MOODY'S

CREDIT OPINION

15 January 2020

Update



Rate this Research

RATINGS

CEZ, a.s.

Domicile	Czech Republic
Long Term Rating	Baa1
Туре	Senior Unsecured - 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.

Contacts

Joanna Fic +44.20.7772.5571 Senior Vice President joanna.fic@moodys.com

Celine Cherubin +33.1.5330.3366

VP-Senior Analyst

celine.cherubin@moodys.com

Oskari Kalliala +44.20.7772.5650

Associate Analyst

oskari.kalliala@moodys.com

Neil Griffiths- +44.20.7772.5543

Lambeth

Associate Managing Director neil.griffiths-lambeth@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

ČEZ, a.s.

Update to credit analysis

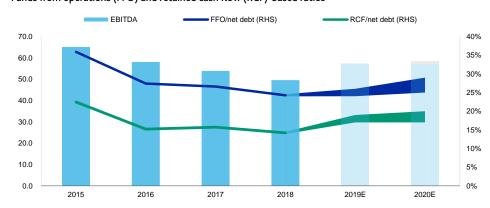
Summary

ČEZ, a.s. (ČEZ)'s credit quality is supported by (1) its leading position in the Czech electricity market and its well-balanced vertical integration; (2) the low-cost nature of its nuclear and lignite power generation fleet; (3) the relatively stable and predictable cash flows generated by its electricity distribution activities in Czech Republic; and (4) a moderate leverage with funds from operations (FFO)/net debt of around 26% as of end-September 2019.

These positives are balanced by (1) the company's relatively high exposure to merchant power generation, which together with the mining segment accounted for almost 50% of EBITDA in the 12 months to September 2019; (2) the predominantly fixed-cost power generation business; (3) the company's evolving strategic refocus on the domestic market, coupled with a fairly high dividend pay-out ratio; and (4) ČEZ's exposure to decarbonization policies, given its centralized and carbon-intensive (lignite) power generation.

We expect ČEZ's credit ratios to slightly strengthen in 2020. The longer term evolution of the company's financial profile will depend on the execution of ČEZ's strategy aimed to exit international markets and will be subject to its involvement in development of new nuclear in the Czech Republic, which could bring significant risk.

Exhibit 1
ČEZ's financial metrics will strengthen on the back of improved power prices
Funds from operations (FFO) and retained cash flow (RCF)-based ratios



The estimates represent Moody's forward view; not the view of the issuer. The forward view does not incorporate any material divestments.

Source: Moody's Investors Service

ČEZ's credit quality is supported by the 70% ownership by the <u>Government of the Czech</u> <u>Republic</u> (Aa3 stable).

Credit strengths

- » Large power generator in the Czech Republic, with some 47% of output based on low-cost nuclear
- » Regulated network distribution activities support cash flow stability
- » Moderate capex programme
- » Ownership by the Czech government (Aa3 stable)

Credit challenges

- » Large exposure to fixed-cost, merchant power generation in the Czech Republic
- » Execution risk associated with ČEZ's strategy to exit international markets
- » Uncertainty surrounding new nuclear development timeline, balance of risks and potential for support
- » Exposure to decarbonisation policies

Rating outlook

The stable outlook reflects our expectation that ČEZ's key credit metrics will remain aligned with the guidance for the current Baa1 rating, which includes funds from operations (FFO)/net debt around the mid twenties in percentage terms, and retained cash flow (RCF)/net debt in the high teens in percentage terms. It further considers that the company's involvement in the new nuclear development will have limited impact on ČEZ's financial risk profile in the near term.

Factors that could lead to an upgrade

ČEZ's rating could be upgraded if (1) there was evidence of the government's continued strong support to ČEZ; (2) the company's fundamental strength remained commensurate with at least the current BCA of baa2; and (3) there were adequate measures in place to mitigate the risk of the company's involvement in development of new nuclear.

Factors that could lead to a downgrade

Negative pressure on ČEZ's rating could develop if (1) the company were not able to maintain a financial profile commensurate with the current guidance, i.e. FFO/net debt around the mid-twenties in percentage terms and RCF/net debt in the high teens in percentage terms; (2) the company's business risk profile were to weaken, which could be as a result of, for example, the company's involvement in new nuclear development without any support mechanism; and/or (3) the support assumption currently incorporated in Moody's assessment were to weaken. Any rating downgrade would be considered in the context of the credit quality of the Government and the likelihood of extraordinary support.

