

CREDIT OPINION

27 February 2024

Update



RATINGS

Interconexion Electrica S.A. E.S.P.

Domicile	Colombia
Long Term Rating	Baa2
Туре	LT Issuer Rating - Fgn Curr
Outlook	Stable

Please see the <u>ratings section</u> 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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Interconexion Electrica S.A. E.S.P.

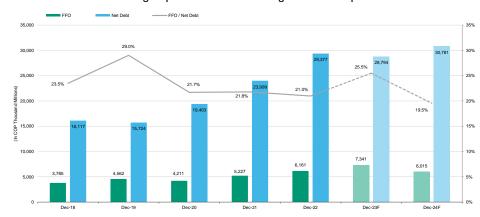
Update to credit analysis

Summary

Interconexion Electrica S.A. E.S.P.'s (ISA) credit profile reflects its position as one of the largest transmission companies in Latin America with diversified operations through its subsidiaries located in Colombia (Government of Colombia, Baa2 stable), Brazil (Government of Brazil, Ba2 stable), Chile (Government of Chile, A2 stable) and Peru (Government of Peru, Baa1 negative) providing exposure to different regulatory regimes. The company also participates in toll road and telecom businesses. Furthermore, the ratings capture ISA's adequate relatively low leverage despite ISA's significant investment program outside Colombia, with projected metrics in line with the assigned ratings (Exhibit 1). The credit view further reflects Ecopetrol S.A.'s (Baa3 negative) 51.4% ownership in ISA and the links with the Government of Colombia.

ISA's Baa2 ratings reflect the application of our Joint Default Analysis (JDA) framework for government-related issuers, which considers the following input factors: a Baseline Credit Assessment (BCA) of baa2; the Baa2 ratings of the Colombian government as ISA's support provider; our assumption of moderate implied government support in case of financial distress; and moderate dependence between ISA and Colombia. These assumptions reflect the strategic and essential nature of the transmission services provided in Colombia, the government control and influence in the direction of the company.

Exhibit 1
Credit metrics will remain strong despite the increase in leverage because of capital investments



Source: Moody's Financial Metrics $^{\text{TM}}$

Credit strengths

- » Diversified geographic profile, with most of the cash flow derived from the very stable transmission business
- » Strong market share in strategic sectors essential to the economies in which it operates

Credit challenges

- » Substantial capital spending program, exposing the company to delays and cost overrun risks, which are typical for projects under construction
- » Uncertainty over the remuneration for Colombian and Brazilian transmission lines
- » Appetite for growth and M&A activity that could increase leverage

Rating outlook

The stable rating outlook reflects our expectation that the company will prudently manage its capital investment program and dividend distribution, such that its interest coverage and FFO/net debt remain around 4.0x and 20%, respectively, over the next 12-18 months.

Factors that could lead to an upgrade

Upward momentum on ISA's ratings could result from a continued diversification or greater presence in higher-rated countries. A positive rating action would require clear evidence of leverage reduction, such that prospective metrics are above the following thresholds, on a sustained basis:

- » interest coverage > 6.0x
- » FFO/net debt and 30%

Factors that could lead to a downgrade

Downward pressure on the ratings could result from our assessment of higher risk in ISA's business portfolio, such as a deterioration in the credit quality of the countries in which ISA holds substantial operations or a perception of lower support from their regulatory regimes. A more aggressive capital spending plan would also be credit negative, as would any significant delays or cost overruns that postpone or hinder the recovery in its key credit metrics. Quantitatively, ISA's rating could be downgraded if remain consistent below the following thresholds:

- » FFO/net debt < 15%
- » interest coverage ratio < 3.0x</p>
- » retained cash flow/net debt < 4%</p>

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2 Interconexion Electrica S.A. E.S.P. (consolidated)

						LTM
	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	Sept-23
FFO Interest Coverage	5.3x	5.8x	4.7x	4.0x	4.1x	5.3x
Net Debt / Fixed Assets	48.0%	45.5%	47.1%	52.2%	49.9%	50.9%
FFO / Net Debt	23.5%	29.0%	21.7%	21.8%	21.0%	26.7%
RCF / Net Debt	11.9%	21.6%	15.2%	9.1%	17.6%	19.5%

