VISTRA ENERGY CORP.
INTERIM REPORT
FOR THE QUARTER ENDED SEPTEMBER 30, 2016

Item 1: Exact name of the issuer and the address of its principal executive offices.

Exact Name of the Issuer:	Vistra Energy Corp. (the Company) Predecessor Name: TCEH Corp. Date of Name Change: November 4, 2016 Predecessor Name: TEX Energy LLC Date of Name Change: October 3, 2016
Principal Executive Offices:	1601 Bryan Street Dallas, Texas 75201-3411 Telephone: (214) 812-4600 Facsimile: (214) 812-5453 Website: www.vistraenergy.com
Investor Relations Officer:	Molly Sorg Vistra Energy Corp. 1601 Bryan Street Dallas, Texas 75201-3411 Telephone: (214) 812-0046 Email: molly.sorg@vistraenergy.com

Item 2: Shares outstanding.

The following table sets forth information concerning each class of authorized securities of the Company as of October 3, 2016:

COMMON STOCK AND PREFERRED STOCK AUTHORIZED AND OUTSTANDING

Period End Date (a)	Number of Shares Authorized	Number of Shares Outstanding	Freely Tradable Shares (Public Float)	Satisfaction of Beneficial Shareholder Requirement (b)	Total Number of Shareholders of Record
October 3, 2016	1,800,000,000 common; 100,000,000 preferred	427,500,000 common; zero preferred	258,256,106	Affirmed.	387

(a) Shares of the Company's common stock were issued on October 3, 2016 pursuant to the Plan of Reorganization (as defined below). Prior to such date, the Company's sole member was TCEH (as defined below).

(b) The *beneficial shareholder requirement* referenced in the header of this table refers to the OTCQX US requirement that the Company have at least fifty beneficial shareholders who each own at least one hundred shares.

GLOSSARY

When the following terms and abbreviations appear in the text of this report, they have the meanings indicated below.

Chapter 11 Cases	Cases being heard in the US Bankruptcy Court for the District of Delaware (Bankruptcy Court) concerning voluntary petitions for relief under Chapter 11 of the US Bankruptcy Code (Bankruptcy Code) filed on April 29, 2014 by the Debtors. On the Effective Date, the TCEH Debtors (together with the Contributed EFH Debtors) emerged from the Chapter 11 Cases.
Contributed EFH Debtors	certain EFH Debtors that became subsidiaries of Vistra Energy on the Effective Date
CSAPR	the final Cross-State Air Pollution Rule issued by the EPA in July 2011
DIP Facility	TCEH's $3.375 billion debtor-in-possession financing facility, which was repaid in August 2016. See Note 9 to the Financial Statements.
DIP Roll Facilities	TCEH's $4.250 billion debtor-in-possession and exit financing facilities. See Note 9 to the Financial Statements.
Debtors	EFH Corp. and the majority of its direct and indirect subsidiaries, including EFIH, EFCH and TCEH, but excluding the Oncor Ring-Fenced Entities. Prior to the Effective Date, also included the TCEH Debtors and the Contributed EFH Debtors.
D.C. Circuit Court	US Court of Appeals for the District of Columbia Circuit
EBITDA	earnings (net income) before interest expense, income taxes, depreciation and amortization
Effective Date	October 3, 2016, the date the TCEH Debtors and the Contributed EFH Debtors completed their reorganization under the Bankruptcy Code and emerged from the Chapter 11 Cases
EFCH	Energy Future Competitive Holdings Company LLC, a direct, wholly owned subsidiary of EFH Corp. and, prior to the Effective Date, the indirect parent of the TCEH Debtors, depending on context
EFH Corp.	Energy Future Holdings Corp. and/or its subsidiaries, depending on context, whose major subsidiaries include Oncor and, prior to the Effective Date, included the TCEH Debtors and the Contributed EFH Debtors
EFH Debtors	EFH Corp. and its subsidiaries that are Debtors in the Chapter 11 Cases, including the EFIH Debtors, but excluding the TCEH Debtors and the Contributed EFH Debtors
EFIH	Energy Future Intermediate Holding Company LLC, a direct, wholly owned subsidiary of EFH Corp. and the direct parent of Oncor Holdings
EFIH Debtors	EFIH and EFIH Finance Inc., a direct, wholly owned subsidiary of EFIH
EPA	US Environmental Protection Agency
ERCOT	Electric Reliability Council of Texas, Inc., the independent system operator and the regional coordinator of various electricity systems within Texas
Federal and State Income Tax Allocation Agreement	Prior to the Effective Date, EFH Corp. and certain of its subsidiaries (including EFCH, EFIH and TCEH, but not including Oncor Holdings and Oncor) were parties to a Federal and State Income Tax Allocation Agreement, executed in May 2012 but effective as of January 2010. The Agreement was rejected by the TCEH Debtors and the Contributed EFH Debtors on the Effective Date. See Note 5 to the Financial Statements.
FERC	US Federal Energy Regulatory Commission
Fifth Circuit Court	US Court of Appeals for the Fifth Circuit
GAAP	generally accepted accounting principles
GHG	greenhouse gas
GWh	gigawatt-hours
IRS	US Internal Revenue Service
LIBOR	London Interbank Offered Rate, an interest rate at which banks can borrow funds, in marketable size, from other banks in the London interbank market

LSTC	liabilities subject to compromise
Luminant	subsidiaries of Vistra Energy engaged in competitive market activities consisting of electricity generation and wholesale energy sales and purchases as well as commodity risk management, all largely in Texas
market heat rate	Heat rate is a measure of the efficiency of converting a fuel source to electricity. Market heat rate is the implied relationship between wholesale electricity prices and natural gas prices and is calculated by dividing the wholesale market price of electricity, which is based on the price offer of the marginal supplier in ERCOT (generally natural gas plants), by the market price of natural gas.
MATS	the Mercury and Air Toxics Standard established by the EPA
Merger	the transaction referred to in the Agreement and Plan of Merger under which Texas Holdings agreed to acquire EFH Corp., which was completed on October 10, 2007
MMBtu	million British thermal units
MW	megawatts
MWh	megawatt-hours
NO_X	nitrogen oxide
NRC	US Nuclear Regulatory Commission
NYMEX	the New York Mercantile Exchange, a commodity derivatives exchange
Oncor	Oncor Electric Delivery Company LLC, a direct, majority-owned subsidiary of Oncor Holdings and an indirect subsidiary of EFH Corp., that is engaged in regulated electricity transmission and distribution activities
Oncor Holdings	Oncor Electric Delivery Holdings Company LLC, a direct, wholly owned subsidiary of EFIH and the direct majority owner of Oncor, and/or its subsidiaries, depending on context
Oncor Ring-Fenced Entities	Oncor Holdings and its direct and indirect subsidiaries, including Oncor
Petition Date	April 29, 2014, the date the Debtors made the Bankruptcy Filing
Plan of Reorganization	Third Amended Joint Plan of Reorganization filed by the Debtors with the Bankruptcy Court in August 2016
PUCT	Public Utility Commission of Texas
purchase accounting	The purchase method of accounting for a business combination as prescribed by US GAAP, whereby the cost or "purchase price" of a business combination, including the amount paid for the equity and direct transaction costs are allocated to identifiable assets and liabilities (including intangible assets) based upon their fair values. The excess of the purchase price over the fair values of assets and liabilities is recorded as goodwill.
REP	retail electric provider
RCT	Railroad Commission of Texas, which among other things, has oversight of lignite mining activity in Texas
SEC	US Securities and Exchange Commission
SG&A	selling, general and administrative
Settlement Agreement	Amended and Restated Settlement Agreement among the Debtors, the Sponsor Group, settling TCEH first lien creditors, settling TCEH second lien creditors, settling TCEH unsecured creditors and the official committee of unsecured creditors of TCEH (collectively, the Settling Parties), approved by the Bankruptcy Court in December 2015. See Note 2 to the Financial Statements.
SO_2	sulfur dioxide
Sponsor Group	Refers, collectively, to certain investment funds affiliated with Kohlberg Kravis Roberts & Co. L.P., TPG Global, LLC (together with its affiliates, TPG) and GS Capital Partners, an affiliate of Goldman, Sachs & Co., that have an ownership interest in Texas Holdings

TCEH	Texas Competitive Electric Holdings Company LLC, a direct, wholly owned subsidiary of EFCH and, prior to the Effective Date, the parent company of the TCEH Debtors, depending on context, that were engaged in electricity generation and wholesale and retail energy market activities, and whose major subsidiaries included Luminant and TXU Energy. Subsequent to the Effective Date, Vistra Energy continued substantially the same operations as TCEH.
TCEH Debtors	the subsidiaries of TCEH that were Debtors in the Chapter 11 Cases
TCEH Finance	TCEH Finance, Inc., a direct, wholly owned subsidiary of TCEH, formed for the sole purpose of serving as co-issuer with TCEH of certain debt securities. TCEH Finance, Inc. was dissolved on the Effective Date.
TCEH Senior Secured Facilities	Refers, collectively, to the TCEH First Lien Term Loan Facilities, TCEH First Lien Revolving Credit Facility and TCEH First Lien Letter of Credit Facility with a total principal amount of $22.616 billion. The claims arising under these facilities were discharged in the Chapter 11 Cases on the Effective Date pursuant to the Plan of Reorganization.
TCEH Senior Secured Notes	TCEH's and TCEH Finance's $1.750 billion principal amount of 11.5% First Lien Senior Secured Notes. The claims arising under these notes were discharged in the Chapter 11 Cases on the Effective Date pursuant to the Plan of Reorganization.
TCEQ	Texas Commission on Environmental Quality
Texas Holdings	Texas Energy Future Holdings Limited Partnership, a limited partnership controlled by the Sponsor Group, that owns substantially all of the common stock of EFH Corp.
TXU Energy	TXU Energy Retail Company LLC, a direct, wholly owned subsidiary of Vistra Energy that is a REP in competitive areas of ERCOT and is engaged in the retail sale of electricity to residential and business customers
US	United States of America
VIE	variable interest entity
Vistra Energy	Vistra Energy Corp., formerly known as TCEH Corp., and/or its subsidiaries, depending on context. On the Effective Date, the TCEH Debtors and the Contributed EFH Debtors emerged from Chapter 11 and became subsidiaries of Vistra Energy Corp. Subsequent to the Effective Date, Vistra Energy Corp. continued substantially the same operations as TCEH.

Item 3: Interim financial statements.

TEXAS COMPETITIVE ELECTRIC HOLDINGS COMPANY LLC
A DEBTOR-IN-POSSESSION
CONDENSED STATEMENTS OF CONSOLIDATED INCOME (LOSS)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
	(millions of dollars)			
Operating revenues	$ 1,690	$ 1,737	$ 3,973	$ 4,265
Fuel, purchased power costs and delivery fees	(874)	(831)	(2,082)	(2,090)
Net gain from commodity hedging and trading activities	336	103	282	226
Operating costs	(190)	(189)	(664)	(598)
Depreciation and amortization	(157)	(200)	(459)	(634)
Selling, general and administrative expenses	(165)	(173)	(482)	(495)
Impairment of goodwill (Note 4)	—	(700)	—	(1,400)
Impairment of long-lived assets (Note 6)	—	(1,295)	—	(1,971)
Other income (Note 16)	5	4	16	15
Other deductions (Note 16)	(28)	(25)	(75)	(86)
Interest income	2	—	3	1
Interest expense and related charges (Note 7)	(371)	(325)	(1,049)	(964)
Reorganization items (Note 8)	(64)	(39)	(116)	(152)
Income (loss) before income taxes	184	(1,933)	(653)	(3,883)
Income tax benefit (expense) (Note 5)	3	416	(3)	816
Net income (loss)	$ 187	$ (1,517)	$ (656)	$ (3,067)

See Notes to the Financial Statements.

CONDENSED STATEMENTS OF CONSOLIDATED COMPREHENSIVE INCOME (LOSS)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
	(millions of dollars)			
Net income (loss)	$ 187	$ (1,517)	$ (656)	$ (3,067)
Other comprehensive income, net of tax effects – cash flow hedges derivative value net loss related to hedged transactions recognized during the period (net of tax benefit of $— in all periods)	—	—	1	1
Comprehensive income (loss)	$ 187	$ (1,517)	$ (655)	$ (3,066)

See Notes to the Financial Statements.

TEXAS COMPETITIVE ELECTRIC HOLDINGS COMPANY LLC
A DEBTOR-IN-POSSESSION
CONDENSED STATEMENTS OF CONSOLIDATED CASH FLOWS
(Unaudited)

	Nine Months Ended September 30,	
	2016	2015
	(millions of dollars)	
Cash flows — operating activities:		
Net loss	$ (656)	$ (3,067)
Adjustments to reconcile net loss to cash provided by (used in) operating activities:		
Depreciation and amortization	532	748
Deferred income tax benefit, net	2	(828)
Impairment of goodwill (Note 4)	—	1,400
Impairment of long-lived assets (Note 6)	—	1,971
Contract claims adjustments (Note 8)	13	28
Adjustment to asbestos liability	11	—
Unrealized net (gain) loss from mark-to-market valuations of commodity positions	36	(107)
Write-off of intangible and other assets (Note 16)	45	83
Other, net	62	49
Changes in operating assets and liabilities:		
Margin deposits, net	(124)	108
Accrued interest	(10)	(3)
Other operating assets and liabilities, including liabilities subject to compromise	(107)	(173)
Cash provided by (used in) operating activities	(196)	209
Cash flows — financing activities:		
Borrowings under DIP Roll Facilities and DIP Facility (Note 9)	4,680	—
DIP Roll Facilities financing fees	(112)	—
Repayments/repurchases of debt (Note 9)	(2,655)	(20)
Cash provided by (used in) financing activities	1,913	(20)
Cash flows — investing activities:		
Notes/advances due from affiliates	(41)	(10)
Lamar and Forney acquisition - net of cash acquired (Note 3)	(1,343)	—
Capital expenditures	(230)	(275)
Nuclear fuel purchases	(33)	(77)
Changes in restricted cash	365	33
Proceeds from sales of nuclear decommissioning trust fund securities (Note 16)	201	315
Investments in nuclear decommissioning trust fund securities (Note 16)	(215)	(328)
Other, net	8	12
Cash used in investing activities	(1,288)	(330)
Net change in cash and cash equivalents	429	(141)
Cash and cash equivalents — beginning balance	1,400	1,843
Cash and cash equivalents — ending balance	$ 1,829	$ 1,702

See Notes to the Financial Statements.

TEXAS COMPETITIVE ELECTRIC HOLDINGS COMPANY LLC
A DEBTOR-IN-POSSESSION
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

	September 30, 2016	December 31, 2015
	(millions of dollars)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 1,829	$ 1,400
Restricted cash (Note 16)	12	519
Trade accounts receivable — net (Note 16)	750	533
Advances to parent (Note 15)	78	34
Inventories (Note 16)	374	428
Commodity and other derivative contractual assets (Note 14)	256	465
Margin deposits related to commodity contracts	42	6
Other current assets	46	65
Total current assets	3,387	3,450
Restricted cash (Note 16)	650	507
Advances to parent (Note 15)	17	20
Investments (Note 16)	1,038	962
Property, plant and equipment — net (Note 16)	10,359	9,349
Goodwill (Note 4)	152	152
Identifiable intangible assets — net (Note 4)	1,148	1,179
Commodity and other derivative contractual assets (Note 14)	72	10
Other noncurrent assets	52	29
Total assets	$ 16,875	$ 15,658
LIABILITIES AND MEMBERSHIP INTERESTS		
Current liabilities:		
Borrowings under debtor-in-possession credit facility (Note 9)	$ —	$ 1,425
Long-term debt due currently (Note 9)	4	16
Trade accounts payable	402	394
Trade accounts and other payables to affiliates	152	120
Commodity and other derivative contractual liabilities (Note 14)	125	203
Margin deposits related to commodity contracts	64	152
Accrued income taxes payable to parent (Note 15)	10	11
Accrued taxes other than income	119	98
Accrued interest	110	120
Other current liabilities	243	273
Total current liabilities	1,229	2,812
Long-term debt, less amounts due currently (Note 9)	—	3
Borrowings under debtor-in-possession credit facilities (Note 9)	3,387	—
Liabilities subject to compromise (Note 10)	33,749	33,734
Commodity and other derivative contractual liabilities (Note 14)	5	1
Accumulated deferred income taxes	217	213
Other noncurrent liabilities and deferred credits (Note 16)	1,827	1,779
Total liabilities	40,414	38,542
Commitments and Contingencies (Note 11)		
Membership interests (Note 12):	(23,539)	(22,884)
Total liabilities and membership interests	$ 16,875	$ 15,658

See Notes to the Financial Statements.

1. BUSINESS AND SIGNIFICANT ACCOUNTING POLICIES

Description of Business

Prior to the Effective Date, references in this report to "we," "our," "us" and "the Company" are to TCEH and/or its subsidiaries, as apparent in the context, and on or after the Effective Date to Vistra Energy. See *Glossary* for defined terms.

Prior to the Effective Date, TCEH was a holding company and a wholly-owned indirect subsidiary of EFH Corp. TCEH's subsidiaries were engaged in competitive electricity market activities largely in Texas, including electricity generation, wholesale energy sales and purchases, and retail electricity operations. On the Effective Date, subsidiaries of TCEH (the TCEH Debtors) and certain EFH Corp. subsidiaries (the Contributed EFH Debtors) emerged from the Chapter 11 Cases as subsidiaries of a newly-formed company, Vistra Energy. On the Effective Date, Vistra Energy was spun-off from EFH Corp. in a tax-free transaction to the former first lien creditors of TCEH (see Note 2). As a result, as of the Effective Date, Vistra Energy is a holding company for subsidiaries principally engaged in the same activities as TCEH.

Bankruptcy Proceeding

On April 29, 2014 (the Petition Date), EFH Corp. and the substantial majority of its direct and indirect subsidiaries, including EFIH, EFCH and TCEH but excluding the Oncor Ring-Fenced Entities (collectively, the Debtors), filed voluntary petitions for relief (the Bankruptcy Filing) under Chapter 11 of the United States Bankruptcy Code (the Bankruptcy Code) in the United States Bankruptcy Court for the District of Delaware (the Bankruptcy Court). On the Effective Date, the TCEH Debtors and the Contributed EFH Debtors completed their reorganization under the Bankruptcy Code and emerged from the Chapter 11 Cases as subsidiaries of Vistra Energy. The EFH Debtors have not yet completed their Chapter 11 Cases. See Note 2 for further discussion regarding the Chapter 11 Cases.

Basis of Presentation, Including Application of Bankruptcy Accounting

The accompanying condensed consolidated financial statements are those of TCEH, the predecessor company to Vistra Energy. The condensed consolidated financial statements have been prepared in accordance with US GAAP. The condensed consolidated financial statements have been prepared as if TCEH was a going concern and contemplated the realization of assets and liabilities in the normal course of business. The condensed consolidated financial statements reflect the application of Financial Accounting Standards Board Accounting Standards Codification 852, *Reorganizations* (ASC 852). During the Chapter 11 Cases, the Debtors operated their businesses as debtors-in-possession under the jurisdiction of the Bankruptcy Court and in accordance with the applicable provisions of the Bankruptcy Code. ASC 852 applies to entities that have filed a petition for bankruptcy under Chapter 11 of the Bankruptcy Code. The guidance requires that transactions and events directly associated with the reorganization be distinguished from the ongoing operations of the business. In addition, the guidance provides for changes in the accounting and presentation of liabilities. See Notes 8 and 10 for discussion of these accounting and reporting changes. Since the Effective Date occurred after the end of the fiscal quarter, ASC 852 continued to apply to the Company for the period.