Key indicators

ČEZ, a.s.

	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	2019 (E)	2020 (E)
(CFO Pre-W/C) / Net Debt	31.5%	35.9%	27.4%	26.6%	24.3%	24%-26%	25%-29%
RCF / Net Debt	19.6%	22.5%	15.2%	15.7%	14.2%	17%-19%	17%-20%
(FFO + Interest Expense) / Interest Expense	7.4x	8.7x	8.3x	8.0x	7.5x	8.0x-9.0x	8.5x-9.5x

^[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

For definitions of Moody's most common ratio terms please see the accompanying User's Guide.

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

^[2] The estimates represent Moody's forward view; not the view of the issuer.

Source: Moody's Financial Metrics, Moody's estimates

Profile

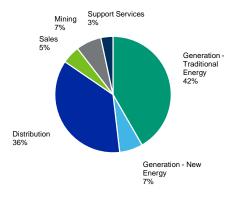
ČEZ, a.s. is one of the largest electric utility companies in Central and Eastern Europe with 15 gigawatts (GW) of power generation capacity and some 7 million customers. The group operates primarily in the Czech Republic (89% of EBITDA in the 12 months to September 2019) as well as in Romania (6%), Bulgaria (3%), Germany (2%) and Poland (1%). It has also limited presence in France.

ČEZ's core businesses are (1) power generation, which includes traditional energy and renewables; (2) regulated distribution; (3) sales (including supply activities); and (4) mining and other activities, which complement the core business segments.

Exhibit 3

Power generation accounts for the bulk of ČEZ's EBITDA

EBITDA breakdown by segment, as of end-September 2019 (LTM)

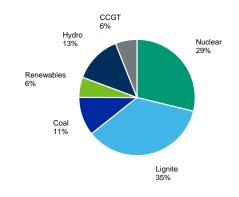


Total EBITDA of CZK55.5 billion.

Source: Company's reports, Moody's Investors Service

Exhibit 4

ČEZ's installed capacity includes mainly nuclear and coal
Breakdown of installed capacity, as of end-2018



Total capacity of around 15 GW.
Source: Company's reports, Moody's Investors Service

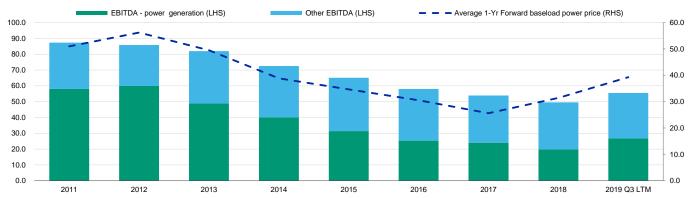
ČEZ is approximately 70% owned by the Czech government, whilst the remaining shares are listed on the Prague stock exchange. As of mid-January 2020, ČEZ had a market capitalisation of around CZK280 billion (€11.1 billion).

Detailed credit considerations

Large power generator exposed to power price swings

ČEZ is the largest generator in the Czech Republic, where it has 13 GW installed capacity and a market share of around 67%. This position is further supported by its vertical integration as the company (1) owns mines covering 71% of its lignite needs; and (2) has a 28% market share in supply. ČEZ's generation fleet is, however, predominantly fixed-cost, with 84% of total generation output represented by nuclear (47%) and lignite (37%). This makes the company particularly exposed to wholesale power prices.

Exhibit 5 ČEZ's EBITDA is sensitive to power prices EBITDA in CZK billion, power price - €/MWh



2018 EBITDA was negatively affected by higher carbon allowance costs, lower coal generation as well as poor wind and hydrological conditions. Source: Moody's Investors Service

More positively, ČEZ has a fairly low production cost of €8/MWh for nuclear, which is supportive of the company's profitability even in a low price environment. ČEZ's fuel cost for lignite is also fairly competitive, but the overall cost of production is impacted by carbon price. This is partly mitigated by the company's hedging strategy. Assuming current CO2 prices, the all-in cost of new/refurbished lignite power plants is at some €30-32/MWh.