All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Financial Metrics™

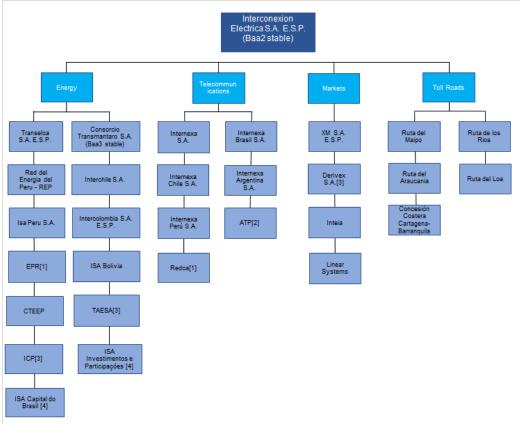
Profile

Headquartered in Medellin, Interconexion Electrica S.A. E.S.P. is an operating holding company with businesses in the electricity transmission, toll roads, telecommunications, and system management sectors. The company is headquartered in Colombia, and holds direct and indirect ownership stakes in a portfolio of subsidiaries located in Colombia, Brazil, Chile, Peru, Bolivia (Caa1 negative) and Argentina (Ca stable). In the 12 months that ended September 2023, the company reported net sales of COP14.4 trillion according to our standard adjustments.

ISA is a mixed utility company with state and private shareholders. Ecopetrol S.A. is ISA's majority or controlling shareholder, holding 51.4% of the capital stock, followed by Empresas Publicas de Medellin E.S.P (Baa3 stable) with a 8.8% stake, local institutional investors (26.9% stake), individuals (3% stake) and foreign investment funds (9.8% stake). The Government of Colombia has roughly 88% ownership of Ecopetrol, that translates into a close to 45% indirect ownership of ISA.

Exhibit 3

ISA's organizational structure



- [1] Investments in Financial Instruments: EPR y Redca.
- [2] Investments in Associates or with significant influence: ATP.
- [3] Investments with Joint Control: ICP, Taesa and Derivex.
- [4] Investment vehicles.

Source: ISA

Detailed credit considerations

Geographic diversification is credit positive; Colombian operations have higher credit quality while Brazil weighs on the consolidated view

ISA's credit profile benefits from the geographic diversification of operating in four countries with different regulatory regimes. Over the course of the last five years, as a result of a large investment cycle, the operations in Brazil increased to cover overall 41% of the consolidated EBITDA as of September 2023, with the contribution of Colombian operations declining to 24% from 34% in 2015 (see Exhibit 4). However, when considering the effective participation (only the percentage of EBITDA that corresponds to the actual ownership) in subsidiaries, the EBITDA represented 26% and 33% for Brazil and Colombia as of September 2023, respectively. We expect the effective share of Brazilian operations to continue to grow given the investments in that country, although the EBITDA mix will not change significantly. The company's credit quality is somewhat linked to the sovereign-related risks of the countries where it operates.

The toll road business has historically been concentrated in Chile, but recently expanded in Colombia through the fourth generation toll road concessions program (4G) and in Panama via ISA Intervial Chile. Nonetheless, the ramping up of transmission operations in Brazil and Chile has outpaced that of toll roads. As a result, we expect the toll roads business' contribution to EBITDA to decline to 16% in 2023 from 28% in 2015.

■Brazil ■Colombia ■Chile ■Peru ■Others 100% 17% 18% 18% 19% 19% 20% 80% 20% 17% 17% 15% 16% 20% 19% 60% 23% 24% 26% 25% 28% 25% 25% 40% 42% 20% 36% -20% 2017 2018 2019 2020 2021 2022 3Q23

Exhibit 4
We expect ISA's EBITDA breakdown by country to remain stable overall in the next 12-18 months

Sources: Company and Moody's Investors Service

The diversification is generally positive, but we overall view the Peruvian and Chilean operations as having the highest credit quality. The credit quality of the Brazilian operations, managed through Companhia de Transmissão de Energia Elétrica Paulista S.A. (ISA CTEEP), is somewhat limited at the level of Brazil's sovereign rating, despite the recognition of the stability of the transmission business in that country. The credit profile of the Peruvian transmission company Consorcio Transmantaro S.A. (Baa3 stable) is constrained by its leverage.

ISA's 2030 corporate strategy aims to expand the group's footprint outside Colombia, in countries, regions and businesses with constructive regulatory frameworks. It also focuses on improving profitability and achieving efficiencies in its core businesses. The strategy also includes the procurement of synergies, given the group's significant investment programs in Colombia, Brazil, Peru, Chile and Panama, as well as pursuing investment opportunities via partnerships (particularly if ISA is the controlling party).

