESO's role in implementing provincial energy policy; 2) a legislated, monopoly position with no threat of competition; and 3) limited risk as a result of the market structure and market rules. While the provincial government does not guarantee any of the IESO's obligations, we expect the Province to continue to provide virtually all of the IESO's capital in the form of debt financing.

Credit Strengths

» Close relationship with the Province of Ontario

» Legislated cost recovery and monopoly position

» Market structure and rules limit risk

Credit Challenges

» Negative outlook on the Province of Ontario

Rating Outlook

The rating outlook is negative, reflecting the negative outlook of the Province of Ontario.

Factors that Could Lead to an Upgrade

An upgrade of the Province of Ontario would likely lead to an upgrade of the IESO.

Factors that Could Lead to a Downgrade

A downgrade of the Province of Ontario would likely lead to a downgrade of the IESO. A change in the nature of the relationship or the probability of extraordinary support from the province could have a negative impact on the IESO's credit quality and could lead to a downgrade. While we do not expect it, a material change in legislation, regulatory frameworks or market rules could also result in a downgrade.

Profile

The IESO is a not-for-profit, non-taxable corporation without share capital created in 1999 pursuant to the Electricity Act of Ontario (the Act). The IESO oversees Ontario's electricity system, which has 37,044 MW of installed generation including 13,009 MW of nuclear (35% of total installed capacity), 10,277 MW of gas/oil (28%), 8,472 MW of hydro (23%), and 5,287 MW of wind, biofuel and solar (14%).

IESO's key objectives include: to direct the operation of the transmission system including providing transmission-related information to all market participants, to maintain the reliability of the grid, to participate in the development of energy policies, to establish and enforce criteria and standards relating to the reliability of the integrated power system, to engage in activities related to electricity supply and capacity procurement and energy conservation, to forecast electricity demand and the adequacy and reliability of electricity resources for the Province by collecting and making related information public, to promote cleaner energy sources for fuel diversity, to assist the OEB by facilitating stability in rates for certain types of customers and to manage the Ontario Electricity Support Program. The IESO is also the servicer for the Fair Hydro Trust (FHT Aa2 sf)

On 1 January 2015, the Ontario Power Authority (OPA) and IESO amalgamated and continue to operate as the IESO pursuant to an Act of Provincial parliament in July 2014. The act provides that for all intents and purposes the IESO will fulfill all of the same roles and functions as its predecessor organizations. The amended Act stipulates effective separation of functions between the IESO's market operations and its procurement and contract management activities. The pre-amalgamated OPA managed about 22,500 MW of capacity as an off-taker under long term power purchase agreements.

Detailed Rating Considerations

Close relationship with the Province of Ontario

The IESO is closely linked to the Province of Ontario and this relationship is a key driver of credit quality. The IESO is linked through the control that the provincial government exerts over it through an act of legislation.

The IESO is effectively controlled and directed by the government that appoints its independent Board of Directors. Annually, the IESO is required to have its business plan approved by the Minister of Energy (the Minister) and to submit to the Ontario Energy Board (OEB) its proposed expenditures, revenue requirements and fees for review and approval. While the IESO has oversight of its revenue requirement and does not set it at its sole discretion, Moody's expects the IESO will continue to recover its costs. We have assumed that the province will continue to fund all of the IESO's capital expenditures.

The IESO implements government electricity policy, reinforcing the ties of the IESO to the government. For example, the Minister of Energy may direct the IESO on issues of electricity procurement and other government directives on associated electricity matters. The IESO is the counterparty for policy driven electricity contracts.

While generally these ties reinforce the close linkage to the government and the linkage of the ratings, the government may also take actions that are credit negative for the IESO. For example, the Ministry and OEB may effectively direct the time frame for cost recovery on some initiatives through their approval of the IESO's budget. The IESO did not start to recover costs on the smart meter initiative, for example, until seven years after it had begun to invest in the initiative. However, all of the costs are either funded through rates or with debt borrowed from the Province.

Legislated, essential role in the Ontario electricity market

The legislated, monopoly position that provides cost recovery with no threat of competition reinforces the IESO's credit quality.