Volatile commodity and power price environment but generation earnings will benefit from higher prices, if sustained Czech power prices are closely linked to those in Germany given the interconnections between the two countries. Current one-year forwards in Germany are at around €46/MWh, while power prices in Czech Republic are at some €50/MWh.

We expect that Czech power prices will remain €2-3/MWh above those in Germany over the medium-term, benefitting ČEZ's earnings. The markets will remain, however, volatile as renewables output grows and nuclear and some thermal capacity is shut down in Germany. In this regard, the evolution of wholesale power prices will be driven by the implementation of the country's plan to phase out coal by 2038 at the latest. (See Coal phase-out: clear timeline but few details, February 2019, and In Germany, additional policy measures will support the energy transition, November 2019).

The impact of changes in prices on the company will be limited by existing hedges. As of end-September 2019, ČEZ hedged 78% and 48% of its output at €43.2/MWh and €45.4/MWh for 2020 and 2021 respectively. The hedge ratio for 2022 is lower, at 20%, with a locked-in price of €46.7/MWh. In addition to power prices, ČEZ hedges also its exposure to carbon prices. The company has hedged its emission allowances at €14 and €18 per tonne for already sold production in 2020 and 2021, respectively. This compares with the current carbon price of around €27 per tonne.

Taking into account ČEZ's generation portfolio in the Czech Republic, we estimate that a €1/MWh increase in wholesale power prices will boost operating profits by around CZK860 million on an unhedged basis, equivalent to less than 2% of EBITDA in the 12 months to September 2019. (This estimate is calculated based on the assumption that the power price increase is mainly driven by the rise in prices for CO2 emission allowances).

Regulated distribution activities support cash flow stability

Around 36% of ČEZ's EBITDA is derived from regulated electricity distribution network activities. Some 87% of this segment's earnings come from the Czech Republic, where the company owns five of the eight distribution grids, representing an aggregate regulated asset base (RAB) of CZK101.6 billion and accounting for around 65% of electricity distributed. The group's distribution activities in Romania (Baa3 stable) and Bulgaria (Baa2 positive) are much smaller in scale.

Exhibit 6
Summary of ČEZ's electricity distribution network activities

	Czech Republic	Bulgaria	Romania
Regulator / Price Control	ERO / 4th regulatory period	EWRC / 5th regulatory period	ANRE / 4th regulatory period
Regulatory period	2016 - 2020	2018 - 2021	2019 - 2023
Pre-tax allowed return	7.951% (nominal)	6.67% (nominal)	6.9% (real)
Regulated Asset Base	€3,952 million	€300 million	€462 million

Source: Company, Moody's Investors Service

We view the regulatory framework for electricity distribution networks in the Czech Republic as well-defined, providing adequate and fair remuneration for operating expenditure and investments and generally supportive of ČEZ's credit quality. The company's visibility over earnings is, however, limited, given that the current regulatory period, which was extended by two years, spans until end of this year. We note that in its draft proposal published in August 2019, the Energy Regulatory Office (ERO) indicated a cut in the allowed returns for the fifth regulatory period starting from 1 January 2021 from 7.951% in the current period to 5.965% or 6.54% depending on the methodology used. The proposal is subject to public consultation with results expected to be published in Q1 and the final methodology in June this year. We estimate that the cut in allowed returns would lower EBITDA from the Czech networks by over 10%.

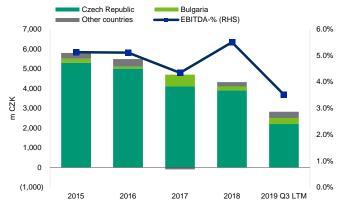
ČEZ's distribution activities in Bulgaria and Romania, contributing around CZK3 billion to the group's EBITDA in the 12 months to September 2019, provide less earnings predictability due to less stable regulatory regimes. The company plans to divest its international distribution networks.

Sales segment provides platform for development of new energy solutions but competition pressures volumes and margins

With sales of 17 TWh in the 12 months to September 2019, ČEZ is a large supplier of electricity in the Czech Republic, accounting for 28% of the market. Outside of its domestic market, the company's electricity retail sales amounted to 19.3 TWh, of which 10.6 TWh in Bulgaria and 3.7 TWh in Romania.