Large scale and leading domestic footprint underpin a solid business profile in Colombia

ISA is the leading transmission company in Colombia, responsible for around 65% of the overall transmission capacity in the country. The company's business profile is enhanced by the very high reliability of its infrastructure, with a track record of maintaining availability rates consistently above 99%, which is highly positive for the availability-based revenue profile of its contracts. The company's assets are held in perpetuity, and tariffs are subject to periodic reviews.

The company manages the portfolio of Colombian transmission lines through a contractual operating agreement with its subsidiary Intercolombia. With the objective of separating ISA's Colombian transmission operations from other businesses, the actual management of the transmission assets is undertaken by its own subsidiary, and the assets remain the property of ISA as an operating holding company. The contractual operating and maintenance agreement, which has the stamp of the system grid's operator, XM S.A. E.S.P (another ISA subsidiary), establishes a cost-plus mechanism, where Intercolombia holds an operating margin over incurred costs, with the remaining cash flow allocated to ISA. Independent of the fact that Intercolombia holds no financial debt, the contractual arrangement mitigates any structural subordination risks.

Update to regulatory review processes

In October 2022, Colombia's energy regulator Comision de Regulación de Energía y Gas (CREG) announced the regulatory changes to lower electricity tariffs, and key companies were given the opportunity to review and comment on the changes. CREG's measures to reduce energy prices for end consumers led power generation companies to lower prices, and transmission and distribution companies to apply the lower consumer price index (CPI) rather than the producer price index (PPI), and change the future indexation (until October 2023) using the lower of these two indexes. For ISA, this resulted in a 2% decline in its annual consolidated expected revenue. The new revenue indexation is in line with the variations in most of Colombian ISA's operating costs, reducing the impact of the mismatch in indexation. For further details, please see Regulatory changes are credit negative for Colombia's electricity sector, published on 7 October 2022. In October 2023, PPI-based indexation resumed which will translate into additional revenue for ISA. CREG is expected to issue a new regulatory regime proposal to address tariff volatility in 2024. We also acknowledge the tariff freeze in Colombian toll roads that was implemented early in 2023, although in January 2024 these were increased and are expected to

catch-up with inflation by year-end. While the concession contracts have provisions that compensate concessionaires for such situations, uncertainty remains around the timing and the form of the compensations. Moreover, it highlights the exposure to political intervention in tariffs amid the high inflation environment in Colombia. Nonetheless, given the diversified business operations of the company, we expect any impact to be negligible.

In 2024, a tariff review is scheduled to take place in business sectors and countries where ISA operates. The more relevant areas are:

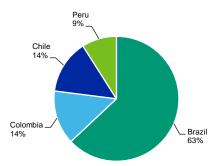
- » Colombia: A transmission tariff review, with an expected resolution in 2025 and application in 2026 or 2027, will have an impact on 53% of total transmission revenue in Colombia.
- » Chile: A transmission tariff review that started in 2022 and will apply in 2024 will have an impact on 10% of total transmission revenue in Chile.
- » Peru: Annual transmission tariff adjustment
- » Brazil: Transmission tariff review with application in 2023-28 will affect 85% of transmission revenue in Brazil

Investment program will increase leverage, although metrics will remain strong

The company is undertaking a substantial capital investment program, sized at around \$7.9 billion over 2023-30. Of this amount, \$7.3 billion was already committed as of August 2023, with the main investments earmarked for Brazil (56% of total; see Exhibit 5). However, ISA is primarily investing in energy transmission assets, which make up 88% of the projected capital spending and benefit from its predictable cash flow generation. The toll road business accounts for 7%, while telecommunications make up the remaining 5%.

Exhibit 5

Capital spending by country, projected for 2023-30



Sources: Company and Moody's Investors Service

The most recent projects awarded to ISA are the following:

- » In August 2023, the company obtained three concession contracts (awarded through the same biding process) that totals 242 kilometers of transmission lines in Peru through Proinversión, with a construction period of up to 51 months and an investment of \$141.6 million.
- » In 2023, through its Brazilian subsidiary Companhia de Transmissão de Energia Elétrica Paulista, ISA won three of the seven transmission projects for which it bid. For further information about the auction, please see <u>Brazil auctions nine electricity</u> transmission projects, paving way for future auctions, published on 05 July 2023.