Additionally, as of the Effective Date, we expect that Vistra Energy will apply fresh start reporting under the applicable provisions of ASC 852. Fresh start reporting includes (1) distinguishing the consolidated financial statements of the entity that was previously in restructuring from the financial statements of the entity that emerges from restructuring, (2) assigning the reorganized value of the successor entity by measuring all assets and liabilities of the entity at fair value, and (3) selecting accounting policies for the successor entity. The financial statements of the successor (Vistra Energy) for periods subsequent to the Effective Date will not be comparable to the financial statements of the predecessor (TCEH) for periods prior to the Effective Date, as those previous periods do not give effect to any adjustments to the carrying values of assets or amounts of liabilities that might be necessary as a consequence of the Plan of Reorganization or the related application of fresh start reporting.

Adjustments (consisting of normal recurring accruals) necessary for a fair presentation of the results of operations and financial position have been included therein. All intercompany items and transactions have been eliminated in consolidation. Certain information and footnote disclosures normally included in annual consolidated financial statements prepared in accordance with US GAAP have been omitted. Because the condensed consolidated interim financial statements do not include all of the information and footnotes required by US GAAP, they should be read in conjunction with our December 31, 2015 audited financial statements and related notes. The results of operations for an interim period may not give a true indication of results for a full year. All dollar amounts in the financial statements and tables in the notes are stated in millions of US dollars unless otherwise indicated. Subsequent events have been evaluated through November 14, 2016, the date these condensed consolidated financial statements were issued.

Use of Estimates

Preparation of financial statements requires estimates and assumptions about future events that affect the reporting of assets and liabilities at the balance sheet dates and the reported amounts of revenue and expense, including fair value measurements and estimates of expected allowed claims. In the event estimates and/or assumptions prove to be different from actual amounts, adjustments are made in subsequent periods to reflect more current information.

Changes in Accounting Standards

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update 2016-2 (ASU 2016-02), *Leases*. The ASU amends previous GAAP to require the recognition of lease assets and liabilities for operating leases. The ASU will be effective for fiscal years beginning after December 15, 2018, including interim periods within those years. Retrospective application to comparative periods presented will be required in the year of adoption. We are currently evaluating the impact of this ASU on our financial statements.

In March 2016, the FASB issued Accounting Standards Update 2016-08 (ASU 2016-08), *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*. ASU 2016-08 clarifies the implementation guidance for principal versus agent considerations related to ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which provides the core principle and key steps in determining the recognition of revenue. The effective date for these updates has been deferred to fiscal years beginning after December 15, 2017. We are currently assessing the impact of these ASUs on our financial statements.

2. EMERGENCE FROM CHAPTER 11 CASES

On the Petition Date, EFH Corp. and the substantial majority of its direct and indirect subsidiaries, including EFIH, EFCH and TCEH but excluding the Oncor Ring-Fenced Entities, filed voluntary petitions for relief under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the District of Delaware. On the Effective Date, the TCEH Debtors and the Contributed EFH Debtors completed their reorganization under the Bankruptcy Code and emerged from the Chapter 11 Cases as subsidiaries of Vistra Energy. On the Effective Date, Vistra Energy was spun-off from EFH Corp. in a tax-free transaction to the former first lien creditors of TCEH. The tax-free spin-off generated a taxable gain that will be largely offset with available net operating losses (NOLs), substantially reducing the NOLs that will be available to EFH Corp. after the transaction. The EFH Debtors have not yet completed their Chapter 11 Cases.

Tax Matters

In July 2016, we received a private letter ruling from the IRS. It provides, among other things, for certain rulings regarding the qualification of (a) the transfer of certain assets and ordinary course operating liabilities to Vistra Energy and (b) the distribution of the equity of Vistra Energy, the cash proceeds from Vistra Energy debt, if any, the cash proceeds from the sale of preferred stock in a newly-formed subsidiary of Vistra Energy, and the right to receive payments under a tax receivables agreement, to holders of TCEH first lien claims, as a reorganization qualifying for tax-free treatment to the extent of the Vistra Energy stock received.

Pre-Petition Claims

Holders of the substantial majority of pre-petition claims against the Debtors were required to file proofs of claims by the bar date established by the Bankruptcy Court. A bar date is the date by which certain claims against the Debtors must be filed if the claimants wish to receive any distribution in the Chapter 11 Cases. The Bankruptcy Court established a bar date of October 27, 2014 for the substantial majority of claims. In addition, in July 2015, the Bankruptcy Court entered an order establishing December 14, 2015 as the bar date for certain asbestos claims that arose or are deemed to have arisen before the Petition Date, except for certain specifically exempt claims.

Since the Petition Date and prior to the applicable bar dates (which have expired), the Debtors have received approximately 41,300 filed pre-petition claims, including approximately 30,900 in filed asbestos claims. The Debtors have substantially completed the process of reconciling all non-asbestos claims that were filed and have recorded such claims at the expected allowed amount. With respect to the claims related to the TCEH Debtors, as of November 14, 2016, most of those claims have been settled, withdrawn or expunged. The TCEH Debtors have approximately $40 million in escrow to allocate among and resolve the remaining claims, which consist primarily of trade payables and legal claims, including asbestos claims. The TCEH Debtors have up to 180 days from the Effective Date to resolve these claims.

In September 2016, the TCEH Debtors filed with the Bankruptcy Court reports developed by independent experts that provide analysis and estimation of potential liabilities associated with asbestos-related claims. In connection with developing those reports, we recorded an adjustment to our estimated liability associated with those claims during the three months ended September 30, 2016 (see Note 16). That estimated liability is subject to revisions, which may be material, as further information arises.

Certain claims filed or reflected in the Debtors schedules of assets and liabilities were resolved on the Effective Dates of the Plan of Reorganization, including certain claims filed by holders of funded debt and contract counterparties. Claims that remain unresolved or unreconciled through the filing of this report have been estimated based upon management's best estimate of the likely claim amounts that the Bankruptcy Court will ultimately allow.

On the Effective Date, the TCEH Debtors (together with the Contributed EFH Debtors) emerged from the Chapter 11 Cases and discharged approximately $33.7 billion in LSTC. Distributions for the settled claims related to the funded debt of the TCEH Debtors commenced subsequent to the Effective Date.

Separation of Vistra Energy from EFH Corp. and its Subsidiaries

Upon the Effective Date, Vistra Energy separated from EFH Corp. pursuant to a tax-free spin-off transaction that resulted in Vistra Energy, including the TCEH Debtors and the Contributed EFH Debtors, no longer being an affiliate of EFH Corp. and its subsidiaries. In addition to the Plan of Reorganization, the separation was effectuated, in part, pursuant to the terms of a separation agreement, a transition services agreement and a tax matters agreement.

Separation Agreement

On the Effective Date, EFH Corp., Vistra Energy and a subsidiary of Vistra Energy entered into a separation agreement that provides for, among other things, the transfer of certain assets and liabilities by EFH Corp., EFCH and TCEH to Vistra Energy. Among other things, EFH Corp., EFCH and/or TCEH, as applicable, (a) transferred the TCEH Debtors and certain contracts and assets (and related liabilities) primarily related to the business of the TCEH Debtors to Vistra Energy, (b) transferred sponsorship of certain employee benefit plans (including related assets), programs and policies to a subsidiary of Vistra Energy and (c) assigned certain employment agreements from EFH Corp. and certain of the Contributed EFH Debtors to a subsidiary of Vistra Energy.

Transition Services Agreement

On the Effective Date, EFH Corp. and a subsidiary of Vistra Energy entered into a transition services agreement that provides for, among other things, (a) the applicable subsidiaries of Vistra Energy to provide certain services to the EFH Debtors, including business services administration, accounting, corporate secretary, tax, human resources, information technology, internal audit and SOX compliance, physical facilities and corporate security, treasury and legal services and (b) EFH Corp. to pay such subsidiary of Vistra Energy all reasonable and documented fees, costs and expenses (including employee-related overhead and general and administrative expenses) incurred by Vistra Energy and its subsidiaries related directly to these services.

Tax Matters Agreement

On the Effective Date, Vistra Energy and EFH Corp. entered into a tax matters agreement (the Tax Matters Agreement) whereby the parties agreed to take certain actions and refrain from taking certain actions to preserve the intended tax treatment of the tax-free spin-off of Vistra Energy from EFH Corp. The Tax Matters Agreement includes limitations on certain actions of Vistra Energy, EFH Corp. and EFIH in order to preserve the tax-free nature of the TCEH spin-off, as well as certain indemnification obligations in the event the reorganization fails to be treated as a tax-free transaction (a) as a result of the breach of any covenants in the Tax Matters Agreement or (b) under "no-fault" circumstances. In the event any indemnification obligations are triggered, the party owing the obligation would likely be materially and adversely affected. Additionally, the covenants and other limitations with respect to the Tax Matters Agreement may limit the ability of Vistra Energy, EFH Corp. and/or EFIH to undertake certain transactions that may otherwise be value-maximizing.

Settlement Agreement

The Settling Parties entered into a settlement agreement (the Settlement Agreement) in August 2015 (as amended in September 2015) to compromise and settle, among other things, (a) intercompany claims among the Debtors, (b) claims and causes of actions against holders of first lien claims against TCEH and the agents under the TCEH Senior Secured Facilities, (c) claims and causes of action against holders of interests in EFH Corp. and certain related entities and (d) claims and causes of action against each of the Debtors' current and former directors, the Sponsor Group, managers and officers and other related entities. Under the terms of the Settlement Agreement, TCEH was granted a $700 million unsecured claim against EFH Corp. This claim remains outstanding and is subject to treatment under the Plan of Reorganization as it relates to the EFH Debtors. The Bankruptcy Court approved the Settlement Agreement in December 2015.

Unaudited Condensed Combined Debtor Financial Statements

The condensed combined financial statements presented below represent the financial statements of TCEH and the subsidiaries of TCEH that were debtors in the Chapter 11 Cases. TCEH's non-debtor subsidiaries, which were substantively comprised of the recently acquired Lamar and Forney generation assets, were accounted for as non-consolidated subsidiaries in these financial statements, and their net income is included in *equity in earnings (loss) of non-debtor entities (net of tax)* in these condensed statements of combined income (loss) and *investment in non-debtor entities* in these condensed combined balance sheets. Intercompany items and transactions among TCEH and subsidiaries of TCEH that were debtors have been eliminated in consolidation in these financial statements.

Condensed statements of combined income (loss) of TCEH and the subsidiaries of TCEH that were debtors in the Chapter 11 Cases for the three and nine months ended September 30, 2016 and 2015 are presented below:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Operating revenues	$ 1,690	$ 1,737	$ 3,973	$ 4,265
Fuel, purchased power costs and delivery fees	(913)	(831)	(2,143)	(2,090)
Net gain from commodity hedging and trading activities	153	103	101	226
Operating costs	(184)	(194)	(646)	(615)
Depreciation and amortization	(133)	(199)	(407)	(631)
Selling, general and administrative expenses	(165)	(174)	(480)	(495)
Impairment of goodwill	—	(700)	—	(1,400)
Impairment of long-lived assets	—	(1,295)	—	(1,971)
Other income (deductions) and interest income	(21)	(21)	(55)	(76)
Interest expense and related charges	(371)	(324)	(1,049)	(961)
Reorganization items	(64)	(39)	(116)	(152)
Income (loss) before income taxes and equity in earnings of non-debtor entities	(8)	(1,937)	(822)	(3,900)
Income tax benefit	71	418	57	822
Equity in earnings of non-debtor entities (net of tax)	124	2	109	11
Net income (loss)	$ 187	$ (1,517)	$ (656)	$ (3,067)

Condensed statements of combined comprehensive income (loss) of TCEH and the subsidiaries of TCEH that were debtors in the Chapter 11 Cases for the three and nine months ended September 30, 2016 and 2015 are presented below:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Net income (loss)	$ 187	$ (1,517)	$ (656)	$ (3,067)
Other comprehensive loss (net of tax)	—	—	1	1
Comprehensive income (loss)	$ 187	$ (1,517)	$ (655)	$ (3,066)

Condensed statements of combined cash flows of TCEH and the subsidiaries of TCEH that were debtors in the Chapter 11 Cases for the nine months ended September 30, 2016 and 2015 are presented below:

	Nine Months Ended September 30,	
	2016	2015
Cash provided by (used in) operating activities	$ (356)	$ 207
Cash flows — financing activities:		
Borrowings under DIP Roll Facilities and DIP Facility	4,680	—
DIP Roll Facilities financing fees	(112)	—
Repayments/repurchases of debt	(2,642)	(4)
Cash provided by (used in) financing activities	1,926	(4)
Cash flows — investing activities:		
Advances to non-debtor affiliates	56	(12)
Investment in non-debtor affiliates	(1,325)	(11)
Capital expenditures	(189)	(253)
Nuclear fuel purchases	(33)	(77)
Changes in restricted cash	365	33
Proceeds from sales of nuclear decommissioning trust fund securities	201	315
Investments in nuclear decommissioning trust fund securities	(215)	(328)
Other, net	9	(20)
Cash used in investing activities	(1,131)	(353)
Net change in cash and cash equivalents	439	(150)
Cash and cash equivalents — beginning balance	1,390	1,842
Cash and cash equivalents — ending balance	$ 1,829	$ 1,692

Condensed combined balance sheets of TCEH and the subsidiaries of TCEH that were Debtors in the Chapter 11 Cases at September 30, 2016 and December 31, 2015 are presented below:

	September 30, 2016	December 31, 2015
ASSETS		
Total current assets	$ 3,281	$ 3,440
Restricted cash	650	507
Advances to parent and non-debtor entities	19	22
Investment in non-debtor entities	1,574	135
Other investments	1,034	958
Property, plant and equipment — net	8,969	9,262
Goodwill	152	152
Identifiable intangible assets — net	1,143	1,182
Commodity and other derivative contractual assets	29	10
Other noncurrent assets	51	29
Total assets	$ 16,902	$ 15,697
LIABILITIES AND MEMBERSHIP INTERESTS		
Total current liabilities	$ 1,248	$ 2,805
Accumulated deferred income taxes	225	256
Commodity and other derivative contractual liabilities	4	1
Borrowings under debtor-in-possession credit facilities	3,387	—
Long-term debt, less amounts due currently	—	3
Liabilities subject to compromise	33,749	33,734
Other noncurrent liabilities and deferred credits	1,828	1,782
Total liabilities	40,441	38,581
Total membership interests	(23,539)	(22,884)
Total liabilities and membership interests	$ 16,902	$ 15,697

3. LAMAR AND FORNEY ACQUISITION

In April 2016, Luminant purchased all of the membership interests in La Frontera Holdings, LLC (La Frontera), the indirect owner of two combined-cycle gas turbine (CCGT) natural gas fueled generation facilities representing nearly 3,000 MW of capacity located in ERCOT, from a subsidiary of NextEra Energy, Inc. (the Lamar and Forney Acquisition). The facility in Forney, Texas has a capacity of 1,912 MW and the facility in Paris, Texas has a capacity of 1,076 MW. The acquisition diversified our fuel mix and increased the dispatch flexibility in our fleet. The aggregate purchase price was approximately $1.313 billion, which included the repayment of approximately $950 million of existing project financing indebtedness of La Frontera at closing, plus approximately $236 million for cash and net working capital. The purchase price was funded by cash-on-hand and additional borrowings under the DIP Facility totaling $1.1 billion. After completing the acquisition, we repaid approximately $230 million of borrowings under the DIP Revolving Credit Facility primarily utilizing cash acquired in the transaction. La Frontera and its subsidiaries were subsidiary guarantors under the DIP Roll Facilities and, on the Effective Date, became subsidiary guarantors under the senior secured exit facilities (see Note 9).

Purchase Accounting

The Lamar and Forney Acquisition has been accounted for in accordance with ASC 805, *Business Combinations* (ASC 805), with identifiable assets acquired and liabilities assumed recorded at their estimated fair values on the acquisition date.

To fair value the acquired property, plant and equipment, we used a discounted cash flow analysis, classified as Level 3 within the fair value hierarchy levels (see Note 13). This discounted cash flow model was created for each generation facility based on its remaining useful life. The discounted cash flow model included gross margin forecasts for each power generation facility determined using forward commodity market prices obtained from long-term forecasts. We also used management's forecasts of generation output, operations and maintenance expense, SG&A and capital expenditures. The resulting cash flows, estimated based upon the age of the assets, efficiency, location and useful life, were then discounted using plant specific discount rates of approximately 9%.

The following table summarizes the consideration paid and the preliminary allocation of the purchase price to the fair value amounts recognized for the assets acquired and liabilities assumed related to the Lamar and Forney Acquisition as of the acquisition date. During the three months ended September 30, 2016, the working capital adjustment included in the purchase price was finalized between the parties, and the purchase price allocation was completed.

Cash paid to seller at close	$	603
Net working capital adjustments		(4)
Consideration paid to seller		599
Cash paid to repay project financing at close		950
Total cash paid related to acquisition	$	1,549
Cash and cash equivalents	$	210
Property, plant and equipment — net		1,316
Commodity and other derivative contractual assets		47
Other assets		44
Total assets acquired		1,617
Commodity and other derivative contractual liabilities		53
Trade accounts payable and other liabilities		15
Total liabilities assumed		68
Identifiable net assets acquired	$	1,549

The Lamar and Forney Acquisition did not result in the recording of goodwill since the purchase price did not exceed the fair value of the net assets acquired.

Unaudited Pro Forma Financial Information

The following unaudited pro forma financial information for the nine months ended September 30, 2016 and 2015 assumes that the Lamar and Forney Acquisition occurred on January 1, 2015. The unaudited pro forma financial information is provided for information purposes only and is not necessarily indicative of the results of operations that would have occurred had the Lamar and Forney Acquisition been completed on January 1, 2015, nor are they indicative of future results of operations.

	Nine Months Ended September 30,			
	2016		2015	
Revenues	$	4,116	$	4,942
Net loss	$	(672)	$	(3,009)

The unaudited pro forma financial information includes adjustments for incremental depreciation as a result of the fair value determination of the net assets acquired and interest expense on borrowings under the DIP Roll Facilities in lieu of interest expense incurred prior to the acquisition.

4. GOODWILL AND IDENTIFIABLE INTANGIBLE ASSETS

Goodwill

The following table provides information regarding our goodwill balance, all of which arose in connection with accounting for the Merger. None of the goodwill is being deducted for tax purposes.

Goodwill before impairment charges	$	18,322
Accumulated noncash impairment charges		(18,170)
Balance at September 30, 2016 and December 31, 2015	$	152

Goodwill Impairments

Goodwill and intangible assets with indefinite useful lives are required to be tested for impairment at least annually (we have selected a December 1 test date) or whenever events or changes in circumstances indicate an impairment may exist.

During the three months ended September 30, 2015 and March 31, 2015, we experienced impairment indicators related to decreases in forward wholesale electricity prices when compared to those prices reflected in our goodwill impairment testing analysis as of March 31, 2015 and December 1, 2014, respectively. As a result, the likelihood of goodwill impairments had increased, and we initiated further testing of goodwill. During the three and nine months ended September 30, 2015, our testing of goodwill for impairment resulted in impairment charges totaling $700 million and $1.4 billion, respectively.

Identifiable Intangible Assets

Identifiable intangible assets, including amounts that arose in connection with accounting for the Merger, are comprised of the following:

	September 30, 2016			December 31, 2015		
Identifiable Intangible Asset	**Gross Carrying Amount**	**Accumulated Amortization**	**Net**	**Gross Carrying Amount**	**Accumulated Amortization**	**Net**
Retail customer relationship	$ 463	$ 451	$ 12	$ 463	$ 442	$ 21
Software and other technology-related assets	411	267	144	385	224	161
Other identifiable intangible assets (a)	53	21	32	72	35	37
Total identifiable intangible assets subject to amortization (b)	$ 927	$ 739	188	$ 920	$ 701	219
Retail trade name (not subject to amortization)			955			955
Mineral interests (not currently subject to amortization)			5			5
Total identifiable intangible assets			$ 1,148			$ 1,179

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(a) Includes favorable purchase and sales contracts, environmental allowances and credits and mining development costs. See discussion below regarding impairment charges recorded in the nine months ended September 30, 2015 related to other identifiable intangible assets.

(b) Amounts related to fully amortized assets that are expired, or of no economic value, have been excluded from both the gross carrying and accumulated amortization amounts.

