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CREDIT OPINION
18 July 2017

Update

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RATINGS

Lower Mattagami Energy Limited Partnership

Domicile	Toronto, Ontario, Canada
Long Term Rating	A2
Type	Senior Secured - Dom Curr
Outlook	Stable

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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Lower Mattagami Energy Limited Partnership

Update to Key Credit Factors

Summary Rating Rationale

Lower Mattagami Energy Limited Partnership (LMELP)'s A2 rating reflects the very predictable minimum net cash flows expected over the term of the hydroelectric energy supply agreement (HESA) with the Independent Electricity System Operator (IESO, Aa2, stable) which should result in debt service coverage ratios (DSCR) slightly in excess of 1.90 times. The rating also reflects the absence of hydrology risk with respect to the revenue requirement, the simplicity of the technology and the substantial experience of Ontario Power Generation Inc. (OPG, NR) as an operator of power assets, in particular hydro-electric assets. However, the rating is constrained by the presence of refinancing risk, potential for increased leverage, and the relatively high cost of the new facilities.

Credit Strengths

» All six new generating units are in service and operating as expected

» Predictable minimum net cash flows derived from the HESA and low degree of operating risk

» Additional protection offered by the project finance debt structure

Credit Challenges

» Relatively high cost of the incremental assets; however, overall, the price needed by the project to cover its obligations is below what is paid to many other Ontario power generators

» DSCRs more reflective of a strong Baa-weak A credit but resilient under various downside scenarios and potential for upside

» Exposure to refinancing risk and potential increase in leverage

Rating Outlook

The stable outlook incorporates our expectation that the facilities will generate the expected DSCRs based on the HESA.

Factors that Could Lead to an Upgrade

An upgrade may be considered if the issuer and the guarantor, Lower Mattagami Limited Partnership (LMLP), generate consolidated DSCRs in excess of the projected DSCRs on a sustained basis (in excess of 1.90 times on average and minimum).

Factors that Could Lead to a Downgrade

DSCR below 1.40 times on a sustained basis, downgrade of the IESO issuer rating, could lead to negative rating pressure.

Detailed Rating Considerations

HESA Mitigates Hydrology Risk and Provides a Predictable Revenue Stream

Like many of the contracts entered into by the IESO, the HESA is a contract for differences: i.e. it requires the power generator to sell its production in the Ontario spot market, and the two parties settle once a month so that, as long as certain tests are met, the generator benefits from a minimum revenue in the event that market revenues are insufficient. In the case of LMELP and LMLP, LMELP will also be allowed to keep most of the revenue upside on its existing assets in addition to benefitting from a revenue floor. The following points are underpinning the contract strength and our view that LMELP and LMLP will benefit from a predictable minimum revenue flow from a highly rated counterparty:

The contract allows LMELP and LMLP to receive minimum revenue, independent of water levels, thus insulating the project from hydrology risk as a downside scenario. The minimum revenue will allow LMELP and LMLP to recover operations and maintenance costs, taxes, interest costs, depreciation and a return on equity based on a deemed capital structure. The payment of such minimum revenue is only subject to minimum availability having been achieved and operations having been carried out in a prudent manner. Based on historical data for hydro-electric stations, it is expected that the minimum availability requirements will be easily achieved. The calculation of such minimum revenue requirement will be adjusted on a regular basis thus lessening the budgeting risk. The gross revenue charges for the water power leases will be a straight pass-through. Capital expenditures required to maintain the assets are incorporated in the forecast revenue requirements in every revenue requirement period or, if unexpected, can give rise to revenue adjustments through contract facility amendments or re-opener events. Moreover, the HESA includes a number of provisions which are credit positive including provisions related to force majeure events. The events of default in the HESA are set at such a level that a termination for non-performance should be highly unlikely given the nature of the assets and their expected performance level (in particular there is no minimum availability requirement for the existing assets, only for the incremental assets).

Competitive Contract Price Compared to Similar Contracts

On a combined basis, LMELP and LMLP need just over 6 cents per KWh to cover their costs, which is higher than historical spot market prices in Ontario but below the average price received by Ontario generators (excluding OPG). This means that, until Ontario power spot market prices firm up, LMELP and LMLP will likely rely on a payment from the IESO most months in order to generate the minimum revenue requirement since market derived revenues will be insufficient. While theoretically there is a risk that the IESO could cancel a contract which may be "out of the money" at some point in time during its term, we believe that this risk is very limited for various reasons:

» The project's revenue requirement (on a $ per MWh basis) is lower than what is required by many other projects that have long term contracts with the IESO or Ontario Electricity Financial Corporation.

» There is limited history in Ontario or Canada of government entities reneging on power purchase agreements, especially once the assets are built

» The IESO is indifferent with respect to the price of the contracts it needs to enter into in order to facilitate investments in the power generation industry since, by right, it can recover all related costs from the Ontario consumers (as long as the contracts are prudently incurred).