Considering these projects, we expect ISA's FFO/net debt will be between 20% and 25% and interest coverage between 3.7x and 4.1x in 2023-24, commensurate with its credit ratings. The significant expansion plan will continue to strain leverage over this period,

although revenue and cash flow will increase as the projects start operations. We expect ISA's consolidated debt/EBITDA to peak at 4.2x in 2025 (compared with the 4x reported in 2022).

ESG considerations

Interconexion Electrica S.A. E.S.P.'s ESG credit impact score is CIS-3

Exhibit 6

ESG credit impact score



Source: Moody's Investors Service

ISA's ESG Credit Impact Score (**CIS-3**) indicates that its ESG attributes are overall considered as having a limited impact on the current rating, with greater potential for future negative impact over time. The score reflects moderate exposure to social risks balanced by a neutral exposure to environmental and governance risks.

ESG issuer profile scores



Source: Moody's Investors Service

Environmental

ISA's exposure to environmental risks (**E-2** issuer profile score) is mainly driven by its low exposure across the various subfactors such as physical climate risk, carbon transition and natural capital. The score is a reflection of the company's geographically diversified business counterbalanced by its concentration in electricity transmission sector.

Social

ISA's exposure to social risks (**S-3** issuer profile score) reflects its exposure to demographics and societal trends that increase public concern over affordability issues that could lead to adverse regulatory political intervention. These risks are partially balanced by low exposures to customer relations, human capital, health and safety, and responsible production related risks.

Governance

Governance risk (**G-2** issuer profile score) is driven by its moderate exposure to policies & procedures given the high ownership concentration. Also, our governance score considers low exposures to internal controls risks and financial strategy risk due to relative low leverage and volume exposure.

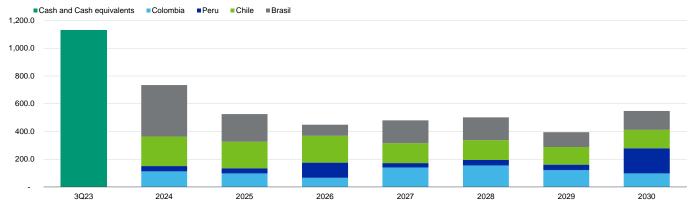
ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Liquidity analysis

ISA has adequate liquidity. As of September 2023, ISA reported a consolidated cash position of COP4.6 trillion, enough to cover debt maturities in 2024. The ratings reflects our assumption that the company will sustain a reliable access to international and domestic markets to timely refinance its upcoming debt maturities if needed and also to improve its liquidity amid tougher market conditions.

Exhibit 8

Debt maturities over 2024-30
In \$ million



Sources: Company and Moody's Investors Service

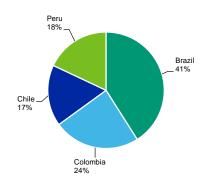
ISA has a track record of relatively high dividend payouts. In 2023, ISA paid extraordinary dividends in addition to ordinary distributions, which in total amounted to 88% of 2022 net income. We expect dividend payouts in the next two to three years to be around 70% of consolidated net income.

Structural considerations

Management's foreign-exchange rate risk policy strives to minimize the exposure to currency volatility by trying to incur debt in proportion to the consolidated cash flow stream. The mismatch exists as the underlying subsidiaries carry different leverage profiles, largely as a function of their position within their capital investment cycle.

As of September 2023, almost 41% of ISA's consolidated debt was denominated in US dollars, largely backed by the Peruvian transmission concessions, which currently are more leveraged than the consolidated profile. On the other hand, Brazilian operations are less leveraged. Consequently, debt incurred in Brazilian real represented 23% of the total, while EBITDA derived from Brazil represented 41% of the total in the third quarter of 2023. On a consolidated basis, ISA does not have significant financial hedges, but this currency risk is somewhat mitigated because 22% of the Colombian revenue and 15% of the Chilean revenue are denominated in US dollars. In terms of interest rate risk, 47% of ISA's debt is denominated at a fixed rate as of September 2023, while the remaining is exposed to high inflation and the current high interest rate environment.