Amortization expense related to finite-lived identifiable intangible assets (including the condensed statements of consolidated income (loss) line item) consisted of:

Identifiable Intangible Asset	Condensed Statements of Consolidated Income (Loss) Line	Three Months Ended September 30, 2016	Three Months Ended September 30, 2015	Nine Months Ended September 30, 2016	Nine Months Ended September 30, 2015
Retail customer relationship	Depreciation and amortization	$ 3	$ 4	$ 9	$ 13
Software and other technology-related assets	Depreciation and amortization	15	17	44	45
Other identifiable intangible assets	Operating revenues/fuel, purchased power costs and delivery fees/ depreciation and amortization	3	9	6	21
Total amortization expense (a)		$ 21	$ 30	$ 59	$ 79

(a) Amounts recorded in depreciation and amortization totaled $20 million and $24 million for the three months ended September 30, 2016 and 2015, respectively, and $58 million and $64 million for the nine months ended September 30, 2016 and 2015, respectively.

Intangible Impairments

The impairments of our generation facilities in March and September 2015 (see Note 6) resulted in the impairment of the SO_2 allowances under the Clean Air Act's acid rain cap-and-trade program that are associated with those facilities to the extent they are not projected to be used at other sites. The fair market values of the SO_2 allowances were estimated to be de minimis based on Level 3 fair value estimates (see Note 13). We also impaired certain of our SO_2 allowances under the Cross-State Air Pollution Rule (CSAPR) related to the impaired generation facilities. Accordingly, in the three and nine months ended September 30, 2015, we recorded noncash impairment charges of $4 million and $55 million, respectively, (before deferred income tax benefit) in other deductions (see Note 16) related to our existing environmental allowances and credits intangible asset. SO_2 emission allowances granted to us under the acid rain cap-and-trade program were recorded as intangible assets at fair value in connection with purchase accounting related to the Merger in 2007. Additionally, the impairments of our generation and related mining facilities in September 2015 resulted in our recording noncash impairment charges of $19 million (before deferred income tax benefit) in other deductions (see Note 16) related to mine development costs (included in other identifiable intangible assets in the table above) at the facilities.

During the three months ended March 31, 2015, we determined that certain intangible assets related to favorable power purchase contracts should be evaluated for impairment. That conclusion was based on further declines in wholesale electricity prices in ERCOT experienced during the three months ended March 31, 2015. Our fair value measurement was based on a discounted cash flow analysis of the contracts that compared the contractual price and terms of the contract to forecasted wholesale electricity and renewable energy credit (REC) prices in ERCOT. As a result of the analysis, we recorded a noncash impairment charge of $8 million (before deferred income tax benefit) in other deductions (see Note 16).

Estimated Amortization of Identifiable Intangible Assets

As of September 30, 2016, the estimated aggregate amortization expense of identifiable intangible assets for each of the next five fiscal years is as shown below. As of the Effective Date, Vistra Energy will apply fresh start accounting principles, which could materially impact the estimated amortization expense.

Year	Estimated Amortization Expense
2016	$ 82
2017	$ 65
2018	$ 40
2019	$ 25
2020	$ 13

5. INCOME TAXES

EFH Corp. files a US federal income tax return that includes the results of EFCH, EFIH, Oncor Holdings and TCEH. Prior to the Effective Date, EFH Corp. was the corporate member of the EFH Corp. consolidated group, while each of EFIH, Oncor Holdings, EFCH and TCEH were classified as a disregarded entity for US federal income tax purposes. Pursuant to applicable US Treasury regulations and published guidance of the IRS, corporations that are members of a consolidated group have joint and several liability for the taxes of such group. Subsequent to the Effective Date, the TCEH Debtors and the Contributed EFH Debtors will no longer be included in the consolidated income tax return of EFH Corp. and will be included in an income tax return with Vistra Energy.

Prior to the Effective Date, EFH Corp. and certain of its subsidiaries (including EFCH, EFIH, and TCEH, but not including Oncor Holdings and Oncor) were parties to a Federal and State Income Tax Allocation Agreement, which provided, among other things, that any corporate member or disregarded entity in the EFH Corp. group is required to make payments to EFH Corp. in an amount calculated to approximate the amount of tax liability such entity would have owed if it filed a separate corporate tax return. Pursuant to the Plan of Reorganization, the TCEH Debtors and the Contributed EFH Debtors rejected this agreement on the Effective Date. See Note 2 for a discussion of the Tax Matters Agreement that was entered on the Effective Date between EFH Corp. and Vistra Energy. Additionally, since the date of the Settlement Agreement, no further cash payments among the Debtors were made in respect of federal income taxes. EFH Corp. has elected to continue to allocate federal income taxes among the entities that are parties to the Federal and State Income Tax Allocation Agreement. The Settlement Agreement did not alter the allocation and payment for state income taxes, which continued to be settled prior to the Effective Date.

The calculation of our effective tax rate is as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Income (loss) before income taxes	$ 184	$ (1,933)	$ (653)	$ (3,883)
Income tax benefit (expense)	$ 3	$ 416	$ (3)	$ 816
Effective tax rate	(1.6)%	21.5%	0.5%	21.0%

For the three months ended September 30, 2016, the effective tax rate of (1.6%) related to our income tax benefit was lower than the US Federal statutory rate of 35% due primarily to a forecasted valuation allowance against deferred tax assets, offset by the tax benefit recognized from the settlement agreement reached with the Texas Comptroller of Public Accounts. For the three months ended September 30, 2015, the effective tax rate of 21.5% related to our income tax benefit was lower than the US Federal statutory rate of 35% due primarily to the nondeductible goodwill impairment charge (see Note 4) and nondeductible legal and other professional services costs related to the Chapter 11 Cases. As of September 30, 2016 the valuation allowance against deferred tax assets totaled $401 million.

For the nine months ended September 30, 2016, the effective tax rate of 0.5% related to our income tax expense was lower than the US Federal statutory rate of 35% due primarily to a forecasted valuation allowance against deferred tax assets and Texas margin tax expense compared to pretax losses in 2016. For the nine months ended September 30, 2015, the effective tax rate of 21.0% related to our income tax benefit was lower than the US Federal statutory rate of 35% due primarily to the nondeductible goodwill impairment charges (see Note 4) and nondeductible legal and other professional services costs related to the Chapter 11 Cases, partially offset by the difference in the forecasted effective tax rate and the statutory rate applied to long-lived and intangible asset impairment charges (see Notes 4 and 6) and the tax benefit recognized due to the Texas margin tax rate reduction in the three months ended June 30, 2015.

Liability for Uncertain Tax Positions

In September 2016, EFH Corp. entered into a settlement agreement with the Texas Comptroller of Public Accounts (Comptroller) whereby the Comptroller agreed to release all claims and liabilities related to the EFH Corp. consolidated group's state taxes, including sales tax, gross receipts utility tax, franchise tax and direct pay tax, through the agreement date, in exchange for a release of all refund claims and a one-time payment of $12 million. This settlement was entered and approved by the Bankruptcy Court in September 2016. As a result of the settlement, we reduced the liability for uncertain tax positions by $27 million.

In July 2016, EFH Corp. executed a Revenue Agent Report (RAR) with the IRS for the 2010 through 2013 tax years. As a result of the RAR, we reduced our liability for uncertain tax positions by $1 million, resulting in a reclassification to the accumulated deferred income tax liability.

In March 2016, EFH Corp. signed a RAR with the IRS for the 2014 tax year. No financial statement impacts resulted from the signing of the 2014 RAR.

In June 2015, EFH Corp. signed a RAR with the IRS for the 2008 and 2009 tax years. The Bankruptcy Court approved EFH Corp.'s signing of the RAR in July 2015. As a result of EFH Corp. signing this RAR, we reduced the liability for uncertain tax positions by $22 million, resulting in a $18 million increase in noncurrent inter-company tax payable to EFH Corp., a $2 million reclassification to the accumulated deferred income tax liability and the recording of a $2 million income tax benefit.

6. IMPAIRMENT OF LONG-LIVED ASSETS

Impairment of Lignite/Coal Fueled Generation and Mining Assets

We evaluated our generation assets for impairment during September 2015 as a result of an impairment indicator related to the continued decline in forecasted wholesale electricity prices in ERCOT. Our evaluation concluded that impairments existed at our Martin Lake, Sandow 4 and Sandow 5 generation facilities, and the carrying value for those facilities and related mining facilities were reduced in total by $1.295 billion.

We evaluated our generation assets for impairment during March 2015 as a result of an impairment indicator related to the continued decline in forecasted wholesale electricity prices in ERCOT. Our evaluation concluded that an impairment existed, and the carrying value at our Big Brown generation facility and related mining facility was reduced by $676 million.

Our fair value measurement for these assets was determined based on an income approach that utilized probability-weighted estimates of discounted future cash flows, which were Level 3 fair value measurements (see Note 13). Key inputs into the fair value measurement for these assets included current forecasted wholesale electricity prices in ERCOT, forecasted fuel prices, capital and operating expenditure forecasts and discount rates.

Additional material impairments may occur in the future for our other generation facilities if forward wholesale electricity prices continue to decline or forecasted costs of producing electricity at our generation facilities increase, including increased costs of compliance with proposed environmental regulations.

7. INTEREST EXPENSE AND RELATED CHARGES

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Interest paid/accrued on debtor-in-possession financing	$ 38	$ 16	$ 76	$ 47
Adequate protection amounts paid/accrued	331	311	977	920
Interest paid/accrued on pre-petition debt	—	—	1	4
Amortization of debt issuance, amendment and extension costs and discounts	4	—	4	1
Capitalized interest	(2)	(2)	(9)	(8)
Total interest expense and related charges	$ 371	$ 325	$ 1,049	$ 964

Interest expense for the three and nine months ended September 30, 2016 and 2015 reflects interest paid and accrued on debtor-in-possession financing (see Note 9), adequate protection amounts paid and accrued, as approved by the Bankruptcy Court in June 2014 for the benefit of secured creditors of (a) $22.616 billion principal amount of outstanding borrowings from the TCEH Senior Secured Facilities, (b) $1.750 billion principal amount of outstanding TCEH Senior Secured Notes and (c) the $1.243 billion net liability related to the TCEH first lien interest rate swaps and natural gas hedging positions terminated shortly after the Bankruptcy Filing (see Note 14), in exchange for their consent to the senior secured, super-priority liens contained in the DIP Facility and any diminution in value of their interests in the pre-petition collateral from the Petition Date. The interest rate applicable to the adequate protection amounts paid/accrued for the nine months ended September 30, 2016 was 4.95% (one-month LIBOR plus 4.50%). As of the Effective Date, amounts of adequate protection payments were re-characterized as payments of principal.

The Bankruptcy Code generally restricts payment of interest on pre-petition debt, subject to certain exceptions. Additional interest payments may also be made upon approval by the Bankruptcy Court. Other than amounts ordered or approved by the Bankruptcy Court, effective on the Petition Date, we discontinued recording interest expense on outstanding pre-petition debt classified as LSTC. The table below shows contractual interest amounts, which are amounts due under the contractual terms of the outstanding debt, including debt subject to compromise during the Chapter 11 Cases. Interest expense reported in the condensed statements of consolidated income (loss) does not include contractual interest on pre-petition debt classified as LSTC totaling $213 million and $224 million for the three months ended September 30, 2016 and 2015, respectively, and $640 million and $673 million for the nine months ended September 30, 2016 and 2015, respectively, which has been stayed by the Bankruptcy Court effective on the Petition Date. Adequate protection paid/accrued presented below excludes interest paid/accrued on the TCEH first-lien interest rate and commodity hedge claims (see Note 14) totaling $16 million and $15 million for the three months ended September 30, 2016 and 2015, respectively, and $47 million and $44 million for the nine months ended September 30, 2016 and 2015, respectively, as such amounts are not included in contractual interest amounts below.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Contractual interest on debt classified as LSTC	$ 528	$ 520	$ 1,570	$ 1,549
Adequate protection amounts paid/accrued	315	296	930	876
Contractual interest on debt classified as LSTC not paid/accrued	$ 213	$ 224	$ 640	$ 673

8. REORGANIZATION ITEMS

Expenses and income directly associated with the Chapter 11 Cases are reported separately in the condensed statements of consolidated income (loss) as reorganization items as required by ASC 852, *Reorganizations*. Reorganization items also include adjustments to reflect the carrying value of LSTC at their estimated allowed claim amounts, as such adjustments are determined. The following table presents reorganization items incurred in the three and nine months ended September 30, 2016 and 2015 as reported in the condensed statements of consolidated income (loss):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Expenses related to legal advisory and representation services	$ 28	$ 25	$ 55	$ 75
Expenses related to other professional consulting and advisory services	19	12	39	46
Contract claims adjustments	10	—	13	28
Other	7	2	9	3
Total reorganization items	$ 64	$ 39	$ 116	$ 152

9. DEBTOR-IN-POSSESSION BORROWING FACILITIES AND LONG-TERM DEBT NOT SUBJECT TO COMPROMISE

DIP Roll Facilities — In August 2016, TCEH entered into the DIP Roll Facilities. The facilities provided for up to $4.250 billion in senior secured, super-priority financing consisting of a revolving credit facility of up to $750 million (DIP Roll Revolving Credit Facility), a term loan letter of credit facility of up to $650 million (TCEH DIP Roll Term Loan Letter of Credit Facility) and a term loan facility of up to $2.850 billion (DIP Roll Term Loan Facility). The DIP Roll Facilities were senior, secured, super-priority debtor-in-possession credit agreements by and among the TCEH Debtors, the lenders that were party thereto from time to time and an administrative and collateral agent. The maturity date of the DIP Roll Facilities was the earlier of (a) October 31, 2017 or (b) the Effective Date. On the Effective Date, the DIP Roll Facilities converted to senior secured exit facilities with maturity dates of August 2021 for the revolving credit facility and August 2023 for the term loan facilities (see Note 2).

Net proceeds from the DIP Roll Facilities totaled $3.465 billion and were used to repay $2.65 billion outstanding under the former DIP Facility, fund a $650 million collateral account used to backstop the issuances of letters of credit and pay $107 million of issuance costs. The remaining balance was used for general corporate purposes. Additionally, $800 million of cash from collateral accounts under the former DIP Facility that was used to backstop letters of credit was released to TCEH to be used for general corporate purposes.

The DIP Roll Facilities and related available capacity at September 30, 2016 are presented below. In the September 30, 2016 condensed consolidated balance sheet, the borrowings under the DIP Roll Facilities are reported as noncurrent liabilities.

	September 30, 2016		
DIP Roll Facilities	Facility Limit	Cash Borrowings (d)	Available Credit Capacity
DIP Roll Revolving Credit Facility (a)	$ 750	$ —	$ 750
DIP Roll Term Loan Letter of Credit Facility (b)	650	650	—
DIP Roll Term Loan Facility (c)	2,850	2,850	—
Total DIP Roll Facilities	$ 4,250	$ 3,500	$ 750

(a) Facility to be used for general corporate purposes.
(b) Facility used for issuing letters of credit for general corporate purposes. Borrowings under this facility were funded to collateral accounts that are reported as restricted cash in the condensed consolidated balance sheet. At September 30, 2016, the restricted cash supported $546 million in letters of credit outstanding (see Note 11), leaving $104 million in available letter of credit capacity.
(c) Facility used to repay all amounts outstanding under the former DIP Facility and issuance costs for the DIP Roll Facilities, with the remaining balance used for general corporate purposes.
(d) Borrowings under debtor-in-possession credit facilities in the condensed balance sheets are presented net of debt issuance costs of $79 million and debt discounts of $34 million.

Any amounts borrowed under the DIP Roll Revolving Credit Facility would bear interest based on applicable LIBOR rates plus 3.25%, and there were no outstanding borrowings at September 30, 2016. Amounts borrowed under the DIP Roll Term Loan Letter of Credit Facility bore interest based on applicable LIBOR rates, subject to a 1% floor, plus 4%, and the rate outstanding on outstanding borrowings was 5.00% at September 30, 2016. Amounts borrowed under the DIP Roll Term Loan Facility bore interest based on applicable LIBOR rates, subject to a 1% floor, plus 4%, and the interest rate on outstanding borrowings was 5.00% at September 30, 2016. The DIP Roll Facilities also provided for certain additional fees payable to the agents and lenders, as well as availability fees payable with respect to any unused portions of the available DIP Roll Facilities.

From and after the Effective Date, the TCEH Debtors' obligations under the DIP Roll Facilities are secured by a lien covering substantially all of Vistra Energy's consolidated assets, rights and properties, subject to certain exceptions set forth in the DIP Roll Facilities. From and after the Effective Date, substantially all of TCEH's subsidiaries are guarantors of the DIP Roll Facilities, including all subsidiaries that were Debtors in the Chapter 11 Cases.

The DIP Roll Facilities also permitted certain hedging agreements to be secured on a pari-passu basis with the DIP Roll Facilities in the event those hedging agreements met certain criteria set forth in the DIP Roll Facilities.

The DIP Roll Facilities provided for a carve-out (RCT Carve-Out) related to mining land reclamation requirements that TCEH's Luminant Mining subsidiary has with the RCT, which among other things, oversees lignite mining activity in Texas. The RCT Carve-Out was used by Luminant Mining to secure up to $975 million of its mining reclamation obligations with the RCT.

The DIP Roll Facilities provided for affirmative and negative covenants applicable to TCEH, including affirmative covenants requiring TCEH to provide financial information, budgets and other information to the agents under the DIP Roll Facilities, and negative covenants restricting TCEH's ability to incur additional indebtedness, grant liens, dispose of assets, make investments, pay dividends or take certain other actions, in each case except as permitted in the DIP Roll Facilities. TCEH's ability to borrow under the DIP Roll Facilities was subject to the satisfaction of certain customary conditions precedent set forth therein.

The DIP Roll Facilities provided for certain customary events of default, including events of default resulting from non-payment of principal, interest or other amounts when due, material breaches of representations and warranties, material breaches of covenants in the DIP Roll Facilities or ancillary loan documents, cross-defaults under other agreements or instruments and the entry of material judgments against TCEH. Solely with respect to the DIP Roll Revolving Credit Facility, and solely during a compliance period (which, in general, is applicable when the aggregate revolving borrowings and revolving letters of credit exceed 30% of the revolving commitments), the agreement included a covenant that required the Consolidated Superpriority Secured Net Debt to Consolidated EBITDA ratio not exceed 4.25 to 1.00. Although we had no borrowings under the DIP Roll Revolving Credit Facility as of September 30, 2016, we would have been in compliance with this financial covenant if it were required to be tested. Upon the existence of an event of default, the DIP Roll Facilities provided that all principal, interest and other amounts due thereunder would become immediately due and payable, either automatically or at the election of specified lenders.

DIP Facility — The DIP Facility provided for up to $3.375 billion in senior secured, super-priority financing consisting of a revolving credit facility of up to $1.950 billion (DIP Revolving Credit Facility) and a term loan facility of up to $1.425 billion (DIP Term Loan Facility). The DIP Facility was a senior, secured, super-priority credit agreement by and among the TCEH Debtors, the lenders that were party thereto and an administrative and collateral agent. At December 31, 2015, all $1.425 billion of the DIP Term Loan Facility were borrowed at an interest rate of 3.75%. Of this amount, $800 million represented amounts that supported issuances of letters of credit that were funded to a collateral account. Of the collateral account at December 31, 2015, $281 million was reported as cash and cash equivalents and $519 million was reported as restricted cash, which represented the amounts of outstanding letters of credit. At December 31, 2015, no amounts were borrowed under the DIP Revolving Credit Facility. As discussed above, in August 2016 all amounts under the DIP Facility were repaid using proceeds from the DIP Roll Facilities, and the $800 million of cash that was funded to the collateral account was released to TCEH to be used for general corporate purposes.

Long-Term Debt Not Subject to Compromise — Amounts presented in the table below represent pre-petition liabilities that are not subject to compromise due to the debt being fully collateralized or specific orders from the Bankruptcy Court approving repayment of the debt.