Legislation granting the IESO the ability to establish and charge fees to recover its costs is a key driver of credit quality. The recovery of its costs and payments related to procurement contracts, a politically sensitive aspect of the IESO's operations, is specifically referenced in legislation and deemed to be approved by the OEB. As a monopoly and implementer of government policy, the IESO benefits from a very strong competitive position. While the IESO is not explicitly exempt from liability in legislation, the IESO can recover its costs in rates.

The IESO plays an essential role in the electricity markets in the Province by ensuring the minute to minute and day to day reliability of electricity. A default by the IESO, while difficult to envision, could have a material impact on the smooth and efficient performance of electricity markets. The efficient function of the electricity market that the IESO administers is in the government's interest and the government would likely intervene if this was jeopardized.

Market structure and rules limit risk to the IESO

The market rules that govern the electricity market in Ontario significantly limit the market risk to the IESO. The IESO's operations are dictated by these market rules, which specify its responsibilities and relationships with market participants, as well as providing indemnity, sources of funding, and mechanisms to minimize counterparty risks for the IESO.

The objective of the IESO administered markets is to promote an efficient, competitive and reliable market for the wholesale sale and purchase of electricity and ancillary services in the Province of Ontario. The market rules provide the framework to govern the IESO controlled grid and the IESO controlled markets for wholesale power in Ontario. The market rules have the effect of a contract between each market participant and the IESO. The IESO is responsible for supervising, administering and enforcing the market rules. Pursuant to legislation, the IESO may make the market rules and in general most are subject to stakeholder review.

IESO risk under the Ontario Fair Hydro Plan is limited

The IESO is the servicer for the Fair Hydro Trust (FHT Aa2 sf), which was established in connection with the Ontario Fair Hydro Plan Act, 2017. The Act was designed to provide rate relief to specified consumers. The under-recovery of costs is initially borne by the IESO, however we expect the FHT to purchase the right to collect from the IESO (and ultimately consumers) on an ongoing basis. We believe the primary risk to the IESO is that the FHT may cease to purchase and finance the shortfall that the IESO incurs, however there is material mitigation for the IESO. We expect that in this highly unlikely event the IESO will first seek further credit directly from the Province, second seek a significant rate increase, and finally, if required, pay generators on a pro-rata basis. In the last 6 months of 2017, the under-collection from customers was $1,378 million, of which $1,179 was purchased by the FHT.

The principal methodology used in these ratings was the Government-Related issuers methodology published in August 2017. Please see the Credit Policy page on www.moodys.com for a copy of this methodology.

Liquidity Analysis

The IESO has sufficient liquidity.

The IESO has a $160 million revolving credit facility provided by the Ontario Electricity Financial Corporation (OEFC: Aa2 negative), a Crown agency controlled by the Ontario government that matures in June 2020 and a $150 million bank credit facility maturing in April 2020. At 31 December 2017, the facilities were undrawn. The only other debt instrument at the IESO prior to amalgamation is a $120 million note payable to the OEFC maturing in June 2020.

The IESO has a $475 million revolving credit facility that matures in December 2019 provided by the Ontario Financing Authority (OFA), an agent of the Crown. Proceeds from this facility are required to be used solely for operations associated with payments under procurement contracts as authorized by regulation. At December 31, 2017, $12 million was drawn on the facility.

In 2017, the IESO signed a $2 billion credit facility agreement with the OFA expiring on September 30, 2022 for the purpose of supporting the IESO's role in the FHP. At December 31, 2017, $1 million was drawn on the facility.

While OEFC and OFA credit facilities contain a material adverse change (MAC) clause, we consider it unlikely that the Province would voluntarily invoke the MAC clause and restrict the IESO's access to funding in times of liquidity stress, given the Province's vested interest in the IESO's ability to continue as a going concern. We expect the facilities to be renewed prior to their next scheduled expiration.

Ratings

Exhibit 1

Category	Moody's Rating
INDEPENDENT ELECTRICITY SYSTEM OPERATOR	
Outlook	Negative
Issuer Rating -Dom Curr	Aa2

Source: Moody's Investors Service

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