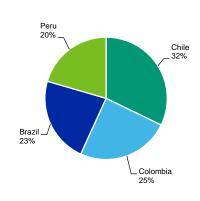
Exhibit 9
EBITDA breakdown by country
As of Q3 2023



Sources: Company and Moody's Investors Service

Exhibit 10

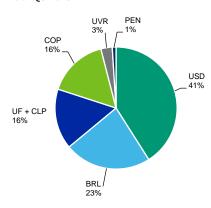
Debt breakdown by country
As of Q3 2023



Sources: Company and Moody's Investors Service

Exhibit 11

Debt breakdown by currency
As of Q3 2023



USD = United States Dollar, BRL = Brazilian Real, UF = Unit of account, CLP = Chilean Peso, COP = Colombian Peso, UVR = Real Value Unit, PEN = Peruvian Sol. Sources: Company and Moody's Investors Service

Methodology and scorecard

We evaluated ISA's BCA under our <u>Regulated Electric and Gas Networks</u> rating methodology, published in April 2022. As depicted in the grid below, the current scorecard-indicated outcome is Baa1, one notch above the assigned ratings. The difference reflects the risk associated with the planned investments as well as the sovereign risk exposure. ISA's Baa2 rating incorporates the moderate likelihood of government support and moderate dependence assumptions, per our <u>Government-Related Issuers</u> rating methodology, published in January 2024.

Exhibit 12
Rating factors
Interconexion Electrica S.A. E.S.P.

Regulated Electric and Gas Networks Industry[1][2]	Curr LTM 9/3		Moody's 12-18 Month Forward View As of 2/19/2024 [3]		
Factor 1 : Regulatory Environment and Asset Ownership Model (40%)	Measure	Score	Measure	Score	
a) Stability and Predictability of Regulatory Regime	Baa	Baa	Baa	Baa	
b) Asset Ownership Model	Aa	Aa	Aa	Aa	
c) Cost and Investment Recovery (Ability and Timeliness)	Baa	Baa	Baa	Baa	
d) Revenue Risk	Aa	Aa	Aa	Aa	
Factor 2 : Scale and Complexity of Capital Program (10%)					
a) Scale and Complexity of Capital Program	Ва	Ва	Ва	Ва	
Factor 3 : Financial Policy (10%)					
a) Financial Policy	Baa	Baa	Baa	Baa	
Factor 4 : Leverage and Coverage (40%)	· · · · · · · · · · · · · · · · · · ·				
a) FFO Interest Coverage (3 Year Avg)	4.2x	Α	4x	Α	
b) Net Debt / Fixed Assets (3 Year Avg)	50.5%	Α	49.9%	Α	
c) FFO / Net Debt (3 Year Avg)	23.8%	Α	21.9%	Α	
d) RCF / Net Debt (3 Year Avg)	15.8%	Α	16.2%	Α	
Rating:					
Scorecard-Indicated Rating from Grid Factors 1-4	-	Baa1		Baa1	
Rating Lift	· · · · · · · · · · · · · · · · · · ·	0		0	
a) Scorecard-Indicated Outcome		Baa1	-	Baa1	
b) Actual Rating Assigned		Baa2		Baa2	
Government-Related Issuer	Factor				
a) Baseline Credit Assessment	baa2				
b) Government Local Currency Rating	Baa2				
c) Default Dependence	Moderate				
d) Support	Moderate				
e) Actual Rating Assigned	Baa2				

^[1] All ratios are based on adjusted financial data and incorporate our Global Standard Adjustments for Non-Financial Corporations.

^[2] As of 9/30/2023(L).

^[3] This represents our forward view; not the view of the issuer; and unless noted in the text, it does not incorporate significant acquisitions and divestitures. Source: Moody's Financial MetricsTM

Ratings

Exhibit 13

Category	Moody's Rating
INTERCONEXION ELECTRICA S.A. E.S.P.	
Outlook	Stable
Issuer Rating	Baa2
Senior Unsecured	Baa2
Parent: Ecopetrol S.A.	
Outlook	Negative
Issuer Rating -Dom Curr	Baa3
Senior Unsecured	Baa3
Source: Moody's Investors Service	

Appendix

Exhibit 14

Cash flow and credit metrics
Interconexion Electrica S.A. E.S.P.