	September 30, 2016	December 31, 2015
7.48% Fixed Secured Facility Bonds with amortizing payments through January 2017 (a)	$ —	$ 13
Capital lease obligations	2	5
Other	2	2
Unamortized discount	—	(1)
Total	4	19
Less amounts due currently	(4)	(16)
Total long-term debt not subject to compromise	$ —	$ 3

(a) Debt issued by trust and secured by assets held by the trust.

10. LIABILITIES SUBJECT TO COMPROMISE (LSTC)

The amounts classified as LSTC reflect the company's estimate of pre-petition liabilities and other expected allowed claims to be addressed in the Chapter 11 Cases. Amounts classified to LSTC do not include pre-petition liabilities that are fully collateralized by letters of credit or cash deposits. The following table presents LSTC as reported in the condensed consolidated balance sheets at September 30, 2016 and December 31, 2015:

	September 30, 2016	December 31, 2015
Notes, loans and other debt per the following table	$ 31,668	$ 31,668
Accrued interest on notes, loans and other debt	646	646
Net liability under terminated TCEH interest rate swap and natural gas hedging agreements (Note 14)	1,243	1,243
Trade accounts payable and other expected allowed claims	191	176
Advances and other payables to affiliates	1	1
Total liabilities subject to compromise	$ 33,749	$ 33,734

On the Effective Date, the TCEH Debtors (together with the Contributed EFH Debtors) emerged from the Chapter 11 Cases and discharged substantially all of the $33.7 billion in LSTC.

Pre-Petition Notes, Loans and Other Debt Reported as LSTC

Amounts presented below represent principal amounts of pre-petition notes, loans and other debt reported as LSTC.

	September 30, 2016	December 31, 2015
Senior Secured Facilities:		
TCEH Floating Rate Term Loan Facilities due October 10, 2014	$ 3,809	$ 3,809
TCEH Floating Rate Letter of Credit Facility due October 10, 2014	42	42
TCEH Floating Rate Revolving Credit Facility due October 10, 2016	2,054	2,054
TCEH Floating Rate Term Loan Facilities due October 10, 2017	15,691	15,691
TCEH Floating Rate Letter of Credit Facility due October 10, 2017	1,020	1,020
11.5% Fixed Senior Secured Notes due October 1, 2020	1,750	1,750
15% Fixed Senior Secured Second Lien Notes due April 1, 2021	336	336
15% Fixed Senior Secured Second Lien Notes due April 1, 2021, Series B	1,235	1,235
10.25% Fixed Senior Notes due November 1, 2015	1,833	1,833
10.25% Fixed Senior Notes due November 1, 2015, Series B	1,292	1,292
10.50% /11.25% Senior Toggle Notes due November 1, 2016	1,749	1,749
Pollution Control Revenue Bonds:		
Brazos River Authority:		
5.40% Fixed Series 1994A due May 1, 2029	39	39
7.70% Fixed Series 1999A due April 1, 2033	111	111
7.70% Fixed Series 1999C due March 1, 2032	50	50
8.25% Fixed Series 2001A due October 1, 2030	71	71
8.25% Fixed Series 2001D-1 due May 1, 2033	171	171
6.30% Fixed Series 2003B due July 1, 2032	39	39
6.75% Fixed Series 2003C due October 1, 2038	52	52
5.40% Fixed Series 2003D due October 1, 2029	31	31
5.00% Fixed Series 2006 due March 1, 2041	100	100
Sabine River Authority of Texas:		
6.45% Fixed Series 2000A due June 1, 2021	51	51
5.20% Fixed Series 2001C due May 1, 2028	70	70
5.80% Fixed Series 2003A due July 1, 2022	12	12
6.15% Fixed Series 2003B due August 1, 2022	45	45
Trinity River Authority of Texas:		
6.25% Fixed Series 2000A due May 1, 2028	14	14
Other:		
Other	1	1
Total TCEH consolidated notes, loans and other debt	$ 31,668	$ 31,668

TCEH Letter of Credit Facility Activity

Borrowings under the TCEH Letter of Credit Facility had been recorded by TCEH as restricted cash that supported issuances of letters of credit. At December 31, 2015, the restricted cash related to the pre-petition TCEH Letter of Credit Facility totaled $507 million, and there were no outstanding letters of credit related to the pre-petition TCEH Letter of Credit Facility. Pursuant to the confirmation of the Plan of Reorganization in August 2016 with respect to the TCEH Debtors and the Contributed EFH Debtors, the restricted cash was released to TCEH and reclassified to cash and cash equivalents.

Information Regarding Significant Pre-Petition Debt

See Note 12 to our December 31, 2015 Financial Statements for information regarding our pre-petition debt. There have been no changes in pre-petition debt since December 31, 2015.

11. COMMITMENTS AND CONTINGENCIES

Guarantees

We have entered into contracts that contain guarantees to unaffiliated parties that could require performance or payment under certain conditions. Material guarantees are discussed below.

See Notes 9 and 10 for discussion of guarantees and security for certain of our post-petition and pre-petition debt.

Letters of Credit

At September 30, 2016, we had outstanding letters of credit under the DIP Roll Facilities totaling $546 million as follows:

- $399 million to support commodity risk management and trading collateral requirements in the normal course of business, including over-the-counter and exchange-traded hedging transactions and collateral postings with ERCOT;
- $64 million to support executory contracts and insurance agreements;
- $55 million to support our REP financial requirements with the PUCT, and
- $28 million for other credit support requirements.

On the Effective Date, all of our outstanding letters of credit under the DIP Roll Facilities became obligations under Vistra Energy's senior secured exit facilities (see Note 9).

Litigation

Litigation Related to EPA Reviews — In June 2008, the EPA issued an initial request for information to TCEH under the EPA's authority under Section 114 of the Clean Air Act (CAA). The stated purpose of the request is to obtain information necessary to determine compliance with the CAA, including New Source Review Standards and air permits issued by the TCEQ for the Big Brown, Monticello and Martin Lake generation facilities. In April 2013, we received an additional information request from the EPA under Section 114 related to the Big Brown, Martin Lake and Monticello facilities as well as an initial information request related to the Sandow 4 generation facility.

In July 2012, the EPA sent us a notice of violation alleging noncompliance with the CAA's New Source Review Standards and the air permits at our Martin Lake and Big Brown generation facilities. In July 2013, the EPA sent us a second notice of violation alleging noncompliance with the CAA's New Source Review Standards at our Martin Lake and Big Brown generation facilities, which the EPA said "superseded" its July 2012 notice. In August 2013, the US Department of Justice, acting as the attorneys for the EPA, filed a civil enforcement lawsuit against Luminant Generation Company LLC and Big Brown Power Company LLC in federal district court in Dallas, alleging violations of the CAA at our Big Brown and Martin Lake generation facilities. In August 2015, the district court issued its ruling on our motion to dismiss and granted the motion as to seven of the nine claims asserted by the EPA in the lawsuit. In August 2016, the EPA filed an amended complaint, eliminating one of the two remaining claims and withdrawing a request for civil penalties in the other remaining claim. The EPA also filed a motion for entry of final judgment. In September 2016, we filed a motion opposing the EPA's motion for entry of final judgment. In October 2016, the district court denied the EPA's motion for entry of final judgment. Presently, the part of the one remaining claims remains before the district court, and it is currently scheduled for trial in October 2017. We believe that we have complied with all requirements of the CAA and intend to vigorously defend against the remaining allegations. The lawsuit requests the maximum civil penalties available under the CAA to the government of up to $32,500 to $37,500 per day for each alleged violation, depending on the date of the alleged violation, and injunctive relief, including an order requiring the installation of best available control technology at the affected units. An adverse outcome could require substantial capital expenditures that cannot be determined at this time and could possibly require the payment of substantial penalties. We cannot predict the outcome of these proceedings, including the financial effects, if any.

Greenhouse Gas Emissions

In August 2015, the EPA finalized rules to address greenhouse gas (GHG) emissions from new, modified and reconstructed units, and existing electricity generation plants. The rule for existing facilities would establish state-specific emissions rate goals to reduce nationwide carbon dioxide emissions related to affected electricity generation units by over 30% from 2012 emission levels by 2030. A number of parties, including Luminant, filed petitions for review in the US Court of Appeals for the District of Columbia Circuit (D.C. Circuit Court) for the rule for new, modified and reconstructed plants. In addition, a number of petitions for review of the rule for existing plants were filed in the D.C. Circuit Court by various parties and groups, including challenges from twenty-seven different states opposed to the rule as well as those from, among others, certain power generating companies, various business groups and some labor unions. Luminant also filed its own petition for review. In January 2016, a coalition of states, industry (including Luminant) and other parties filed applications with the US Supreme Court asking that the court stay the rule while the court reviews the legality of the rule for existing plants. In February 2016, the US Supreme Court stayed the rule pending the conclusion of legal challenges on the rule before the D.C. Circuit Court and until the US Supreme Court disposes of any subsequent petition for review. Oral argument on the merits of the legal challenges to the rule was heard in September 2016 before the entire D.C. Circuit Court. While we cannot predict the outcome of this rulemaking and legal proceedings on our results of operations, liquidity or financial condition, the impacts could be material.

In August 2015, the EPA proposed model rules and federal plan requirements for states to consider as they develop state plans to comply with the rules for GHG emissions. A federal plan would then be finalized for a state if a state fails to submit a state plan by the deadlines established in the CAA for existing plants or if the EPA disapproves a submitted state plan. We filed comments on the federal plan proposal in January 2016. While we cannot predict the timing or outcome of this rulemaking and legal proceedings on our results of operations, liquidity or financial condition, the impacts could be material.

Cross-State Air Pollution Rule (CSAPR)

In July 2011, the EPA issued the CSAPR, compliance with which would have required significant additional reductions of sulfur dioxide (SO_2) and nitrogen oxide (NO_x) emissions from our fossil fueled generation units. In February 2012, the EPA released a final rule (Final Revisions) and a proposed rule revising certain aspects of the CSAPR, including increases in the emissions budgets for Texas and our generation assets as compared to the July 2011 version of the rule. In June 2012, the EPA finalized the proposed rule (Second Revised Rule).

The CSAPR became effective January 1, 2015. In July 2015, following a remand of the case from the US Supreme Court to consider further legal challenges, the D.C. Circuit Court unanimously ruled in favor of us and other petitioners, holding that the CSAPR emissions budgets over-controlled Texas and other states. The D.C. Circuit Court remanded those states' budgets to the EPA for prompt reconsideration. While we planned to participate in the EPA's reconsideration process to develop increased budgets that do not over-control Texas, the EPA instead responded to the remand by updating the NO_X ozone season budget for the 2008 ozone standard with a new rulemaking without explicitly addressing the issues of over-control of the 1997 standard. Comments on the EPA's proposal were submitted by Luminant in February 2016. In June 2016, the EPA issued a memorandum describing the EPA's proposed approach for responding to the D.C. Circuit Court's remand for reconsideration of the CSAPR SO_2 emission budgets for Texas and three other states that had been remanded to the EPA by the D.C. Circuit Court. In the memorandum, the EPA stated that those four states could either voluntarily participate in the CSAPR by submitting a SIP revision adopting the SO_2 budgets that had been previously held invalid by the D.C. Circuit Court and the current annual NOx budgets or, if the state chooses not to participate in the CSAPR, the EPA could withdraw the CSAPR FIPs by the fall of 2016 for those states and address any interstate transport and regional haze obligations on a state-by-state basis. While we cannot predict the outcome of future proceedings related to the CSAPR, including the EPA's recent actions concerning the CSAPR annual emissions budgets for affected states and participating in the CSAPR program, based upon our current operating plans we do not believe that the CSAPR will cause any material operational, financial or compliance issues. We are currently evaluating the EPA's recent proposed actions regarding SO_2 budgets for Texas.

Regional Haze

The Regional Haze Program of the CAA establishes "as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I federal areas, like national parks, which impairment results from man-made pollution." There are two components to the Regional Haze Program. First, states must establish goals for reasonable progress for Class I federal areas within the state and establish long-term strategies to reach those goals and to assist Class I federal areas in neighboring states to achieve reasonable progress set by those states towards a goal of natural visibility by 2064. Second, electricity generation units built between 1962 and 1977 are subject to best available retrofit technology (BART) standards designed to improve visibility. BART reductions of SO_2 and NO_X are required either on a unit-by-unit basis or are deemed satisfied by state participation in an EPA-approved regional trading program such as the CSAPR. In February 2009, the TCEQ submitted a State Implementation Plan (SIP) concerning regional haze (Regional Haze SIP) to the EPA. In December 2011, the EPA proposed a limited disapproval of the Regional Haze SIP due to its reliance on the Clean Air Interstate Rule (CAIR) instead of the EPA's replacement CSAPR program. In August 2012, we filed a petition for review in the Fifth Circuit Court challenging the EPA's limited disapproval of the Regional Haze SIP on the grounds that the CAIR continued in effect pending the D.C. Circuit Court's decision in the CSAPR litigation. In September 2012, we filed a petition to intervene in a case filed by industry groups and other states and private parties in the D.C. Circuit Court challenging the EPA's limited disapproval and issuance of a Federal Implementation Plan (FIP) regarding the regional haze BART program. The Fifth Circuit Court case has since been transferred to the D.C. Circuit Court and consolidated with other pending BART program regional haze appeals. Briefing in the D.C. Circuit Court is scheduled to be completed by March 2017.

In response to a lawsuit by environmental groups, the D.C. Circuit Court issued a consent decree in March 2012 that required the EPA to propose a decision on the Regional Haze SIP by May 2012 and finalize that decision by November 2012. The consent decree requires a FIP for any provisions that the EPA disapproves. The D.C. Circuit Court has amended the consent decree several times to extend the dates for the EPA to propose and finalize a decision on the Regional Haze SIP. The consent decree was modified in December 2015 to extend the deadline for the EPA to finalize action on the determination and adoption of requirements for BART for electricity generation. Under the amended consent decree the EPA has until December 2016 to finalize a FIP for BART for Texas electricity generation sources, if the EPA determines that BART requirements have not been met.

In June 2014, the EPA issued requests for information under Section 114 of the CAA to Luminant and other generators in Texas. After releasing a proposed rule in November 2014 and receiving comments from a number of parties, including Luminant and the State of Texas in April 2015, the EPA released a final rule in January 2016 approving in part and disapproving in part Texas' SIP for Regional Haze and issuing a FIP for Regional Haze. In the rule, the EPA asserts that the Texas SIP does not show reasonable progress in improving visibility for two areas in Texas and that its long-term strategy fails to make emission reductions needed to achieve reasonable progress in improving visibility in the Wichita Mountains of Oklahoma. Unlike the proposed rule and inconsistent with how the EPA has applied Regional Haze rules to other states, the EPA's final rule does not treat Texas's compliance with the CSAPR as satisfying its obligations under the BART portion of the Regional Haze Program. The EPA concluded that it would not be appropriate to finalize that determination at this time given the remand of the CSAPR budgets. In our view, the EPA's proposed FIP for Texas goes beyond the requirements of the CAA and sets emission limits on a unit-by-unit basis for 15 electricity generation units in Texas. The EPA's proposed emission limits assume additional control equipment for specific coal fueled generation units across Texas, including new flue gas desulfurization systems (scrubbers) at seven generation units and upgrades to existing scrubbers at seven generation units. Specifically for Luminant, the EPA's emission limitations are based on new scrubbers at Big Brown Units 1 and 2 and Monticello Units 1 and 2 and scrubber upgrades at Martin Lake Units 1, 2 and 3, Monticello Unit 3 and Sandow Unit 4. Luminant is continuing to evaluate the requirements and potential financial and operational impacts of the rule, but new scrubbers at the Big Brown and Monticello units necessary to achieve the emission limits required by the FIP (if those limits are possible to attain), along with the existence of low wholesale power prices in ERCOT, would likely challenge the long-term economic viability of those units. Under the terms of the rule, the scrubber upgrades will be required by February 2019, and the new scrubbers will be required by February 2021. In March 2016, Luminant and a number of other parties, including the State of Texas, filed petitions for review in the US Fifth Circuit Court challenging the FIP on Texas. Luminant and other parties also filed motions to stay the FIP while the court reviews the legality of the EPA's action. In July 2016, the Fifth Circuit Court denied the EPA's motion to dismiss our challenge to the FIP and denied the EPA's motion to transfer the challenges Luminant, the other industry petitioners and the State of Texas filed to the D.C. Circuit Court. In addition, the Fifth Circuit Court granted the motions to stay filed by Luminant, the other industry petitioners and the State of Texas pending final review of the petitions for review. The case is currently abated until the end of November 2016 in order to allow the parties to pursue settlement discussions. While we cannot predict the outcome of the rulemaking and legal proceedings, the result may have a material impact on our results of operations, liquidity or financial condition.

State Implementation Plan (SIP)

In February 2013, in response to a petition for rulemaking filed by the Sierra Club, the EPA proposed a rule requiring certain states to replace SIP exemptions for excess emissions during malfunctions with an affirmative defense. Texas was not included in that original proposal since it already had an EPA-approved affirmative defense provision in its SIP. In 2014, as a result of a D.C. Circuit Court decision striking down an affirmative defense in another EPA rule, the EPA revised its 2013 proposal to extend the EPA's proposed findings of inadequacy to states that have affirmative defense provisions, including Texas. The EPA's revised proposal would require Texas to remove or replace its EPA-approved affirmative defense provisions for excess emissions during startup, shutdown and maintenance events. In May 2015, the EPA finalized the proposal. In June 2015, we filed a petition for review in the Fifth Circuit Court challenging certain aspects of the EPA's final rule as they apply to the Texas SIP. The State of Texas and other parties have also filed similar petitions in the Fifth Circuit Court. In August 2015, the Fifth Circuit Court transferred the petitions that Luminant and other parties filed to the D.C. Circuit Court, and in October 2015 the petitions were consolidated with the pending petitions challenging the EPA's action in the D.C. Circuit Court. Briefing in the D.C. Circuit Court on the challenges was completed in October 2016. We cannot predict the timing or outcome of this proceeding.

In June 2014, the Sierra Club filed a petition in the D.C. Circuit Court seeking review of several EPA regulations containing affirmative defenses for malfunctions, including the Mercury and Air Toxics Standard (MATS) rule for power plants. In the petition, the Sierra Club contends this affirmative defense is no longer permissible in light of a D.C. Circuit Court decision regarding similar defenses applicable to the cement industry. Luminant filed a motion to intervene in this case. In July 2014, the D.C. Circuit Court ordered the case stayed pending the EPA's consideration of a petition for administrative reconsideration of the regulations at issue. In December 2014, the EPA signed a proposal to make technical corrections to the MATS rule. We filed comments on this proposal in April 2015. In March 2016, the EPA finalized the MATS technical corrections, including the removal of affirmative defense for malfunctions. Except as set forth above, we cannot predict the timing or outcome of future proceedings related to this petition, the petition for administrative reconsideration that is pending before the EPA or the financial effects of these proceedings, if any.

Other Matters

We are involved in various legal and administrative proceedings in the normal course of business, the ultimate resolutions of which, in the opinion of management, are not anticipated to have a material effect on our results of operations, liquidity or financial condition.

12. MEMBERSHIP INTERESTS

Under applicable law, we are prohibited from paying any distribution to the extent that immediately following payment of such distribution, we would be insolvent.

The agreement governing the DIP Roll Facilities generally restricts our ability to make distributions or loans to any of our parent companies or their subsidiaries unless such distributions or loans were expressly permitted under the agreement governing such facility.