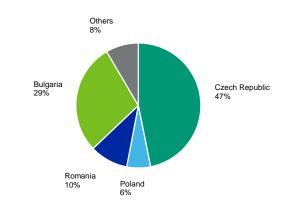
ČEZ's earnings in the Czech Republic were under pressure last year due to higher commodity prices but the overall competitive dynamics still appear to be less challenging than in some Western European countries. Profitability of sales in Romania and Bulgaria has, however, decreased further. The decline in retail supply earnings is somewhat offset by growth in energy services, including in Germany and Poland, where ČEZ increased its presence via a number of acquisitions.

Exhibit 7
ČEZ's Sales EBITDA has decreased since 2015 in CZK million



2015 EBITDA includes extraordinary CZK 1.1 billion payment. 2019 Q3 LTM EBITDA includes one-off payment of CZK1.3 billion. Source: Company's reports, Moody's Investors Service

Sales in the Czech Republic account for the bulk of total Electricity supplied in TWh, as of end-September 2019 (LTM)

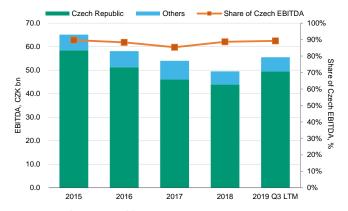


Total electricity supplied amounted to 36.4 TWh. Source: Company's reports, Moody's Investors Service

New strategy assumes focus on the domestic market

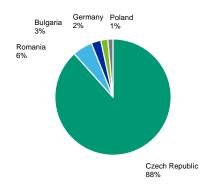
In June 2019, ČEZ presented a new strategy with a stronger focus on its domestic market and a selective approach to pursuing opportunities in the energy services (ESCO) segment outside of the Czech Republic. The company plans to exit segments and countries where it sees limited growth potential or heightened competitive pressure on returns. In particular, ČEZ will cease to expand in renewable energy abroad and, instead, prioritise growth in renewables in the Czech Republic. (See ČEZ, a.s.: Updated strategy focuses on domestic market, July 2019).

Exhibit 9 ČEZ's share of domestic EBITDA has been fairly stable EBITDA in CZK billion



Source: Company's reports, Moody's Investors Service

International activities account for a modest share of total EBITDA breakdown, as of end-September 2019 (LTM)



Source: Company's Reports, Moody's Investors Service

International businesses to be divested contributed CZK5.5 billion, or 11%, to the company's EBITDA in 2018.

While ČEZ's goal is to sell those assets by the end of 2022, there is uncertainty around the timing of the planned exit from international markets and the amount of cash proceeds. In this regard, we note that ČEZ has been pursuing the disposal of its business in Bulgaria since early 2018, with the transaction encountering a number of challenges to execution. More generally, the credit impact of the divestments will depend on the use of cash proceeds. Management has indicated that the company will either reduce its net debt, reinvest the proceeds into energy services and domestic renewables (subject to new legislation, which is expected this year), and/or distribute to shareholders.

Longer term credit metrics will depend on the evolution of investments and execution of disposals

In 2018, ČEZ's financial ratios were weakly positioned against our guidance, given negative impact of lower wholesale power prices and output on the company's earnings.

We estimate that the company's credit ratios will slightly improve this year. The longer term evolution of the company's financial profile will depend on the execution of ČEZ's strategy aimed to exit international markets and the level of investments. At this stage, the company has not provided an updated investment plan, actual spending is likely to depend on the pace of renewables development in the Czech Republic, which is subject to approval of new legislation for renewable energy. The scale of investments will also depend on the development of new nuclear power plant as the company prepares for the construction phase in the medium term.

ČEZ targets a financial profile with leverage of 2.5-3x on a net debt/EBITDA basis (as defined by management). The company's updated dividend policy assumes a pay-out of 80-100% of consolidated adjusted net income, with the actual payments at the higher end of this range.