Low Degree of Technical and Operating Risk

The cash flow predictability provided by the HESA is further strengthened by a number of aspects of the project:

The facilities are simple assets to operate. Further, OPG operates the facilities under operation and maintenance contracts with LMELP and LMLP and OPG has extensive experience operating power generation assets, especially hydro assets. While the contract terms and conditions are not very onerous for OPG, at this stage we believe that, as long as OPG is a controlling partner, there is an alignment of interests between OPG as operator and OPG as a key partner (the requirement for OPG to remain a controlling partner is a condition of the financing for LMELP).

Debt Service Coverage Ratios More Reflective of a Strong Baa-Weak A Credit but Resilient and there is Potential for Upside

While the anticipated DSCR (2.12 times average/1.99 times minimum assuming a 65% debt to capitalization ratio) based on minimum HESA revenues is more reflective of amortizing debt projects rated at the upper end of the Baa rating category-Low end of an A rating category, the assigned rating reflects several key qualitative factors, including the modest degree of conditionality around reaching these metrics, the credit quality of the IESO, the project's resiliency to several stress scenarios, as well as the unique relationship between OPG, the sponsor, developer and operator and the IESO, the offtaker.

In addition, over the term of the HESA, the existing assets may benefit from prices above the minimum required to cover their costs. We note that the HESA will allow the LMELP to assume that, for purposes of allocating the energy produced between the existing assets and the incremental assets, the energy produced is first produced by the existing assets. As a result, even assuming a fairly conservative forecast of market prices, the DSCR could easily strengthen above the level generated by the HESA guaranteed revenue floor. Also the HESA is structured in such a way that the existing assets and the incremental assets are treated separately. Therefore even if the existing assets generate substantial cash flows well in excess of their needs to cover costs and pay debt service, that is not offset against the payments that the IESO is likely to have to make for the incremental assets which are more expensive.

Refinancing Risk is a Weakness

LMELP will have exposure to significant refinancing risk, more akin to that normally exhibited by a corporate. The issuer has staggered the bond maturities in order to avoid large maturities in any single year. We note that the refinancing risk is further mitigated by the fact that the actual interest expense is recoverable under the HESA through the revenue requirement calculations (although there could be a one year delay in recovering the difference between the actual cost and the cost of debt estimated at the beginning of the year).

Unlike most amortizing project financings, at maturity of the HESA, there should be approximately $580 million of the original debt left to repay, based on the expected amortization profile. That's excluding any debt associated with major rehabilitations becoming necessary over the 50 year term of the HESA (all recoverable under the HESA if prudently incurred).

The refinancing risk is mitigated in a number of ways. The HESA partially, but not entirely, mitigates that risk through a ten year extension option exercisable by either party although that extension option only applies to the incremental assets and is only available as long as the counterparties to the HESA are controlled by the Province of Ontario. In addition, should lenders require amortization of the whole debt amount or a cash sweep mechanism before the end of the HESA, there is ample cash flow available to repay the amount of debt well before the end of the HESA.

We also note that if all the debt is not repaid by the end of the HESA, and depending on market prices as well as hydrology at that time, the rating of LMELP could be weaker than the current rating.

Possible Increase in Leverage

While the Equity Support Agreement between OPG and the IESO sets the maximum debt to capitalization ratio for LMELP and LMLP at a level approximately equal to the deemed debt to capitalization ratio as set in the HESA (i.e. 65% initially), that ratio can change over time in two ways: a) the ratio can increase or decrease as amended in the HESA (expected to reflect the increase or decrease in deemed debt to capitalization ratios for a sample of Ontario Energy Board regulated entities), or b) the parties to the Equity Support Agreement can agree to deviate from the HESA deemed ratio as long as both parties agree to such a change. We note that there is nothing in the master trust indenture which would stop the issuer from increasing the debt to capitalization ratio as long as the loan to book value ratio was less than 85% on a maintenance basis (assuming the DSRA was fully funded) and less than 80% on a debt incurrence basis. In our view, over the term of the HESA, an increased leverage for the issuer and its guarantor is a material possibility, especially if power market prices firm up substantially.

An increase in leverage to 80% debt to capitalization would likely result in weakening DSCRs as well as increased refinancing risk at the end of the HESA, and could have implications for the rating.

Project Finance Debt Structure Offers Additional Protection

Step-in-rights: The HESA provides the indenture trustee with the opportunity to cure defaults by LMELP/LMLP and the right to prevent the termination of the HESA by the IESO (under certain conditions) which is quite standard for this type of contract.