Membership Interests

The following tables present the changes to membership interests for the nine months ended September 30, 2016 and 2015:

Nine Months Ended September 30, 2016

	Capital Account	Accumulated Other Comprehensive Loss	Total Membership Interests
Balance at December 31, 2015	$ (22,851)	$ (33)	$ (22,884)
Net loss	(656)	—	(656)
Net effects of cash flow hedges	—	1	1
Other	—	—	—
Balance at September 30, 2016	$ (23,507)	$ (32)	$ (23,539)

Nine Months Ended September 30, 2015

	Capital Account	Accumulated Other Comprehensive Loss	Total Membership Interests
Balance at December 31, 2014	$ (18,174)	$ (35)	$ (18,209)
Net loss	(3,067)	—	(3,067)
Net effect of cash flow hedges	—	1	1
Balance at June 30, 2015	$ (21,241)	$ (34)	$ (21,275)

13. FAIR VALUE MEASUREMENTS

Accounting standards related to the determination of fair value define fair value as the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between willing market participants at the measurement date. We use a mid-market valuation convention (the mid-point price between bid and ask prices) as a practical expedient to measure fair value for the majority of our assets and liabilities subject to fair value measurement on a recurring basis. We primarily use the market approach for recurring fair value measurements and use valuation techniques to maximize the use of observable inputs and minimize the use of unobservable inputs.

We categorize our assets and liabilities recorded at fair value based upon the following fair value hierarchy:

- Level 1 valuations use quoted prices in active markets for identical assets or liabilities that are accessible at the measurement date. An active market is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis. Our Level 1 assets and liabilities include exchange-traded commodity contracts. For example, some of our derivatives are NYMEX or the IntercontinentalExchange (an electronic commodity derivative exchange) futures and swaps transacted through clearing brokers for which prices are actively quoted.

- Level 2 valuations use inputs that, in the absence of actively quoted market prices, are observable for the asset or liability, either directly or indirectly. Level 2 inputs include: (a) quoted prices for similar assets or liabilities in active markets, (b) quoted prices for identical or similar assets or liabilities in markets that are not active, (c) inputs other than quoted prices that are observable for the asset or liability such as interest rates and yield curves observable at commonly quoted intervals and (d) inputs that are derived principally from or corroborated by observable market data by correlation or other mathematical means. Our Level 2 valuations utilize over-the-counter broker quotes, quoted prices for similar assets or liabilities that are corroborated by correlations or other mathematical means, and other valuation inputs. For example, our Level 2 assets and liabilities include forward commodity positions at locations for which over-the-counter broker quotes are available.

- Level 3 valuations use unobservable inputs for the asset or liability. Unobservable inputs are used to the extent observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date. We use the most meaningful information available from the market combined with internally developed valuation methodologies to develop our best estimate of fair value. For example, our Level 3 assets and liabilities include certain derivatives with values derived from pricing models that utilize multiple inputs to the valuations, including inputs that are not observable or easily corroborated through other means. See further discussion below.

Prior to the Effective Date, our valuation policies and procedures were developed, maintained and validated by an EFH Corp. centralized risk management group that reported to the EFH Corp. Chief Financial Officer. Risk management functions include commodity price reporting and validation, valuation model validation, risk analytics, risk control, credit risk management and risk reporting.

We utilize several different valuation techniques to measure the fair value of assets and liabilities, relying primarily on the market approach of using prices and other market information for identical and/or comparable assets and liabilities for those items that are measured on a recurring basis. These methods include, among others, the use of broker quotes and statistical relationships between different price curves.

In utilizing broker quotes, we attempt to obtain multiple quotes from brokers (generally non-binding) that are active in the commodity markets in which we participate (and require at least one quote from two brokers to determine a pricing input as observable); however, not all pricing inputs are quoted by brokers. The number of broker quotes received for certain pricing inputs varies depending on the depth of the trading market, each individual broker's publication policy, recent trading volume trends and various other factors.

Probable loss from default by either us or our counterparties is considered in determining the fair value of derivative assets and liabilities. These non-performance risk adjustments take into consideration credit enhancements and the credit risks associated with our credit standing and the credit standing of our counterparties (see Note 14 for additional information regarding credit risk associated with our derivatives). We utilize credit ratings and default rate factors in calculating these fair value measurement adjustments.

Certain derivatives and financial instruments are valued utilizing option pricing models that take into consideration multiple inputs including, but not limited to, commodity prices, volatility factors, discount rates and other market based factors. Additionally, when there is not a sufficient amount of observable market data, valuation models are developed that incorporate proprietary views of market factors. Significant unobservable inputs used to develop the valuation models include volatility curves, correlation curves, illiquid pricing locations and credit/non-performance risk assumptions. Those valuation models are generally used in developing long-term forward price curves for certain commodities. We believe the development of such curves is consistent with industry practice; however, the fair value measurements resulting from such curves are classified as Level 3.

The significant unobservable inputs and valuation models are developed by employees trained and experienced in market operations and fair value measurements and validated by the company's risk management group, which also further analyzes any significant changes in Level 3 measurements. Significant changes in the unobservable inputs could result in significant upward or downward changes in the fair value measurement.

With respect to amounts presented in the following fair value hierarchy tables, the fair value measurement of an asset or liability (e.g., a contract) is required to fall in its entirety in one level, based on the lowest level input that is significant to the fair value measurement. Certain assets and liabilities would be classified in Level 2 instead of Level 3 of the hierarchy except for the effects of credit reserves and non-performance risk adjustments, respectively. Assessing the significance of a particular input to the fair value measurement in its entirety requires judgment, considering factors specific to the asset or liability being measured.

Assets and liabilities measured at fair value on a recurring basis consisted of the following:

September 30, 2016	Level 1	Level 2	Level 3 (a)	Reclassification (b)	Total
Assets:					
Commodity contracts	$ 118	$ 97	$ 109	$ 4	$ 328
Nuclear decommissioning trust – equity securities (c)	410	—	—	—	410
Nuclear decommissioning trust – debt securities (c)	—	348	—	—	348
Subtotal	$ 528	$ 445	$ 109	$ 4	$ 1,086
Assets measured at net asset value (d):					
Nuclear decommissioning trust - equity securities (c)					237
Total assets					$ 1,323
Liabilities:					
Commodity contracts	$ 97	$ 17	$ 12	$ 4	$ 130
Total liabilities	$ 97	$ 17	$ 12	$ 4	$ 130

December 31, 2015	Level 1	Level 2	Level 3 (a)	Reclassification (b)	Total
Assets:					
Commodity contracts	$ 385	$ 41	$ 49	$ —	$ 475
Nuclear decommissioning trust – equity securities (c)	380	219	—	—	599
Nuclear decommissioning trust – debt securities (c)	—	319	—	—	319
Total assets	$ 765	$ 579	$ 49	$ —	$ 1,393
Liabilities:					
Commodity contracts	$ 128	$ 64	$ 12	$ —	$ 204
Total liabilities	$ 128	$ 64	$ 12	$ —	$ 204

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(a) See table below for description of Level 3 assets and liabilities.

(b) Fair values are determined on a contract basis, but certain contracts result in a current asset and a noncurrent liability, or vice versa, as presented in the condensed consolidated balance sheets.

(c) The nuclear decommissioning trust investment is included in the investments line in the condensed consolidated balance sheets. See Note 16.

(d) Certain investments measured at fair value using the net asset value per share (or its equivalent) have not been classified in the fair value hierarchy. This presentation is only allowed for periods beginning after December 15, 2015. The fair value amounts presented in this line are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the condensed consolidated balance sheets.

Commodity contracts consist primarily of natural gas, electricity, fuel oil, uranium and coal agreements and include financial instruments entered into for hedging purposes as well as physical contracts that have not been designated normal purchases or sales. See Note 14 for further discussion regarding derivative instruments.

Nuclear decommissioning trust assets represent securities held for the purpose of funding the future retirement and decommissioning of our nuclear generation facility. These investments include equity, debt and other fixed-income securities consistent with investment rules established by the NRC and the PUCT.

The following tables present the fair value of the Level 3 assets and liabilities by major contract type and the significant unobservable inputs used in the valuations at September 30, 2016 and December 31, 2015:

September 30, 2016

Contract Type (a)	Fair Value			Valuation Technique	Significant Unobservable Input	Range (b)
	Assets	Liabilities	Total			
Electricity purchases and sales	$ 39	$ (1)	$ 38	Valuation Model	Hourly price curve shape (d)	$0 to $35/ MWh
					Illiquid delivery periods for ERCOT hub power prices and heat rates (e)	$30 to $70/ MWh
Electricity spread options	31	(4)	27	Option Pricing Model	Gas to power correlation (f)	50% to 95%
					Power volatility (g)	10% to 60%
Electricity congestion revenue rights	32	(6)	26	Market Approach (h)	Illiquid price differences between settlement points (i)	$0 to $10/ MWh
Other (j)	7	(1)	6			
Total	$ 109	$ (12)	$ 97			

December 31, 2015

Contract Type (a)	Fair Value			Valuation Technique	Significant Unobservable Input	Range (b)
	Assets	Liabilities	Total			
Electricity purchases and sales	$ 1	$ (1)	$ —	Valuation Model	Illiquid pricing locations (c)	$15 to $35/ MWh
					Hourly price curve shape (d)	$15 to $45/ MWh
Electricity spread options	2	(7)	(5)	Option Pricing Model	Gas to power correlation (f)	35% to 80%
					Power volatility (g)	10% to 35%
Electricity congestion revenue rights	39	(4)	35	Market Approach (h)	Illiquid price differences between settlement points (i)	$0 to $10/ MWh
Other (j)	7	—	7			
Total	$ 49	$ (12)	$ 37			

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(a) Electricity purchase and sales contracts include power and heat rate hedging positions in the ERCOT regions. Electricity spread options contracts consist of physical electricity call options. Electricity congestion revenue rights contracts consist of forward purchase contracts (swaps and options) used to hedge electricity price differences between settlement points within ERCOT.

(b) The range of the inputs may be influenced by factors such as time of day, delivery period, season and location.

(c) Based on the historical range of forward average monthly ERCOT hub and load zone prices.

(d) Based on the historical range of forward average hourly ERCOT North Hub prices.

(e) Based on historical forward ERCOT power price and heat rate variability.

(f) Estimate of the historical range based on forward natural gas and on-peak power prices for the ERCOT hubs most relevant to our spread options.
(g) Based on historical forward price changes.
(h) While we use the market approach, there is insufficient market data to consider the valuation liquid.
(i) Based on the historical price differences between settlement points within the ERCOT hubs and load zones.
(j) Other includes contracts for ancillary services, natural gas, power options, coal and coal options.

There were no significant transfers between Level 1 and Level 2 of the fair value hierarchy for the three and nine months ended September 30, 2016 and 2015. See the table of changes in fair values of Level 3 assets and liabilities below for discussion of transfers between Level 2 and Level 3 for the three and nine months ended September 30, 2016 and 2015. During the three months ended September 30, 2016, in conjunction with the Lamar and Forney Acquisition, we assumed certain electricity spread options that are classified in Level 3 of the fair value hierarchy.

The following table presents the changes in fair value of the Level 3 assets and liabilities for the three and nine months ended September 30, 2016 and 2015.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Net asset (liability) balance at beginning of period	$ (9)	$ 44	$ 37	$ 35
Total unrealized valuation gains (losses)	126	(1)	122	13
Purchases, issuances and settlements (a):				
Purchases	11	5	37	37
Issuances	(4)	(2)	(20)	(7)
Settlements	(24)	(19)	(51)	(44)
Transfers into Level 3 (b)	—	—	1	—
Transfers out of Level 3 (b)	—	—	1	(7)
Net liabilities assumed in the Lamar and Forney Acquisition (Note 3)	(3)	—	(30)	—
Net change (c)	106	(17)	60	(8)
Net asset (liability) balance at end of period	$ 97	$ 27	$ 97	$ 27
Unrealized valuation gains (losses) relating to instruments held at end of period	$ 92	$ 1	$ 98	$ 1

(a) Settlements reflect reversals of unrealized mark-to-market valuations previously recognized in net income. Purchases and issuances reflect option premiums paid or received.
(b) Includes transfers due to changes in the observability of significant inputs. Transfers in and out occur at the end of each quarter, which is when the assessments are performed. All Level 3 transfers during the periods presented are in and out of Level 2.
(c) Substantially all changes in values of commodity contracts (excluding net liabilities assumed in the Lamar and Forney Acquisition) are reported in the condensed statements of consolidated income (loss) in net gain from commodity hedging and trading activities. Activity excludes changes in fair value in the month the positions settled as well as amounts related to positions entered into and settled in the same quarter.

14. COMMODITY AND OTHER DERIVATIVE CONTRACTUAL ASSETS AND LIABILITIES

Strategic Use of Derivatives

We transact in derivative instruments, such as options, swaps, futures and forward contracts, to manage commodity price risk. See Note 13 for a discussion of the fair value of derivatives.

Commodity Hedging and Trading Activity — We utilize natural gas derivatives as hedging instruments designed to reduce exposure to changes in future electricity prices due to changes in the price of natural gas, thereby hedging future revenues from electricity sales from our generation assets. In ERCOT, the wholesale price of electricity has generally moved with the price of natural gas. We also enter into derivatives, including electricity, natural gas, fuel oil, uranium, emission and coal instruments, generally for short-term hedging purposes. Unrealized gains and losses arising from changes in the fair value of hedging and trading instruments as well as realized gains and losses upon settlement of the instruments are reported in the condensed statements of consolidated income (loss) in net gain from commodity hedging and trading activities.

Termination of Commodity Hedges and Interest Rate Swaps — Commodity hedges and interest rate swaps entered into prior to the Petition Date are deemed to be forward contracts under the Bankruptcy Code. The Bankruptcy Filing constituted an event of default under these arrangements, and in accordance with the contractual terms, counterparties terminated certain positions shortly after the Bankruptcy Filing. The positions terminated consisted almost entirely of natural gas hedging positions and interest rate swaps that were secured by a first-lien interest in the same assets of TCEH on a pari passu basis with the TCEH Senior Secured Facilities and the TCEH Senior Secured Notes.

Entities with a first-lien security interest included counterparties to both our natural gas hedging positions and interest rate swaps, which had entered into master agreements that provided for netting and setoff of amounts related to these positions. Additionally, certain counterparties to only our interest rate swaps hold the same first-lien security interest. The total net liability of $1.243 billion as of September 30, 2016 is reported in the condensed consolidated balance sheets as a liability subject to compromise. Additionally, counterparties associated with the net liability are allowed, and, prior to the Effective Date, had been receiving, adequate protection payments related to their claims as permitted by TCEH's cash collateral order approved by the Bankruptcy Court (see Note 7).

Financial Statement Effects of Derivatives

Substantially all derivative contractual assets and liabilities are accounted for under mark-to-market accounting consistent with accounting standards related to derivative instruments and hedging activities. The following tables provide detail of derivative contractual assets and liabilities as reported in the condensed consolidated balance sheets at September 30, 2016 and December 31, 2015. Derivative asset and liability totals represent the net value of the contract, while the balance sheet totals represent the gross value of the contract. All amounts relate to commodity contracts.

	September 30, 2016			December 31, 2015		
	Derivative Assets	Derivative Liabilities	Total	Derivative Assets	Derivative Liabilities	Total
Current assets	$ 256	$ —	$ 256	$ 465	$ —	$ 465
Noncurrent assets	72	—	72	10	—	10
Current liabilities	(4)	(121)	(125)	—	(203)	(203)
Noncurrent liabilities	—	(5)	(5)	—	(1)	(1)
Net assets (liabilities)	$ 324	$ (126)	$ 198	$ 475	$ (204)	$ 271

At September 30, 2016 and December 31, 2015, there were no derivative positions accounted for as cash flow or fair value hedges.

The pretax effect of derivatives on net income (loss), including realized and unrealized effects, totaled $239 million and $130 million in net gains in the three months ended September 30, 2016 and 2015, respectively, and $194 million and $281 million in net gains in the nine months ended September 30, 2016 and 2015, respectively, all of which related to commodity contracts reported in net gain from commodity hedging and trading activities in the condensed statements of consolidated income (loss). Amounts represent changes in fair value of positions in the derivative portfolio during the period, as realized amounts related to positions settled are assumed to equal reversals of previously recorded unrealized amounts.

The pretax effect (all losses) on net income and other comprehensive income (OCI) of derivative instruments previously accounted for as cash flow hedges was immaterial in both the three and nine months ended September 30, 2016 and 2015. There were no amounts recognized in OCI for the three and nine months ended September 30, 2016 and 2015.

Accumulated other comprehensive income related to cash flow hedges at September 30, 2016 and December 31, 2015 totaled $32 million and $33 million, respectively, in net losses (after-tax), substantially all of which relates to interest rate swaps previously accounted for as cash flow hedges. In conjunction with fresh start reporting (see Note 1), we expect that the balances in accumulated other comprehensive income will be eliminated from our condensed consolidated balance sheet on the Effective Date.

Balance Sheet Presentation of Derivatives

Consistent with elections under US GAAP to present amounts on a gross basis, we report derivative assets and liabilities in the condensed consolidated balance sheets without taking into consideration netting arrangements we have with counterparties. We may enter into offsetting positions with the same counterparty, resulting in both assets and liabilities. Volatility in underlying commodity prices can result in significant changes in assets and liabilities presented from period to period.

Margin deposits that contractually offset these derivative instruments are reported separately in the condensed consolidated balance sheets. Margin deposits received from counterparties are either used for working capital or other general corporate purposes or, if there are restrictions on the use of cash, amounts are deposited in a separate restricted cash account. At September 30, 2016 and December 31, 2015, essentially all margin deposits held were unrestricted.

We maintain standardized master netting agreements with certain counterparties that allow for the netting of positive and negative exposures. These agreements contain credit enhancements that allow for the right to offset assets and liabilities and collateral received in order to reduce credit exposure between us and the counterparty. These agreements contain specific language related to margin requirements, monthly settlement netting, cross-commodity netting and early termination netting, which is negotiated with the contract counterparty.

The following tables reconcile our derivative assets and liabilities as presented in the condensed consolidated balance sheets to net amounts after taking into consideration netting arrangements with counterparties and financial collateral:

September 30, 2016

	Amounts Presented in Balance Sheet	Offsetting Instruments (a)	Financial Collateral (Received) Pledged (b)	Net Amounts
Derivative assets:				
Commodity contracts	$ 328	$ (126)	$ (33)	$ 169
Derivative liabilities:				
Commodity contracts	(130)	126	—	(4)
Net amounts	$ 198	$ —	$ (33)	$ 165

December 31, 2015

	Amounts Presented in Balance Sheet	Offsetting Instruments (a)	Financial Collateral (Received) Pledged (b)	Net Amounts
Derivative assets:				
Commodity contracts	$ 475	$ (145)	$ (147)	$ 183
Derivative liabilities:				
Commodity contracts	(204)	145	6	(53)
Net amounts	$ 271	$ —	$ (141)	$ 130

(a) Amounts presented exclude trade accounts receivable and payable related to settled financial instruments.
(b) Financial collateral consists entirely of cash margin deposits.

Derivative Volumes

The following table presents the gross notional amounts of derivative volumes at September 30, 2016 and December 31, 2015:

	September 30, 2016	December 31, 2015	
Derivative type	Notional Volume		Unit of Measure
Natural gas (a)	1,464	1,489	Million MMBtu
Electricity	85,019	58,022	GWh
Congestion Revenue Rights (b)	114,474	106,260	GWh
Coal	6	10	Million US tons
Fuel oil	21	35	Million gallons
Uranium	200	75	Thousand pounds

(a) Represents gross notional forward sales, purchases and options transactions, locational basis swaps and other natural gas transactions.
(b) Represents gross forward purchases associated with instruments used to hedge electricity price differences between settlement points within ERCOT.

Credit Risk-Related Contingent Features of Derivatives

The agreements that govern our derivative instrument transactions may contain certain credit risk-related contingent features that could trigger liquidity requirements in the form of cash collateral, letters of credit or some other form of credit enhancement. Certain of these agreements require the posting of collateral if our credit rating is downgraded by one or more credit rating agencies.

At September 30, 2016 and December 31, 2015, the fair value of liabilities related to derivative instruments under agreements with credit risk-related contingent features that were not fully collateralized totaled $11 million and $58 million, respectively. The liquidity exposure associated with these liabilities was reduced by cash and letter of credit postings with counterparties totaling $4 million and $31 million at September 30, 2016 and December 31, 2015, respectively. If all the credit risk-related contingent features related to these derivatives had been triggered, including cross-default provisions, remaining liquidity requirements would be immaterial at both September 30, 2016 and December 31, 2015.