New nuclear would bring significant risks but support arrangements yet to be confirmed and project has a long timeline

In July 2019, the Czech government approved a framework plan for new nuclear plant development that would allow the Czech Republic to remain self-sufficient in power generation after the country runs out of domestic coal and existing nuclear plants reach the end of their operational life. The proposed model assumes that ČEZ will invest in new nuclear capacity based on a contract with the government.

Under the government plan, the project will be developed at a dedicated special purpose vehicle (SPV) of ČEZ. The contract will include put and call options at various stages of development of the project with an obligation for the government to buy the SPV for a price principally corresponding to cumulative project costs to date in case of the absence of the agreement on the next phase of the project. The terms of the contract, which will need to receive state aid clearance from the European Commission, are, however, still subject to negotiation.

While many details, including the funding model, are yet to be agreed, the previously considered options for ČEZs involvement in the project with the potential for the split of the group and the support mechanism in the form of state guarantees, do not appear to be a likely solution. This is particularly relevant in the context of the significant execution risks in nuclear construction - long lead time, high costs and complex engineering, as evidenced by the long delays and cost overruns for the ongoing projects in other European countries. (See New cost overrun and potential delay at Hinkley Point are credit negative, September 2019).

Overall, we view the potential new nuclear development by ČEZ as credit negative. The precise impact of the project will, however, depend on the balance of risks between the company and the government. In addition, any investments associated with new nuclear development will be limited in the medium term. According to the current timetable, selection of the EPC contractor will not be before 2024-25, while construction would start in 2029-32 the earliest.

Government ownership supports credit quality

ČEZ is 70% owned by the Czech government and we expect the state will continue to hold a majority shareholding in the company.

The company plays a critical role within the Czech energy sector and has a high strategic importance to the overall Czech economy, given that it represents one of the largest employers and contributors to the state budget.

Relatively high risk from decarbonisation of the power sector

The EU has committed to reducing greenhouse gas emissions by 40% from 1990 levels and to increasing the contribution of renewables to energy demand to 32% by 2030. We believe that unregulated utilities, which account for 40% of EU carbon emissions, will need to deliver a significant share of the reductions and that this will create a variety of risks and opportunities for utilities.

The Czech Republic has committed to a 22% contribution to the European target by 2030. The share of renewables in electricity should reach 16.9% by the end of this decade. Similarly to Germany, the government has established a so-called coal commission, whose task is to provide a long-term path to the country's exit from coal. We understand that a first report by the commission is expected in September this year.

We believe that ČEZ has a relatively high exposure to carbon transition risks compared to peers, given its material exposure to centralized and carbon-intensive (lignite) power generation. The company's carbon intensity of its generation fleet amounted to 390 g/kWh in 2018. ČEZ currently has limited exposure to renewables and services. The company's lignite and coal-based capacity (some 6.9 GW as of end-2018) will reduce as power plants are gradually closed and if the sale of the 1 GW Počerady power plant is concluded in 2024. ČEZ has committed to phase out coal by 2050.

Liquidity analysis

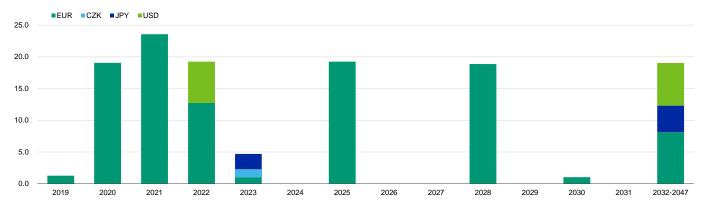
As of end-September 2019, ČEZ's liquidity was supported by CZK11 billion of cash and CZK17.5 billion of undrawn committed facilities.

We note that in December, ČEZ issued a €750 million 7-year bond and signed a €330 million committed facility with EIB to support its investments into the Czech distribution grid.

The company's next significant bond maturity is in Q2 this year, when its €750 million 4.5% notes come due.

Exhibit 11

Bond maturity profile as of end-September 2019 in CZK billion



In addition to bonds, ČEZ had CZK24 billion in bank debt outstanding as of end-September 2019. Source: Company, Moody's Investors Service

Rating methodology and scorecard factors

ČEZ is rated in accordance with the rating methodology for <u>Unregulated Utilities and Unregulated Power Companies</u>, published in May 2017. The company's baseline credit assessment (BCA) is in line with the scorecard-indicated outcome.