Project Finance Structure: While LMELP will have aspects of a corporation, lenders will benefit from some structural protection more akin to project finance, including a debt service reserve account equal to approximately 6 months of debt service; test for permitted distributions; tests for additional indebtedness; security on material contracts and revenues; security on the assets of the Complex etc. However the full suite of project finance structure is not available in the sense that, for instance, there are no trusteed accounts to control the flow of funds and no assignment of the partnership interests in LMLP and LMELP to lenders. While there is no major maintenance reserve, we are of the opinion that the absence of such reserve is more than compensated by certain provisions of the HESA which would allow LMLP and LMELP to recover both planned and certain unplanned capital expenditures through the application of various mechanisms. In addition, LMELP and LMLP will benefit from additional liquidity in the form of an operating credit facility to deal with unexpected capital expenditures, which should be sufficient given the diversity of the sites, as well as a credit facility/ commercial paper program in an amount sufficient to achieve the required target debt amortization (a synthetic debt amortization schedule achieved through draw downs and repayments of a credit facility between bond maturities). The authorized amount of the commercial paper program, rated Prime-1, is currently $500 million and will be adjusted to an amount still to be determined.

Relatively Complex Structure

While LMELP is the issuer, it only holds the existing assets of the Lower Mattagami complex (Complex). The incremental assets are held by LMLP and LMLP has pledged its assets to the LMELP lenders. LMELP has issued all the debt required for the Complex's funding needs and then on-lent the funds to LMLP on a back-to-back basis. The terms and conditions of the master trust indenture ensure that there is no leakage of funds out of LMLP which could weaken LMLP's ability to repay its share of the debt raised by LMELP:

» Guarantee from LMLP

» Restriction on borrowing at LMLP level except from LMELP (except for a minor working capital facility)

» LMLP to abide by covenants and other terms and conditions applicable to the issuer

» Consolidated financial tests

» No restrictions on flow of funds from LMLP to LMELP

Liquidity Analysis

Please see above under sections entitled “Project Finance Debt Structure Offers Additional Protection”.

Structural Considerations

Please see above under sections entitled “Project Finance Debt Structure Offers Additional Protection” and “Relatively Complex Structure”.

Profile

LMELP, the issuer, is a limited partnership between OPG and LM Energy Inc., a wholly owned subsidiary of OPG. LMLP, the guarantor, is a limited partnership between OPG (75%) and Moose Cree First Nation (25%), through its subsidiary the Amisk-oo-Skow Finance Corporation. OPG is wholly-owned by the Province of Ontario (Aa2, stable) and it is the largest power generator in Ontario with over 16,000 MW of in-service capacity, more than 45% of which is hydroelectric generation capacity through 66 stations. Together, LMELP and LMLP have entered into a long-term hydroelectric energy supply agreement (HESA) with the IESO.

Under the HESA, LMELP and LMLP are required to operate four hydroelectric generating stations located on the Lower Mattagami River in north-eastern Ontario. LMELP holds the existing assets (whose runners were upgraded separately) while LMLP holds all incremental assets (a third unit for each of the existing three generating stations and a fully redeveloped fourth generating station). The combined capacity of the four facilities is now almost 924 MW. The HESA will end approximately 50 years after the date the last incremental unit achieved commercial operation (2064).

Rating Methodology and Scorecard Factors

LMELP's rating is derived from the Power Generation Projects methodology updated in May 2017. The assigned A2 rating is equal to the grid-indicated A2 rating.

Exhibit 1

Factor	Subfactor	Score
1. Predictability of Cash Flows	a) Quality and Diversity of Cash Flow Stream	Aa
	b) Conditions for Contract Payments or Receipt of Revenues	Aa
2. Competitiveness / Regulatory Support	a) Competitiveness of Project Assets / Regulatory Support	Baa
3. Technical and Operating Risks / Vendor Profile	a) Technology, Operating Track Record and Vendor Profile	A
	b) Quality of Operator, O&M Contractual Framework and Sponsor Strength / Commitment	A
4. Key Financial Metrics	a) Ratio of CFADS to Mandatory Debt Service	Baa
Notching Considerations	1 - Liquidity	1.0
	2 - Strength of Project Financing Structure	0.0
	3 - Refinancing Risk	-0.5
	4 - Structural Subordination	0.0
	5 - Construction Risk	0.0
	6 - Termination Payment	0.0
Scorecard Indicated Rating:		**A2**

Source: Moody's Investors Service

Ratings

Exhibit 2

Category	Moody's Rating
LOWER MATTAGAMI ENERGY LIMITED PARTNERSHIP	
Outlook	Stable
Senior Secured -Dom Curr	A2

Source: Moody's Investors Service

Recent Developments

Recourse Release Conditions Met on July 12, 2017

Now that the Recourse Release Date has been met, OPG no longer guarantees the long term debt obligations of LMELP (and will no longer guarantee the commercial paper program subject to certain document amendments to be finalized). The most recent financial projections provided by LMELP show that the DSCRs should be able to be slightly above 1.90 times based on the assumed debt to capitalization ratio of 65% at recourse release date and based on minimum revenue requirements. This is somewhat better than what was expected at the beginning of the project construction, which is credit positive.

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