In addition, certain derivative agreements include cross-default provisions that could result in the settlement of such contracts if there were a failure under other financing arrangements to meet payment terms or to comply with other covenants that could result in the acceleration of such indebtedness. At September 30, 2016 and December 31, 2015, the fair value of derivative liabilities subject to such cross-default provisions were immaterial. At both September 30, 2016 and December 31, 2015, no cash collateral or letters of credit were posted with these counterparties, and there was no liquidity exposure associated with these liabilities.

As discussed immediately above, the aggregate fair values of liabilities under derivative agreements with credit risk-related contingent features, including cross-default provisions, totaled $12 million and $59 million at September 30, 2016 and December 31, 2015, respectively. These amounts are before consideration of cash and letter of credit collateral posted, net accounts receivable and derivative assets under netting arrangements and assets subject to related liens.

Some commodity derivative contracts contain credit risk-related contingent features that do not provide for specific amounts to be posted if the features are triggered. These provisions include material adverse change, performance assurance, and other clauses that generally provide counterparties with the right to request additional credit enhancements. The amounts disclosed above exclude credit risk-related contingent features that do not provide for specific amounts or exposure calculations.

Concentrations of Credit Risk Related to Derivatives

We have concentrations of credit risk with the counterparties to our derivative contracts. At September 30, 2016, total credit risk exposure to all counterparties related to derivative contracts totaled $460 million (including associated accounts receivable). The net exposure to those counterparties totaled $268 million at September 30, 2016 after taking into effect netting arrangements, setoff provisions and collateral, with the largest net exposure to a single counterparty totaling $114 million. At September 30, 2016, the credit risk exposure to the banking and financial sector represented 65% of the total credit risk exposure and 57% of the net exposure.

Exposure to banking and financial sector counterparties is considered to be within an acceptable level of risk tolerance because all of this exposure is with counterparties with investment grade credit ratings. However, this concentration increases the risk that a default by any of these counterparties would have a material effect on our financial condition, results of operations and liquidity. The transactions with these counterparties contain certain provisions that would require the counterparties to post collateral in the event of a material downgrade in their credit rating.

We maintain credit risk policies with regard to our counterparties to minimize overall credit risk. These policies authorize specific risk mitigation tools including, but not limited to, use of standardized master agreements that allow for netting of positive and negative exposures associated with a single counterparty. Credit enhancements such as parent guarantees, letters of credit, surety bonds, liens on assets and margin deposits are also utilized. Prospective material changes in the payment history or financial condition of a counterparty or downgrade of its credit quality result in the reassessment of the credit limit with that counterparty. The process can result in the subsequent reduction of the credit limit or a request for additional financial assurances. An event of default by one or more counterparties could subsequently result in termination-related settlement payments that reduce available liquidity if amounts are owed to the counterparties related to the derivative contracts or delays in receipts of expected settlements if the counterparties owe amounts to us.

15. RELATED-PARTY TRANSACTIONS

The following represent our significant related-party transactions. As of the Effective Date, pursuant to the Plan of Reorganization, the Sponsor Group, EFH Corp., EFIH, Oncor Holdings and Oncor ceased being affiliates of Vistra Energy and its subsidiaries, including the TCEH Debtors and the Contributed EFH Debtors.

- Our retail operations pay Oncor for services it provides, principally the delivery of electricity. Expenses recorded for these services, reported in fuel, purchased power costs and delivery fees, totaled $265 million and $279 million for the three months ended September 30, 2016 and 2015, respectively, and $700 million and $739 million for the nine months ended September 30, 2016 and 2015, respectively. The fees are based on rates regulated by the PUCT that apply to all REPs. The condensed consolidated balance sheets at September 30, 2016 and December 31, 2015 reflect amounts due currently to Oncor totaling $146 million and $118 million, respectively, (included in trade accounts and other payables to affiliates) largely related to these electricity delivery fees.

- Contributions to the EFH Corp. retirement plan by both Oncor and TCEH in 2014 and 2015 resulted in the EFH Corp. retirement plan being fully funded as calculated under the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA). As a result of the Bankruptcy Filing, participants in the EFH Corp. retirement plan who choose to retire would not be eligible for the lump sum payout option under the retirement plan unless the EFH Corp. retirement plan was fully funded. In September 2016, a cash contribution totaling $2 million was made to the EFH Corp. retirement plan, all of which was contributed by TCEH, which resulted in the EFH Corp. retirement plan continuing to be fully funded as calculated under the provisions of ERISA. The balance of the advance totaled $21 million at September 30, 2016, with $6 million recorded as a current asset and $15 million recorded as a noncurrent asset. The balance of the advance totaled $24 million at December 31, 2015, with $6 million recorded as a current asset and $18 million recorded as a noncurrent asset. On the Effective Date, the EFH Corp. retirement plan was transferred to Vistra Energy pursuant to the Plan of Reorganization.

  Receivables from affiliates are measured at historical cost and primarily have consisted of notes receivable for cash loaned to EFH Corp. for debt principal and interest payments and other general corporate purposes of EFH Corp. as discussed above. We review economic conditions, counterparty credit scores and historical payment activity to assess the overall collectability of our affiliated receivables. There were no credit loss allowances at September 30, 2016 and December 31, 2015.

- A former subsidiary of EFH Corp. (and following the Effective Date, a subsidiary of Vistra Energy) bills our subsidiaries for information technology, financial, accounting and other administrative services at cost. These charges, which are largely settled in cash and primarily reported in SG&A expenses, totaled $51 million and $52 million for the three months ended September 30, 2016 and 2015, respectively, and $157 million and $151 million for the nine months ended September 30, 2016 and 2015, respectively.

For the three months ended March 31, 2016, we settled a $2 million payable related to information technology assets purchased from a subsidiary of EFH Corp. in December 2015. For the three months ended March 31, 2015, we settled a $15 million payable related to information technology assets purchased from a subsidiary of EFH Corp. in 2014. For the three months ended June 30, 2015, TCEH purchased and settled $12 million of additional assets. Following the Effective Date, the assets are substantially for the use of Vistra Energy and its subsidiaries.

- Under Texas regulatory provisions, the trust fund for decommissioning the Comanche Peak nuclear generation facility is funded by a delivery fee surcharge billed to REPs by Oncor, as collection agent, and remitted monthly to us (and following the Effective Date, a subsidiary of Vistra Energy) for contribution to the trust fund with the intent that the trust fund assets, reported in investments in our condensed consolidated balance sheets, will ultimately be sufficient to fund the future decommissioning liability, reported in noncurrent liabilities in our condensed consolidated balance sheets. The delivery fee surcharges remitted to us totaled $6 million and $5 million for the three months ended September 30, 2016 and 2015, respectively, and $15 million and $13 million for the nine months ended September 30, 2016 and 2015, respectively. Income and expenses associated with the trust fund and the decommissioning liability incurred by us (and following the Effective Date, a subsidiary of Vistra Energy) are offset by a net change in a receivable/payable that ultimately will be settled through changes in Oncor's delivery fee rates. At September 30, 2016 and December 31, 2015, the excess of the trust fund balance over the decommissioning liability resulted in a payable totaling $465 million and $409 million, respectively, and is reported in noncurrent liabilities.

- EFH Corp. files consolidated federal income tax and Texas state margin tax returns that include our results; however, under a Federal and State Income Tax Allocation Agreement, our federal income tax and Texas margin tax expense and related balance sheet amounts, including income taxes payable to or receivable from EFH Corp., are recorded as if we file our own corporate income tax return. As of September 30, 2016 and December 31, 2015, we had current income tax liabilities due to EFH Corp. of $10 million and $11 million, respectively. We made tax payments to EFH Corp. of $22 million and $26 million for the nine months ended September 30, 2016 and 2015, respectively. See Note 5 for discussion of cessation of payment of federal income taxes pursuant to the Settlement Agreement.

- Oncor collected transition surcharges from its customers to recover the payment obligations related to its securitization (transition) bonds issued to recover generation-related regulatory assets. As of September 30, 2016, Oncor had over-collected transition charges of approximately $1 million that is expected to be refunded to us upon PUCT approval.

- Oncor had requirements in place to assure adequate creditworthiness to support TCEH's obligation to collect securitization bond-related (transition) charges on its behalf. Under these requirements, as a result of TCEH's credit rating being below investment grade, we were required to post collateral support in an amount equal to estimated transition charges over specified time periods. Accordingly, at December 31, 2015, we had posted letters of credit and/or cash in the amount of $6 million for the benefit of Oncor. In May 2016, the last series of Oncor's securitization bonds matured and the letters of credit were released.

- In 2007, TCEH entered into the TCEH Senior Secured Facilities with syndicates of financial institutions and other lenders. These syndicates included affiliates of GS Capital Partners, which is a member of the Sponsor Group. Affiliates of each member of the Sponsor Group have from time to time engaged in commercial banking transactions with us and/or provided financial advisory services to us, in each case in the normal course of business.

- Affiliates of GS Capital Partners were parties to certain commodity and interest rate hedging transactions with us in the normal course of business.

- Affiliates of the Sponsor Group have sold or acquired, and in the future may sell or acquire, debt or debt securities issued by us in open market transactions or through loan syndications.

See Notes 9 and 10 for discussion of guarantees by EFCH of certain of our debt. See Note 2 for a discussion of certain agreements entered into on the Effective Date between EFH Corp. and Vistra Energy with respect to the separation of the entities.

16. SUPPLEMENTARY FINANCIAL INFORMATION

Other Income and Deductions

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Other income:				
Insurance settlement	$ —	$ —	$ 9	$ —
Sale of land	2	—	2	6
All other	3	4	5	9
Total other income	$ 5	$ 4	$ 16	$ 15
Other deductions:				
Adjustment to asbestos liability	$ 11	$ —	$ 11	$ —
Write-off of generation equipment	4	—	45	—
Fees associated with DIP Roll Facilities	5		5	
Impairment of favorable purchase contracts (Note 4)	—	—	—	8
Impairment of emission allowances (Note 4)	—	4	—	55
Impairment of mining development costs (Note 4)	—	19	—	19
All other	8	2	14	4
Total other deductions	$ 28	$ 25	$ 75	$ 86

Restricted Cash

	September 30, 2016		December 31, 2015	
	Current Assets	Noncurrent Assets	Current Assets	Noncurrent Assets
Amounts related to the DIP Roll Facility (Note 9)	$ —	$ 650	$ 519	$ —
Amounts related to TCEH's pre-petition Letter of Credit Facility (Note 10)	—	—	—	507
Amounts related to margin deposits held	12	—	—	—
Total restricted cash	$ 12	$ 650	$ 519	$ 507

Trade Accounts Receivable

	September 30, 2016	December 31, 2015
Wholesale and retail trade accounts receivable	$ 763	$ 542
Allowance for uncollectible accounts	(13)	(9)
Trade accounts receivable — net	$ 750	$ 533

Gross trade accounts receivable at September 30, 2016 and December 31, 2015 included unbilled revenues of $245 million and $231 million, respectively.

Allowance for Uncollectible Accounts Receivable

	Nine Months Ended September 30,	
	2016	2015
Allowance for uncollectible accounts receivable at beginning of period	$ 9	$ 15
Increase for bad debt expense	20	29
Decrease for account write-offs	(16)	(28)
Allowance for uncollectible accounts receivable at end of period	$ 13	$ 16

Inventories by Major Category

	September 30, 2016	December 31, 2015
Materials and supplies	$ 235	$ 226
Fuel stock	119	170
Natural gas in storage	20	32
Total inventories	$ 374	$ 428

Investments

	September 30, 2016	December 31, 2015
Nuclear plant decommissioning trust	$ 995	$ 918
Land	36	36
Miscellaneous other	7	8
Total investments	$ 1,038	$ 962

Nuclear Decommissioning Trust — Investments in a trust that will be used to fund the costs to decommission the Comanche Peak nuclear generation plant are carried at fair value. Decommissioning costs are being recovered from Oncor's customers as a delivery fee surcharge over the life of the plant and deposited by TCEH (and following the Effective Date, a subsidiary of Vistra Energy) in the trust fund. Income and expense associated with the trust fund and the decommissioning liability are offset by a corresponding change in a receivable/payable (currently a payable reported in noncurrent liabilities) that will ultimately be settled through changes in Oncor's delivery fees rates (see Note 15). The nuclear decommissioning trust fund was not a debtor in the Chapter 11 Cases. A summary of investments in the fund follows:

	September 30, 2016			
	Cost (a)	Unrealized gain	Unrealized loss	Fair market value
Debt securities (b)	$ 327	$ 22	$ (1)	$ 348
Equity securities (c)	306	347	(6)	647
Total	$ 633	$ 369	$ (7)	$ 995

	December 31, 2015			
	Cost (a)	Unrealized gain	Unrealized loss	Fair market value
Debt securities (b)	$ 310	$ 11	$ (2)	$ 319
Equity securities (c)	291	315	(7)	599
Total	$ 601	$ 326	$ (9)	$ 918

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(a) Includes realized gains and losses on securities sold.

(b) The investment objective for debt securities is to invest in a diversified tax efficient portfolio with an overall portfolio rating of AA or above as graded by S&P or Aa2 by Moody's Investors Services, Inc. The debt securities are heavily weighted with municipal bonds. The debt securities had an average coupon rate of 3.56% and 3.68% at September 30, 2016 and December 31, 2015, respectively, and an average maturity of 8 years at both September 30, 2016 and December 31, 2015.

(c) The investment objective for equity securities is to invest tax efficiently and to match the performance of the S&P 500 Index.

Debt securities held at September 30, 2016 mature as follows: $109 million in one to five years, $82 million in five to ten years and $157 million after ten years.

The following table summarizes proceeds from sales of available-for-sale securities and the related realized gains and losses from such sales.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Realized gains	$ 3	$ 1	$ 3	$ 2
Realized losses	$ (2)	$ (2)	$ (2)	$ (3)
Proceeds from sales of securities	$ 46	$ 242	$ 201	$ 315
Investments in securities	$ (52)	$ (247)	$ (215)	$ (328)

Property, Plant and Equipment

At September 30, 2016 and December 31, 2015, property, plant and equipment of $10.359 billion and $9.349 billion, respectively, which is stated net of accumulated depreciation and amortization of $4.497 billion and $4.037 billion, respectively.

Asset Retirement and Mining Reclamation Obligations

These liabilities primarily relate to nuclear generation plant decommissioning, land reclamation related to lignite mining, removal of lignite/coal fueled plant ash treatment facilities and generation plant asbestos removal and disposal costs. There is no earnings impact with respect to changes in the nuclear plant decommissioning liability, as all costs are recoverable through the regulatory process as part of Oncor's delivery fees.

The following table summarizes the changes to these obligations, reported in other current liabilities and other noncurrent liabilities and deferred credits in the condensed consolidated balance sheets, for the nine months ended September 30, 2016:

	Nuclear Plant Decommissioning	Mining Land Reclamation	Other	Total
Liability at December 31, 2015	$ 508	$ 215	$ 107	$ 830
Additions:				
Accretion	22	16	5	43
Adjustment for new cost estimate	—	—	1	1
Incremental reclamation costs	—	14	12	26
Reductions:				
Payments	—	(37)	(3)	(40)
Liability at September 30, 2016	530	208	122	860
Less amounts due currently	—	(50)	(1)	(51)
Noncurrent liability at September 30, 2016	$ 530	$ 158	$ 121	$ 809

Other Noncurrent Liabilities and Deferred Credits

The balance of other noncurrent liabilities and deferred credits consists of the following:

	September 30, 2016	December 31, 2015
Uncertain tax positions, including accrued interest	$ —	$ 41
Asset retirement and mining reclamation obligations	809	764
Unfavorable purchase and sales contracts	525	543
Nuclear decommissioning fund excess over asset retirement obligation (Note 15)	465	409
Other, including retirement and other employee benefits	28	22
Total other noncurrent liabilities and deferred credits	$ 1,827	$ 1,779

Unfavorable Purchase and Sales Contracts — The amortization of unfavorable purchase and sales contracts totaled $6 million for both the three months ended September 30, 2016 and 2015 and $18 million and $17 million for the nine months ended September 30, 2016 and 2015, respectively. See Note 4 for intangible assets related to favorable purchase and sales contracts.

As of the Effective Date, unfavorable purchase and sales contracts were removed from the condensed consolidated balance sheet in conjunction with fresh start reporting for TCEH.

Fair Value of Debt

	September 30, 2016		December 31, 2015	
Debt:	**Carrying Amount**	**Fair Value**	**Carrying Amount**	**Fair Value**
Borrowings under debtor-in-possession or senior secured exit facilities (Note 9)	$ 3,382	$ 3,526	$ 1,425	$ 1,411
Long-term debt not subject to compromise, excluding capital lease obligations (Note 9)	$ 2	$ 2	$ 14	$ 15

We determine fair value in accordance with accounting standards as discussed in Note 13, and at September 30, 2016, our debt fair value represents Level 2 valuations. We obtain security pricing from an independent party who uses broker quotes and third-party pricing services to determine fair values. Where relevant, these prices are validated through subscription services such as Bloomberg. The fair value estimates of our pre-petition notes, loans and other debt reported as liabilities subject to compromise have been excluded from the table above.

Supplemental Cash Flow Information

	Nine Months Ended September 30,	
	2016	**2015**
Cash payments related to:		
Interest paid (a)	$ 1,064	$ 974
Capitalized interest	(9)	(8)
Interest paid (net of capitalized interest) (a)	$ 1,055	$ 966
Reorganization items (b)	$ 104	$ 114
Income taxes	$ 22	$ 26
Noncash investing and financing activities:		
Construction expenditures (c)	$ 53	$ 64

(a) This amount includes amounts paid for adequate protection.
(b) Represents cash payments for legal and other consulting services, including amounts paid on behalf of third parties pursuant to contractual obligations approved by the Bankruptcy Court.
(c) Represents end-of-period accruals for ongoing construction projects.

Item 4: Management's discussion and analysis.

The following discussion and analysis of our financial condition and results of operations for the three and nine months ended September 30, 2016 and 2015 should be read in conjunction with our condensed consolidated financial statements and the notes to those statements. This discussion relates to TCEH, the predecessor company of Vistra Energy. Results are impacted by the effects of the Bankruptcy Filing and the application of Financial Accounting Standards Board Accounting Standards Codification (ASC) 852, *Reorganizations.*

As described in Note 1 to the Financial Statements, Vistra Energy is considered a new reporting entity for accounting purposes as of the Effective Date, and its financial statements will reflect the application of fresh start reporting. Accordingly, the financial statements of the successor for periods subsequent to the Effective Date will not be comparable to the financial statements of the predecessor for periods prior to the Effective Date, as those previous periods do not give effect to any adjustments to the carrying values of assets or amounts of liabilities that might be necessary as a consequence of the Plan of Reorganization or the related application of fresh start reporting.

All dollar amounts in the tables in the following discussion and analysis are stated in millions of US dollars unless otherwise indicated.

Business

Prior to the Effective Date, TCEH was a holding company for subsidiaries engaged in competitive electricity market activities largely in Texas, including electricity generation, wholesale energy sales and purchases, commodity risk management, and retail electricity operations. On the Effective Date, subsidiaries of TCEH (the TCEH Debtors) and certain EFH Corp. subsidiaries (the Contributed EFH Debtors) emerged from the Chapter 11 Cases as subsidiaries of a newly-formed company, Vistra Energy. On the Effective Date, Vistra Energy was spun-off from EFH Corp. in a tax-free transaction to the former first lien creditors of TCEH (see Note 2 to the Financial Statements). As a result, as of the Effective Date, Vistra Energy is a holding company for subsidiaries principally engaged in the same activities as TCEH.