Given the 70% ownership by the Czech government, ČEZ is considered a Government-Related Issuer (GRI) under Moody's methodology for <u>Government-Related Issuers</u>, published in June 2018. Accordingly, and based on our estimate of strong support and moderate dependence, the Baa1 rating factors in one notch of uplift from the company's BCA of baa2.

Rating Factors ČEZ, a.s.

Unregulated Utilities and Unregulated Power Companies Industry Grid [1][2]	Curre LTM 9/30		
Factor 1 : Scale (10%)	Measure	Score	
a) Scale (USD Billion)	A	Α	
Factor 2 : Business Profile (40%)	<u>-</u>		
a) Market Diversification	Ва	Ва	
b) Hedging and Integration Impact on Cash Flow Predictability	Baa	Baa	
c) Market Framework & Positioning	Ва	Ва	
d) Capital Requirements and Operational Performance	A	Α	
e) Business Mix Impact on Cash Flow Predictability	Aa	Aa	
Factor 3 : Financial Policy (10%)			
a) Financial Policy	Baa	Baa	
Factor 4 : Leverage and Coverage (40%)	<u>-</u>		
a) (CFO Pre-W/C + Interest) / Interest (3 Year Avg)	7.1x	Baa	
b) (CFO Pre-W/C) / Net Debt (3 Year Avg)	26.8%	Baa	
c) RCF / Net Debt (3 Year Avg)	17.2%	Baa	
Rating:			
a) Indicated Rating from Grid		Baa2	
b) Actual Baseline Credit Assessment Assigned		baa2	
Government-Related Issuer	Factor		
a) Baseline Credit Assessment	baa2		
b) Government Local Currency Rating	Aa3	-	
c) Default Dependence	Moderate		
d) Support	Strong	-	
e) Final Rating Outcome	Baa1		

As of Januar	
Measure	Score
А	Α
Ва	Ва
Baa	Baa
Ва	Ва
A	Α
Aa	Aa
Baa	Baa

Α

Baa

Baa

Baa1

8.5x - 9.5x

25%-29%

17% - 20%

Moody's 12-18 Month Forward

Ratings

Exhibit 13

Category	Moody's Rating
CEZ, A.S.	
Outlook	Stable
Senior Unsecured	Baa1
Source: Moody's Investors Service	

^[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] As of 09/30/2019; Source: Moody's Financial Metrics™.

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

Appendix

Exhibit 14 ČEZ, a.s.Peer Comparison Table

	CEZ, a.s. Baa1 Stable			Fortum Oyj Baa2 Rating(s) Under Review		EnBW AG (P)A3 Negative			Vattenfall AB A3 Negative			
	FYE	FYE	LTM	FYE	FYE	LTM	FYE	FYE	LTM	FYE	FYE	LTM
(in EUR million)	Dec-17	Dec-18	Sep-19	Dec-17	Dec-18	Sep-19	Dec-17	Dec-18	Sep-19	Dec-17	Dec-18	Sep-19
Revenue	7,616	7,093	7,740	4,520	5,242	5,493	21,974	20,618	21,349	14,019	15,294	16,187
EBITDA	2,005	1,892	1,975	1,296	1,621	1,641	4,092	2,172	2,157	3,691	3,509	3,786
Total Assets	23,833	26,925	25,552	22,901	23,619	23,938	39,207	39,950	39,758	42,142	46,234	41,694
Total Debt	7,045	7,210	7,466	6,152	7,410	7,975	18,554	18,504	21,032	15,550	15,129	13,771
Net Debt	6,422	6,782	6,989	2,255	6,826	6,545	9,497	10,509	13,677	13,098	11,421	10,602
FFO / Net Debt	26.6%	24.3%	26.1%	40.9%	18.9%	24.8%	33.1%	17.7%	14.8%	20.9%	22.6%	29.1%
RCF / Net Debt	15.7%	14.2%	19.0%	-2.5%	4.6%	9.6%	31.7%	14.4%	12.3%	20.0%	19.5%	25.7%
(FFO + Interest Expense) / Interest Expense	8.0x	7.5x	8.2x	5.9x	8.5x	10.1x	5.4x	3.7x	4.1x	4.6x	5.1x	6.9x
Debt / Book Capitalization	38.0%	39.8%	39.6%	30.4%	36.7%	37.2%	70.8%	69.7%	73.6%	56.8%	54.5%	52.4%

All figures & ratios calculated using Moody's estimates & standard adjustments. FYE = Financial Year-End. LTM = Last Twelve Months. RUR* = Ratings under Review, where UPG = for upgrade and DNG = for downgrade.