						LTM
(In COP Thousand Millions)	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	Sept-23
As Adjusted						
EBITDA	4,883	5,329	5,414	7,589	8,604	9,079
FFO	3,785	4,562	4,211	5,227	6,161	7,308
- Div	1,864	1,170	1,253	3,042	999	1,983
RCF	1,921	3,392	2,958	2,184	5,163	5,325
FFO	3,785	4,562	4,211	5,227	6,161	7,308
+/- Other	(115)	46	352	-	-	-
CFO Pre-WC	3,670	4,608	4,563	5,227	6,161	7,308
+/- ΔWC	(270)	(928)	(2,625)	(2,249)	(3,205)	(4,656)
CFO	3,400	3,680	1,938	2,977	2,957	2,653
- Div	1,864	1,170	1,253	3,042	999	1,983
- Capex	273	2,248	3,054	1,723	1,925	1,977
FCF	1,263	262	(2,369)	(1,788)	33	(1,308)
Debt / EBITDA	3.6x	3.4x	4.3x	3.8x	4.0x	3.5x
Revenue	6,474	6,698	6,917	11,117	13,356	14,392
Interest Expense	889	955	1,142	1,766	1,969	1,711
Net Income	1,600	1,716	931	2,126	2,761	3,032
Total Assets	45,190	48,793	54,194	61,698	78,734	72,759
Total Liabilities	33,321	36,351	41,026	47,334	60,298	56,217
Total Equity	11,869	12,442	13,168	14,364	18,436	16,542

All figures and ratios are calculated using our estimates and standard adjustments. LTM = Last 12 months. Source: Moody's Financial Metrics™

Exhibit 15
Peer comparison
Interconexion Electrica S.A. E.S.P.

	Interconexio	on Electrica S.A	A. E.S.P.	Interchile S.A.			Transelec S.A.		Consorcio Transmantaro S.A.			State Grid Brazil Holding S.A.		ıg S.A.	
	В	saa2 stable	a2 stable Baa1 stable		Baa1 stable			Baa3 stable			Baa3 stable				
	FYE	FYE	LTM	FYE	FYE	FYE	FYE	FYE	LTM	FYE	FYE	LTM	FYE	FYE	FYE
	Dec-21	Dec-22	Sept-23	Dec-20	Dec-21	Dec-22	Dec-20	Dec-21	Sept-23	Dec-21	Dec-22	Sept-23	Dec-20	Dec-21	Dec-22
Revenue (in USD millions)	2,974	3,162	3,207	79	86	94	422	404	604	370	364	340	572	626	695
EBITDA (in USD millions)	2,030	2,037	2,023	67	66	81	354	336	593	179	191	209	560	656	703
FFO Interest Coverage	4.0x	4.1x	5.3x	1.5x	0.5x	1.4x	3.5x	3.2x	5.3x	3.9x	3.5x	5.4x	3.3x	5.4x	3.7x
Net Debt / Fixed Assets	52.2%	49.9%	50.9%	69.0%	84.6%	87.9%	85.2%	83.0%	91.9%	94.6%	68.6%	68.5%	3536.9%	3582.3%	3236.2%
FFO / Net Debt	21.8%	21.0%	26.7%	2.4%	-8.5%	2.8%	14.1%	11.7%	24.4%	12.8%	11.9%	20.7%	15.4%	21.6%	17.4%
RCF / Net Debt	9.1%	17.6%	19.5%	2.4%	-8.5%	2.8%	11.1%	9.8%	10.4%	2.1%	10.2%	14.5%	6.1%	4.2%	1.6%
EBITDA / Interest Expense	4.3x	4.4x	5.3x	1.8x	0.5x	1.4x	3.5x	3.2x	5.3x	3.8x	3.6x	3.8x	4.2x	6.2x	4.7x

All figures and ratios are calculated using our estimates and standard adjustments. FYE = Financial year-end. LTM = Last 12 months. Source: Moody's Financial MetricsTM

Exhibit 16 Moody's-adjusted debt breakdown Interconexion Electrica S.A. E.S.P.

Moody's - Adjusted Debt	17,639	18,212	23,185	28,685	34,746	31,931
Operating Leases	226	0	0	0	0	0
Pensions	222	228	489	525	293	293
As Reported Debt	17,191	17,984	22,696	28,160	34,454	31,639
(In COP Thousand Millions)	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	Sept-23
	FYE	FYE	FYE	FYE	FYE	LIM

All figures and ratios are calculated using our estimates and standard adjustments. FYE = Financial year-end. LTM = Last 12 months Source: Moody's Financial Metrics TM

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