Significant Activities and Events and Items Influencing Future Performance

Filing under Chapter 11 of the United States Bankruptcy Code — On April 29, 2014 (the Petition Date), EFH Corp. and the substantial majority of its direct and indirect subsidiaries, including EFIH, EFCH and TCEH but excluding the Oncor Ring-Fenced Entities, (the Debtors) filed voluntary petitions for relief (the Bankruptcy Filing) under Chapter 11 of the United States Bankruptcy Code (the Bankruptcy Code) in the United States Bankruptcy Court for the District of Delaware (the Bankruptcy Court). In August 2016, the Bankruptcy Court entered an order confirming the Debtors' Third Amended Joint Plan of Reorganization (the Plan of Reorganization) solely as it pertains to the TCEH Debtors and the Contributed EFH Debtors. On October 3, 2016 (the Effective Date), the Plan of Reorganization solely with respect to the TCEH Debtors and the Contributed EFH Debtors became effective and the TCEH Debtors and the Contributed EFH Debtors completed their reorganization under the Bankruptcy Code and emerged from the Chapter 11 Cases. See Note 2 to the Financial Statements.

Workforce Reduction — In October 2016, we reduced our workforce by approximately 500 people in order to better align our cost structure, particularly as it relates to support functions within the business, to current market conditions. These market conditions include persistently low wholesale power prices, environmental regulatory pressure and a highly competitive retail market. As part of these reductions, we expect to incur severance costs of approximately $60 million.

Lamar and Forney Acquisition — In April 2016, Luminant purchased all of the membership interests in La Frontera Holdings, LLC, the indirect owner of two natural gas fueled generation facilities representing nearly 3,000 MW of capacity located in ERCOT, from a subsidiary of NextEra Energy, Inc. The facility in Forney, Texas has a capacity of 1,912 MW and the facility in Paris, Texas has a capacity of 1,076 MW. The aggregate purchase price was approximately $1.313 billion, which included the repayment of approximately $950 million of existing project financing indebtedness, plus approximately $236 million for cash and net working capital subject to final settlement. The purchase price was funded by cash-on-hand and additional borrowings under the DIP Facility totaling $1.1 billion. After completing the acquisition, we repaid approximately $230 million of borrowings under the DIP Revolving Credit Facility primarily utilizing cash acquired in the transaction. See Note 3 to the Financial Statements for further discussion of the acquisition.

DIP Roll Facilities — In August 2016, TCEH entered into the DIP Roll Facilities. Prior to the Effective Date, the facilities provided for up to $4.250 billion in senior secured, super-priority financing consisting of a revolving credit facility of up to $750 million, a term loan letter of credit facility of up to $650 million and a term loan facility of up to $2.850 billion. Approximately $2.65 billion of the net proceeds from the DIP Roll Term Loan Facilities were used to repay all amounts outstanding under the former DIP Credit Facility, and the remaining net proceeds were used for general corporate purposes. Upon the Effective Date, the DIP Roll Facilities converted to a senior secured exit facility with maturity dates of August 2021 for the revolving credit facility and August 2023 for the term loan facilities. See Note 9 to the Financial Statements for discussion of the DIP Roll Facilities.

Overall Hedged Generation Position — Taking together forward wholesale and retail electricity sales with all hedging positions, at September 30, 2016 we had effectively hedged an estimated 85% and 79%, respectively, of the price exposure, on a natural gas equivalent basis, related to our expected generation output for the remainder of 2016 and 2017 (assuming an 8.5 market heat rate), as compared to 94% and 18%, respectively, at December 31, 2015.

Commodity Price Sensitivities — The following sensitivity table provides estimates of the potential impact (in $ millions) of movements in natural gas prices and market heat rates on realized pretax earnings for the periods presented. The estimates related to price sensitivity are based on our unhedged position and forward prices at September 30, 2016, which for natural gas reflects estimates of electricity generation less amounts under existing wholesale and retail sales contracts and amounts related to hedging positions. On a rolling basis, generally twelve-months, the substantial majority of retail sales under month-to-month arrangements are deemed to be under contract.

	Balance 2016	2017
$1.00/MMBtu change in natural gas price (a)(b)	$ ~12	$ ~90
0.1/MMBtu/MWh change in market heat rate (c)	$ ~—	$ ~7

(a) Balance of 2016 is from November 1, 2016 through December 31, 2016.
(b) Assumes conversion of electricity positions based on an approximate 8.5 market heat rate with natural gas generally being on the margin 70% to 90% of the time in the ERCOT market (i.e., when coal is forecast to be on the margin, no natural gas position is assumed to be generated). Excludes the impact of economic backdown.
(c) Based on Houston Ship Channel natural gas prices at September 30, 2016.

Environmental Matters — See Note 11 to Financial Statements for a discussion of greenhouse gas emissions, the CSAPR, regional haze, state implementation plan and other recent EPA actions as well as related litigation.

Results of Operations

Financial Results — Three and Nine Months Ended September 30, 2016 Compared to Three and Nine Months Ended September 30, 2015

See below for discussion of significant variances in financial results for the three and nine months ended September 30, 2016 when compared to the three and nine months ended September 30, 2015.

Revenue, Sales Volume and Customer Count Data

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2016	2015	% Change	2016	2015	% Change
Operating revenues:						
Retail electricity revenues:						
Residential	$ 903	$ 997	(9.4)%	$ 2,084	$ 2,362	(11.8)%
Business markets	396	438	(9.6)%	1,070	1,177	(9.1)%
Total retail electricity revenues	1,299	1,435	(9.5)%	3,154	3,539	(10.9)%
Wholesale electricity revenues (a) (b)	326	238	37.0 %	649	539	20.4 %
Other operating revenues	65	64	1.6 %	170	187	(9.1)%
Total operating revenues	$ 1,690	$ 1,737	(2.7)%	$ 3,973	$ 4,265	(6.8)%
Sales volumes:						
Retail electricity sales volumes – (GWh):						
Residential	7,359	7,569	(2.8)%	16,619	17,667	(5.9)%
Business markets	5,385	5,634	(4.4)%	14,354	14,796	(3.0)%
Total retail electricity	12,744	13,203	(3.5)%	30,973	32,463	(4.6)%
Wholesale electricity sales volumes (b)	12,058	6,901	74.7 %	25,563	17,526	45.9 %
Total sales volumes	24,802	20,104	23.4 %	56,536	49,989	13.1 %
Weather (North Texas average) – percent of normal (c):						
Cooling degree days	106.6%	111.8%	(4.7)%	102.8%	102.8%	— %
Heating degree days	—%	—%	— %	81.9%	118.9%	(31.1)%
Retail customer counts:						
Retail electricity customers (end of period, in thousands) (d):						
Residential				1,483	1,493	(0.7)%
Business markets				196	205	(4.4)%
Total retail electricity customers				1,679	1,698	(1.1)%

(a) Upon settlement, physical derivative commodity contracts that we mark-to-market in net income, such as certain electricity sales and purchase agreements and coal purchase contracts, wholesale electricity revenues and fuel and purchased power costs are reported at approximated market prices, as required by accounting rules, rather than contract price. The offsetting differences between contract and market prices are reported in net gain from commodity hedging and trading activities.

(b) Includes net amounts related to sales and purchases of balancing energy in the ERCOT real-time market.

(c) Weather data is obtained from Weatherbank, Inc., an independent company that collects and archives weather data from reporting stations of the National Oceanic and Atmospheric Administration (a federal agency under the US Department of Commerce). Normal is defined as the average over the 10-year period from 2000 to 2010.

(d) Based on number of meters. Typically, large business and other customers have more than one meter; therefore, number of meters does not reflect the number of individual customers.

Production, Purchased Power and Delivery Cost Data

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2016	2015	% Change	2016	2015	% Change
Fuel, purchased power costs and delivery fees ($ millions):						
Fuel for nuclear facilities	$ 31	$ 40	(22.5)%	$ 92	$ 118	(22.0)%
Fuel for lignite/coal facilities	236	236	— %	548	560	(2.1)%
Total nuclear and lignite/coal facilities (a)	267	276	(3.3)%	640	678	(5.6)%
Fuel for natural gas facilities and purchased power costs (a)	150	77	94.8 %	310	199	55.8 %
Other costs	41	49	(16.3)%	108	128	(15.6)%
Fuel and purchased power costs	458	402	13.9 %	1,058	1,005	5.3 %
Delivery fees	416	429	(3.0)%	1,024	1,085	(5.6)%
Total	$ 874	$ 831	5.2 %	$ 2,082	$ 2,090	(0.4)%
Fuel and purchased power costs (which excludes generation facilities operating costs) per MWh:						
Nuclear facilities	$ 5.80	$ 7.59	(23.6)%	$ 6.12	$ 7.44	(17.7)%
Lignite/coal facilities (b)	$ 17.57	$ 20.38	(13.8)%	$ 19.20	$ 21.83	(12.0)%
Natural gas facilities and purchased power (c)	$ 26.79	$ 43.16	(37.9)%	$ 26.65	$ 45.98	(42.0)%
Delivery fees per MWh	$ 32.46	$ 32.38	0.2 %	$ 32.89	$ 33.31	(1.3)%
Production and purchased power volumes (GWh):						
Nuclear facilities	5,310	5,309	— %	15,005	15,830	(5.2)%
Lignite/coal facilities (d)	14,630	13,727	6.6 %	31,865	31,784	0.3 %
Total nuclear and lignite/coal facilities	19,940	19,036	4.7 %	46,870	47,614	(1.6)%
Natural gas facilities (e)	4,452	548	— %	8,539	689	— %
Purchased power (f)	410	520	(21.2)%	1,127	1,686	(33.2)%
Total energy supply volumes	24,802	20,104	23.4 %	56,536	49,989	13.1 %
Capacity factors:						
Nuclear facilities	104.6%	104.5%	0.1 %	99.2%	105.1%	(5.6)%
Lignite/coal facilities (d)	82.6%	77.5%	6.6 %	60.5%	60.5%	— %
Total	87.5%	83.6%	4.7 %	69.1%	70.4%	(1.8)%

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(a) See note (a) to the *Revenue, Sales Volume and Customer Count Data* table on previous page.

(b) Includes depreciation and amortization of lignite mining assets, which is reported in the depreciation and amortization expense line item, but is part of overall fuel costs and excludes unrealized amounts as discussed in footnote (a) to the *Revenue, Sales Volume and Customer Count Data* table on the previous page.

(c) Excludes volumes related to line loss and power imbalances and unrealized amounts referenced in footnote (a) to the *Revenue, Sales Volume and Customer Count Data* table on previous page.

(d) Includes the estimated effects of economic backdown (including seasonal operations) of lignite/coal fueled units totaling 2,390 GWh and 3,210 GWh for the three months ended September 30, 2016 and 2015, respectively and 14,420 GWh and 15,300 GWh for the nine months ended September 30, 2016 and 2015, respectively.

(e) The percent changes between the periods presented have been excluded because they are not meaningful due to the addition of the Lamar and Forney natural gas fueled generation facilities in 2016.

(f) Includes amounts related to line loss and power imbalances.

Financial Results — Three Months Ended September 30, 2016 Compared to Three Months Ended September 30, 2015

The overall $2.117 billion improvement in income (loss) before income taxes in 2016 primarily reflected the noncash impairment of goodwill and the noncash impairments of certain long-lived assets in 2015 and higher net gains in commodity and hedging activities in 2016. In 2015, a noncash impairment of goodwill totaling $700 million and noncash impairments of certain long-lived assets totaling $1.295 billion were recorded as discussed in Notes 4 and 6 to the Financial Statements.

Operating revenues decreased $47 million driven by decreases in retail electricity revenues, partially offset by an increase in wholesale electricity revenues. Retail electricity revenues decreased $136 million reflecting lower pricing of 6% and a 4% decrease in sales volumes due to mild weather. Wholesale electricity revenues increased $88 million due to a 4,808 GWh increase in generation volumes driven by the Lamar and Forney Acquisition in April 2016, partially offset by lower average prices.

Following is an analysis of amounts reported as net gain from commodity hedging and trading activities. Results are primarily related to natural gas and power hedging activity.

	Three Months Ended September 30,		
Net gain from commodity hedging and trading activities	**2016**	**2015**	**Change**
Realized net gains	$ 122	$ 70	$ 52
Unrealized net gains	214	33	181
Total	$ 336	$ 103	$ 233

Decreases in operating revenues were offset by a $52 million increase in realized gains during 2016 which reflected higher settled gains due to declining market prices on natural gas and power positions.

The $181 million increase in unrealized gains reflects a larger reversal of previously recorded unrealized losses on settled positions in 2016 and higher unrealized net gains recorded in 2016 due to unrealized gains on heat rate and power hedges due to decreases in forward prices.

Fuel, purchased power costs and delivery fees increased $43 million driven by an $80 million increase in fuel costs for natural gas facilities, which reflected the Lamar and Forney Acquisition, partially offset by lower delivery fees and lower nuclear and lignite/coal facilities fuel costs.

Depreciation and amortization expenses decreased $43 million, driven by the effect of noncash impairments of certain long-lived assets recorded in 2015, partially offset by incremental depreciation associated with the Lamar and Forney Acquisition.

Financial Results — Nine Months Ended September 30, 2016 Compared to Nine Months Ended September 30, 2015

The overall $3.230 billion decrease in loss before income taxes primarily reflected the noncash impairment of goodwill and the noncash impairments of certain long-lived assets in 2015, partially offset by lower operating revenues. In 2015, a noncash impairment of goodwill totaling $1.4 billion and noncash impairments of certain long-lived assets totaling $1.971 billion were recorded as discussed in Notes 5 and 7 to the Financial Statements.

Operating revenues decreased $292 million driven by decreases in retail electricity revenues, partially offset by an increase in wholesale electricity revenues. Retail electricity revenues decreased $385 million in 2016 reflecting a $223 million decrease due to 7% lower average pricing and a $162 million decrease due to a 5% decrease in sales volumes driven by milder weather. Wholesale electricity revenues increased $110 million due to a 7,106 GWh increase in generation volumes driven by the Lamar and Forney Acquisition in April 2016, partially offset by lower average wholesale electricity prices.

Following is an analysis of amounts reported as net gain from commodity hedging and trading activities. Results are primarily related to natural gas and power hedging activity.

	Nine Months Ended September 30,		
Net gain from commodity hedging and trading activities	**2016**	**2015**	**Change**
Realized net gains	$ 320	$ 121	$ 199
Unrealized net gains (losses)	(38)	105	(143)
Total	$ 282	$ 226	$ 56

Decreases in operating revenues were partially offset by a $199 million increase in realized net gains during 2016 which reflected settled gains due to declining market prices. These gains were primarily related to natural gas positions.

The $143 million unfavorable change in net unrealized gains (losses) reflected a larger reversal of previously recorded unrealized net gains on settled positions in 2016 and higher unrealized net gains recorded in 2015 due to an increase in forward natural gas and power prices on hedge positions.

The $8 million decrease in fuel, purchased power costs and delivery fees in 2016 reflected a $61 million decrease in delivery fees, $38 million in lower nuclear and lignite/coal facilities fuel costs and $28 million in lower purchased power costs, partially offset by a $139 million increase in fuel costs for natural gas facilities, which reflects impacts of the Lamar and Forney Acquisition.

The $66 million increase in operating costs reflected higher nuclear maintenance costs due to a spring nuclear outage in 2016 compared to a fall outage in 2015 and incremental operating and maintenance costs associated with the Lamar and Forney Acquisition.

Depreciation and amortization expenses decreased $175 million, driven by the effect of noncash impairments of certain long-lived assets recorded in 2015, partially offset by incremental expense associated with the Lamar and Forney Acquisition.

For the nine months ended September 30, 2016, results include $32 million of severance expense, primarily reported in fuel, purchased power and delivery fees and operating costs, associated with certain actions taken to reduce costs related to our mining and lignite/coal generation operations.

Energy-Related Commodity Contracts and Mark-to-Market Activities

The table below summarizes the changes in commodity contract assets and liabilities for the nine months ended September 30, 2016 and 2015. The net change in these assets and liabilities, excluding "other activity" as described below, reflects $38 million in unrealized net losses in 2016 and $105 million in unrealized net gains in 2015 arising from mark-to-market accounting for positions in the commodity contract portfolio.

	Nine Months Ended September 30,	
	2016	2015
Commodity contract net asset at beginning of period	$ 271	$ 180
Settlements/termination of positions (a)	(232)	(176)
Changes in fair value of positions in the portfolio (b)	194	281
Other activity (c)	(35)	(26)
Commodity contract net asset at end of period	$ 198	$ 259

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(a) Represents reversals of previously recognized unrealized gains and losses upon settlement/termination (offsets realized gains and losses recognized in the settlement period). Excludes changes in fair value in the month the position settled as well as amounts related to positions entered into and settled in the same month.
(b) Represents unrealized net gains (losses) recognized, reflecting the effect of changes in fair value. Excludes changes in fair value in the month the position settled as well as amounts related to positions entered into and settled in the same month.
(c) These amounts do not represent unrealized gains or losses. Includes fair value of acquired commodity contracts as of the date of the Lamar and Forney Acquisition (see Note 3 to the Financial Statements). Also includes initial values of positions involving the receipt or payment of cash or other consideration, generally related to options purchased/sold.

Maturity Table — The following table presents the net commodity contract asset arising from recognition of fair values at September 30, 2016, scheduled by the source of fair value and contractual settlement dates of the underlying positions.

	Maturity dates of unrealized commodity contract net asset at September 30, 2016			
Source of fair value	Less than 1 year	1-3 years	4-5 years	Total
Prices actively quoted	$ 28	$ (6)	$ (1)	$ 21
Prices provided by other external sources	57	23	—	80
Prices based on models	53	40	4	97
Total	$ 138	$ 57	$ 3	$ 198

Financial Condition

***Cash Flows** — Nine Months Ended September 30, 2016 Compared to Nine Months Ended September 30, 2015* — Cash used in operating activities totaled $196 million in 2016 and cash provided by operating activities totaled $209 million in 2015. The increase in cash used of $405 million was primarily driven by a $232 million decrease in cash provided by margin deposits and higher cash interest payments.

Depreciation and amortization expense reported in the condensed statements of consolidated cash flows exceeded the amount reported in the condensed statements of consolidated income (loss) by $73 million and $114 million for the nine months ended September 30, 2016 and 2015, respectively. The difference primarily represents amortization of nuclear fuel, which is reported as fuel costs in the condensed statements of consolidated income (loss) consistent with industry practice.

Cash provided by financing activities totaled $1.913 billion in 2016 compared to cash used in financing activities of $20 million 2015. Activity in 2016 reflected $2.040 billion in net borrowings under the DIP Roll Facilities and the DIP Facility, including $870 million in net borrowings to fund the Lamar and Forney Acquisition (see Note 3 to the Financial Statements). Activity in 2016 also reflected $112 million in fees related to the issuance of the DIP Roll Facilities. Activity in 2016 and 2015 reflected debt repayments of $15 million and $20 million, respectively.

Cash used in investing activities totaled $1.288 billion and $330 million in 2016 and 2015, respectively. Cash used in 2016 reflected payments of $1.343 billion related to the Lamar and Forney Acquisition net of cash acquired (see Note 3 to the Financial Statements) and capital expenditures (including nuclear fuel purchases) totaling $263 million, partially offset by a $365 million decrease in restricted cash used to backstop letters of credit.

Debt Activity — See Notes 9 and 10 to the Financial Statements for details of the DIP Facility and pre-petition debt.

***Available Liquidity* —** The following table summarizes changes in available liquidity for the nine months ended September 30, 2016:

	Available Liquidity		
	September 30, 2016	**December 31, 2015**	**Change**
Cash and cash equivalents (a)	$ 1,829	$ 1,400	$ 429
DIP Roll Revolving Credit Facility	750	—	750
DIP Revolving Credit Facility	—	1,950	(1,950)
Total liquidity	$ 2,579	$ 3,350	$ (771)

(a) Cash and cash equivalents at September 30, 2016 and December 31, 2015 exclude $650 million and $1.026 billion, respectively, of restricted cash held for letter of credit support. The September 30, 2016 restricted cash balance represents borrowings under the DIP Roll Term Loan Letter of Credit Facility held in a collateral account that supports $546 million in letters of credit outstanding, leaving $104 million in available letter of credit capacity (see Note 9).