Source: Moody's Financial Metrics™.

Exhibit 15 ČEZ, a.s. Adjusted Net Debt calculation

		FYE	FYE	FYE	FYE	FYE	LTM
(in CZK million)		Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Sep-19
As Reported Total Debt		184,134	157,494	167,816	154,307	160,966	164,609
	Non-Standard Public Adjustments	32,751	26,680	23,069	25,868	24,889	27,916
Moody's Adjusted Total Debt		216,885	184,174	190,885	180,175	185,855	192,525
	Cash & Cash Equivalents	(36,879)	(25,595)	(16,218)	(15,933)	(11,037)	(12,325)
Moody's Adjusted Net Debt		180,006	158,579	174,667	164,242	174,818	180,200

All figures & ratios calculated using Moody's estimates & standard adjustments. FYE = Financial Year-End. LTM = Last Twelve Months. RUR* = Ratings under Review, where UPG = for upgrade and DNG = for downgrade.

Source: Moody's Financial Metrics™.

Exhibit 16 ČEZ, a.s. Selected Moody's adjusted financial data

	FYE	FYE	FYE	FYE	FYE	LTM
(in CZK million)	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Sep-19
INCOME STATEMENT						
Revenue	198,306	206,134	201,641	200,213	181,893	199,274
EBITDA	68,196	67,032	56,562	52,714	48,504	50,846
EBIT	40,491	38,413	27,584	23,409	20,365	22,414
Interest Expense	8,806	7,414	6,574	6,203	6,497	6,543
Net income	23,891	22,724	13,430	12,338	10,500	13,308
BALANCE SHEET						
Net Property Plant and Equipment	422,486	417,741	423,906	426,411	415,648	416,309
Total Assets	612,149	586,707	614,864	609,559	694,089	658,863
Total Debt	216,885	184,174	190,885	180,175	185,855	192,525
Cash & Cash Equivalents	36,879	25,595	16,218	15,933	11,037	12,325
Net Debt	180,006	158,579	174,667	164,242	174,818	180,200
Total Liabilities	351,240	310,664	341,027	339,969	434,270	390,754
CASH FLOW						
Funds from Operations (FFO)	56,786	56,928	47,923	43,698	42,471	47,098
Cash Flow From Operations (CFO)	63,263	65,540	42,806	40,479	31,064	34,929
Dividends	21,549	21,313	21,333	17,859	17,613	12,854
Retained Cash Flow (RCF)	35,237	35,615	26,590	25,839	24,858	34,244
Capital Expenditures	(28,386)	(24,870)	(29,406)	(25,355)	(21,731)	(26,074)
Free Cash Flow (FCF)	13,328	19,357	(7,933)	(2,735)	(8,280)	(3,999)
NTEREST COVERAGE						
(FFO + Interest Expense) / Interest Expense	7.4x	8.7x	8.3x	8.0x	7.5x	8.2x
LEVERAGE						
FFO / Net Debt	31.5%	35.9%	27.4%	26.6%	24.3%	26.1%
RCF / Net Debt	19.6%	22.5%	15.2%	15.7%	14.2%	19.0%
Debt / EBITDA	3.2x	2.7x	3.4x	3.4x	3.8x	3.8x
Net Debt / EBITDA	2.6x	2.4x	3.1x	3.1x	3.6x	3.5x

All figures and ratios are calculated using Moody's estimates and standard adjustments. Source: Moody's Financial Metrics

10

© 2020 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND/OR ITS CREDIT RATINGS AFFILIATES ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S INVESTORS SERVICE DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S INVESTORS SERVICE CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS AND PUBLICATIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS OF PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS AND PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. MCO and Moody's investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER

1207961