The decrease in available liquidity of $771 million in the nine months ended September 30, 2016 compared to December 31, 2015 was primarily driven by $2.040 billion in net borrowings under the DIP Roll Facilities and the DIP Facility, including $870 million in net borrowings to fund the Lamar and Forney Acquisition (see Note 3 to the Financial Statements), $1.064 billion in cash interest payments (including adequate protection payments), $263 million in capital expenditures (including nuclear fuel purchases) and $104 million of cash used to pay for reorganization expenses.

Liquidity Effects of Commodity Hedging and Trading Activities — We have entered into commodity hedging and trading transactions that require us to post collateral if the forward price of the underlying commodity moves such that the hedging or trading instrument we hold has declined in value. We use cash, letters of credit and other forms of credit support to satisfy such collateral posting obligations. See Note 9 to the Financial Statements for discussion of the DIP Roll Facilities.

At September 30, 2016, TCEH received or posted cash and letters of credit for commodity hedging and trading activities as follows:

- $42 million in cash has been posted with counterparties as compared to $6 million posted at December 31, 2015;
- $64 million in cash has been received from counterparties as compared to $152 million received at December 31, 2015;
- $399 million in letters of credit have been posted with counterparties as compared to $230 million posted at December 31, 2015, and
- $2 million in letters of credit have been received from counterparties as compared to $3 million received at December 31, 2015.

Income Tax Matters — EFH Corp. files a US federal income tax return that includes the results of EFCH and TCEH. EFH Corp. (parent entity) is a corporate member of the EFH Corp. consolidated group, while each of EFCH and TCEH is classified as a disregarded entity for US federal income tax purposes. Pursuant to applicable US Treasury regulations and published guidance of the IRS, corporations that are members of a consolidated group have joint and several liability for the taxes of such group. Subsequent to the Effective Date, the TCEH Debtors and the Contributed EFH Debtors will no longer be included in the consolidated income tax return and will be included in an income tax return with Vistra Energy.

Prior to the Effective Date, EFH Corp. and certain of its subsidiaries (including EFCH and TCEH) were parties to a Federal and State Income Tax Allocation Agreement, which provided, among other things, that any corporate member or disregarded entity in the EFH Corp. group was required to make payments to EFH Corp. in an amount calculated to approximate the amount of tax liability such entity would have owed if it filed a separate corporate tax return. Pursuant to the Plan of Reorganization, the TCEH Debtors and the Contributed EFH Debtors rejected this agreement on the Effective Date. Additionally, since the date of the Settlement Agreement, no further cash payments among the Debtors were made in respect of federal income taxes. EFH Corp. has elected to continue to allocate federal income taxes among the entities that are parties to the Federal and State Income Tax Allocation Agreement. The Settlement Agreement did not alter the allocation and payment for state income taxes, which will continue to be settled prior to the Effective Date.

The TCEH Debtors and the Contributed EFH Debtors emerged from the Chapter 11 Cases on the Effective Date in a tax-free spin-off from EFH Corp. The tax-free spin-off generated a taxable gain that will be largely offset with available net operating losses (NOLs), substantially reducing the NOLs that will be available to EFH Corp. after the transaction. The EFH Corp. consolidated group's NOLs as of December 31, 2016 (including current year losses and prior year carryforwards) prior to taking into account the emergence transaction impacts are estimated to be approximately $7.4 billion, and we expect that approximately $5.5 billion to $6.0 billion of those losses will be used to offset taxable gain from the emergence transaction.

We believe that neither Vistra Energy nor any corporate subsidiary of Vistra Energy is a US real property holding corporation (USRPHC) or has been a USRPHC during the applicable period specified. We do not anticipate that either Vistra Energy or any corporate subsidiary of Vistra Energy will become a USRPHC in the foreseeable future. Generally, a corporation is a USRPHC only if the fair market value of its US real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. There can be no assurance regarding the USRPHC status of Vistra Energy or the corporate subsidiaries of Vistra Energy for the current year or future years, however, because USRPHC status is based on the composition of our assets at the time and on certain rules whose application is uncertain.

Income Tax Payments — In the next twelve months, income tax payments related to Texas margin tax are expected to total approximately $14 million, and no payments or refunds of federal income taxes are expected. Income tax payments totaled $16 million and $26 million (all of which related to Texas Margin tax) for the nine months ended September 30, 2016 and 2015, respectively.

Financial Covenants — The agreement governing the DIP Roll Facilities includes a covenant, solely with respect to the DIP Roll Revolving Credit Facility and solely during a compliance period (which, in general, is applicable when the aggregate revolving borrowings and revolving letters of credit exceed 30% of the revolving commitments), that requires the Consolidated Superpriority Secured Net Debt to Consolidated EBITDA ratio not exceed 4.25 to 1.00. Although we had no borrowings under the DIP Roll Revolving Credit Facility as of September 30, 2016, we would have been in compliance with this financial covenant if it was required to be tested at such date.

See Note 9 to the Financial Statements for discussion of other covenants related to the DIP Facilities.

Collateral Support Obligations — The RCT has rules in place to assure that parties can meet their mining reclamation obligations. In September 2016, the RCT agreed to a collateral bond from TCEH of up to $975 million to support its reclamation obligations. The collateral bond is a $975 million carve out from the super-priority liens under the DIP Roll Facilities that will enable the RCT to be paid before the DIP Roll Facilities lenders in the event of a liquidation of Vistra Energy's assets. Collateral support relates to land mined or being mined and not yet reclaimed as well as land for which permits have been obtained but mining activities have not yet begun and land already reclaimed but not released from regulatory obligations by the RCT, and includes cost contingency amounts.

The PUCT has rules in place to assure adequate creditworthiness of each REP, including the ability to return customer deposits, if necessary. Under these rules, at September 30, 2016, TCEH posted letters of credit in the amount of $55 million, which is subject to adjustments.

ERCOT has rules in place to assure adequate creditworthiness of parties that participate in the day-ahead, real-time and congestion revenue rights markets operated by ERCOT. Under these rules, TCEH has posted collateral support, in the form of letters of credit, totaling $110 million at September 30, 2016 (which is subject to daily adjustments based on settlement activity with ERCOT).

Material Cross Default/Acceleration Provisions — Certain of our financing arrangements contain provisions that result in an event of default if there were a failure under other financing arrangements to meet payment terms or to observe other covenants that could or does result in an acceleration of payments due. Such provisions are referred to as "cross default" or "cross acceleration" provisions.

A default by Vistra Operations Company LLC or any of its restricted subsidiaries in respect of indebtedness in an aggregate amount in excess of $300 million may result in a cross default under the DIP Roll Facilities, which could allow the lenders to accelerate the maturity of outstanding balances under such facilities.

Other arrangements, including leases, have cross default provisions, the triggering of which would not be expected to result in a significant effect on liquidity.

Guarantees — See Note 11 to the Financial Statements for discussion of guarantees.

Off–Balance Sheet Arrangements

See Notes 1 and 11 to the Financial Statements regarding VIEs and guarantees, respectively.

Commitments and Contingencies

See Note 11 to the Financial Statements for discussion of commitments and contingencies and legal proceedings. For additional discussion of the Bankruptcy Filing, the emergence of the TCEH Debtors and the Contributed EFH Debtors and their related effects, see Note 2 to the Financial Statements.

Changes in Accounting Standards

See Note 1 to the Financial Statements for discussion of changes in accounting standards.

Quantitative and Qualitative Disclosures About Market Risk

Market risk is the risk that in the ordinary course of business we may experience a loss in value as a result of changes in market conditions that affect economic factors such as commodity prices, interest rates and counterparty credit. Our exposure to market risk is affected by a number of factors, including the size, duration and composition of our energy and financial portfolio, as well as the volatility and liquidity of markets. Instruments used to manage this exposure include interest rate swaps to hedge debt costs, as well as exchange-traded, over-the-counter contracts and other contractual arrangements to hedge commodity prices.

Risk Oversight

We manage the commodity price, counterparty credit and commodity-related operational risk related to the competitive energy business within limitations established by senior management and in accordance with overall risk management policies. Interest rate risk is managed centrally by the corporate treasury function. Market risks are monitored by risk management groups that operate independently of the wholesale commercial operations, utilizing defined practices and analytical methodologies. These techniques measure the risk of change in value of the portfolio of contracts and the hypothetical effect on this value from changes in market conditions and include, but are not limited to, position review, Value at Risk (VaR) methodologies and stress test scenarios. Key risk control activities include, but are not limited to, transaction review and approval (including credit review), operational and market risk measurement, transaction authority oversight, validation of transaction capture, market price validation and reporting, and portfolio valuation and reporting, including mark-to-market valuation, VaR and other risk measurement metrics.

Vistra Energy has a corporate risk management organization that enforces applicable risk limits, including the respective policies and procedures to ensure compliance with such limits, and evaluates the risks inherent in our businesses.

Commodity Price Risk

Our business is subject to the inherent risks of market fluctuations in the price of electricity, natural gas and other energy-related products it markets or purchases. We actively manage the portfolio of generation assets, fuel supply and retail sales load to mitigate the near-term impacts of these risks on results of operations. Similar to other participants in the market, we cannot fully manage the long-term value impact of structural declines or increases in natural gas and power prices.

In managing energy price risk, we enter into a variety of market transactions including, but not limited to, short- and long-term contracts for physical delivery, exchange-traded and over-the-counter financial contracts and bilateral contracts with customers. Activities include hedging, the structuring of long-term contractual arrangements and proprietary trading. We continuously monitor the valuation of identified risks and adjust positions based on current market conditions. We strive to use consistent assumptions regarding forward market price curves in evaluating and recording the effects of commodity price risk.

VaR Methodology — A VaR methodology is used to measure the amount of market risk that exists within the portfolio under a variety of market conditions. The resultant VaR produces an estimate of a portfolio's potential for loss given a specified confidence level and considers, among other things, market movements utilizing standard statistical techniques given historical and projected market prices and volatilities.

A Monte Carlo simulation methodology is used to calculate VaR and is considered by management to be the most effective way to estimate changes in a portfolio's value based on assumed market conditions for liquid markets. The use of this method requires a number of key assumptions, such as use of (i) an assumed confidence level; (ii) an assumed holding period (i.e., the time necessary for management action, such as to liquidate positions); and (iii) historical estimates of volatility and correlation data. The tables below detail certain VaR measures related to various portfolios of contracts; however, we have excluded a table for proprietary trading activity due to the de minimis size of that activity.

VaR for Energy-Related Contracts Subject to Mark-to-Market (MtM) Accounting — This measurement estimates the potential loss in fair value, due to changes in market conditions, of all contracts marked-to-market in net income, based on a 95% confidence level and an assumed holding period of 60 days.

	September 30, 2016	December 31, 2015
Month-end average MtM VaR:	$ 63	$ 68
Month-end high MtM VaR:	$ 118	$ 97
Month-end low MtM VaR:	$ 30	$ 49

The increase in the month-end high MtM VaR risk measure reflected increased commodity positions, higher natural gas prices and increased price volatility during the second quarter of 2016.

Credit Risk

Credit risk relates to the risk of loss associated with nonperformance by counterparties. We maintain credit risk policies with regard to our counterparties to minimize overall credit risk. These policies prescribe practices for evaluating a potential counterparty's financial condition, credit rating and other quantitative and qualitative credit criteria and authorize specific risk mitigation tools including, but not limited to, use of standardized master agreements that allow for netting of positive and negative exposures associated with a single counterparty. We have processes for monitoring and managing credit exposure of our businesses including methodologies to analyze counterparties' financial strength, measurement of current and potential future exposures and contract language that provides rights for netting and setoff. Credit enhancements such as parental guarantees, letters of credit, surety bonds, margin deposits and customer deposits are also utilized. Additionally, individual counterparties and credit portfolios are managed to assess overall credit exposure.

Credit Exposure — Our gross exposure to credit risk associated with trade accounts receivable (retail and wholesale) and net asset positions (before collateral) arising from commodity contracts and hedging and trading activities totaled $871 million at September 30, 2016. The components of this exposure are discussed in more detail below.

Assets subject to credit risk at September 30, 2016 include $532 million in retail trade accounts receivable before taking into account cash deposits held as collateral for these receivables totaling $50 million. The risk of material loss (after consideration of bad debt allowances) from nonperformance by these customers is unlikely based upon historical experience. Allowances for uncollectible accounts receivable are established for the potential loss from nonpayment by these customers based on historical experience, market or operational conditions and changes in the financial condition of large business customers.

The remaining credit exposure arises from wholesale trade receivables and amounts associated with derivative instruments related to hedging and trading activities. Counterparties to these transactions include energy companies, financial institutions, electric utilities, independent power producers, oil and gas producers, local distribution companies and energy marketing companies. At September 30, 2016, the exposure to credit risk from these counterparties totaled $339 million consisting of accounts receivable of $138 million and net asset positions related to commodity contracts of $201 million, after taking into account the netting provisions of the master agreements described above but before taking into account $66 million in collateral (cash, letters of credit and other credit support). The net exposure (after collateral) of $273 million decreased $59 million in the nine months ended September 30, 2016.

Of this $273 million net exposure, 93% is with investment grade customers and counterparties, as determined by our internal credit evaluation process which includes publicly available information including major rating agencies' published ratings as well as internal credit methodologies and credit scoring models. The company routinely monitors and manages credit exposure to these customers and counterparties based on, but not limited to, the assigned credit rating, margining and collateral management.

The following table presents the distribution of credit exposure at September 30, 2016. This credit exposure largely represents wholesale trade accounts receivable and net asset positions related to commodity contracts and hedging and trading activities recognized as derivative assets in the condensed consolidated balance sheets, after taking into consideration netting provisions within each contract, setoff provisions in the event of default and any master netting contracts with counterparties. Credit collateral includes cash and letters of credit, but excludes other credit enhancements such as liens on assets. See Note 14 to the Financial Statements for further discussion of portions of this exposure related to activities marked-to-market in the financial statements.

	Exposure Before Credit Collateral	Credit Collateral	Net Exposure
Investment grade	$ 303	$ 49	$ 254
Below investment grade or no rating	36	17	19
Totals	$ 339	$ 66	$ 273
Investment grade	89.4%		93.0%
Below investment grade or no rating	10.6%		7.0%

In addition to the exposures in the table above, contracts classified as "normal" purchase or sale and non-derivative contractual commitments are not marked-to-market in the financial statements. Such contractual commitments may contain pricing that is favorable considering current market conditions and therefore represent economic risk if the counterparties do not perform. Nonperformance could have a material impact on future results of operations, liquidity and financial condition.

Significant (10% or greater) concentration of credit exposure exists with two counterparties, which represented 39% and 14% of the $273 million net exposure. We view exposure to these counterparties to be within an acceptable level of risk tolerance due to the counterparties' credit ratings, each of which is rated as investment grade, the counterparties' market role and deemed creditworthiness and the importance of our business relationship with the counterparties. An event of default by one or more counterparties could subsequently result in termination-related settlement payments that reduce available liquidity if amounts such as margin deposits are owed to the counterparties or delays in receipts of expected settlements owed to us. While the potential concentration of risk with these counterparties is viewed to be within an acceptable risk tolerance, the exposure to hedge counterparties is managed through the various ongoing risk management measures described above.

Forward-Looking Statements

This report and other presentations made by us contain "forward-looking statements." All statements, other than statements of historical facts, that are included in this report, or made in presentations, in response to questions or otherwise, that address activities, events or developments that may occur in the future, including such matters as activities related to our bankruptcy, financial or operational projections, capital allocation, future capital expenditures, business strategy, competitive strengths, goals, future acquisitions or dispositions, development or operation of power generation assets, market and industry developments and the growth of our businesses and operations (often, but not always, through the use of words or phrases such as "intends," "plans," "will likely," "unlikely," "expected," "anticipated," "estimated," "should," "projection," "target," "goal," "objective" and "outlook"), are forward-looking statements. Although we believe that in making any such forward-looking statement our expectations are based on reasonable assumptions, any such forward-looking statement involves uncertainties the discussion under Item 2, *Management's Discussion and Analysis of Financial Condition and Results of Operations* in this report and the following important factors, among others, that could cause our actual results to differ materially from those projected in such forward-looking statements:

- the fact that the TCEH Debtors and the Contributed EFH Debtors emerged from the Chapter 11 Cases prior to the EFH Debtors emerging from the Chapter 11 Cases, and, as a result, the companies will no longer be affiliated entities;
- our ability to maintain or obtain sufficient financing sources;
- limitations on our ability to utilize previously incurred federal net operating losses or alternative minimum tax credits;
- the actions and decisions of regulatory authorities;
- restrictions on our operations due to the terms of our debt agreements, including the senior secured exit facilities;
- prevailing governmental policies and regulatory actions, including those of the Texas Legislature, the Governor of Texas, the US Congress, the FERC, the North American Electric Reliability Corporation, the Texas Reliability Entity, Inc., the PUCT, the RCT, the NRC, the EPA, the TCEQ, the US Mine Safety and Health Administration and the US Commodity Futures Trading Commission, with respect to, among other things:
    - allowed prices;
    - industry, market and rate structure;
    - purchased power and recovery of investments;
    - operations of nuclear generation facilities;
    - operations of fossil fueled generation facilities;
    - operations of mines;
    - self-bonding requirements;
    - acquisition and disposal of assets and facilities;
    - development, construction and operation of facilities;
    - decommissioning costs;
    - present or prospective wholesale and retail competition;
    - changes in tax laws and policies;
    - changes in and compliance with environmental and safety laws and policies, including the CSAPR, the MATS, regional haze program implementation and greenhouse gas and other climate change initiatives, and
    - clearing over-the-counter derivatives through exchanges and posting of cash collateral therewith;
- legal and administrative proceedings and settlements;
- general industry trends;
- economic conditions, including the impact of an economic downturn;
- weather conditions, including drought and limitations on access to water, and other natural phenomena, and acts of sabotage, wars or terrorist or cyber security threats or activities;
- our ability to collect trade receivables from counterparties;
- our ability to attract and retain profitable customers;
- our ability to profitably serve our customers;
- restrictions on competitive retail pricing;
- changes in wholesale electricity prices or energy commodity prices, including the price of natural gas;
- changes in prices of transportation of natural gas, coal, fuel oil and other refined products;
- changes in the ability of vendors to provide or deliver commodities as needed;
- changes in market heat rates in the ERCOT electricity market;
- our ability to effectively hedge against unfavorable commodity prices, including the price of natural gas, market heat rates and interest rates;
- population growth or decline, or changes in market supply or demand and demographic patterns, particularly in ERCOT;
- access to adequate transmission facilities to meet changing demands;
- changes in interest rates, commodity prices, rates of inflation or foreign exchange rates;
- changes in operating expenses, liquidity needs and capital expenditures;

- commercial bank market and capital market conditions and the potential impact of disruptions in US and international credit markets;
- access to capital, the cost of such capital, and the results of financing and refinancing efforts, including availability of funds in capital markets;
- our ability to generate sufficient cash flow to make interest payments, or refinance, our debt instruments:
- competition for new energy development and other business opportunities;
- inability of various counterparties to meet their obligations with respect to our financial instruments;
- changes in technology (including large scale electricity storage) used by and services offered by us;
- changes in electricity transmission that allow additional electricity generation to compete with our generation assets;
- the impact of the October 2016 workforce reduction on our cost structure and our ability to attract and retain qualified employees;
- significant changes in our relationship with our employees, including the availability of qualified personnel, and the potential adverse effects if labor disputes or grievances were to occur;
- changes in assumptions used to estimate costs of providing employee benefits, including medical and dental benefits, pension and OPEB, and future funding requirements related thereto, including joint and several liability exposure under ERISA;
- hazards customary to the industry and the possibility that we may not have adequate insurance to cover losses resulting from such hazards, and
- actions by credit rating agencies.

Any forward-looking statement speaks only at the date on which it is made, and except as may be required by law, we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which it is made or to reflect the occurrence of unanticipated events or circumstances. New factors emerge from time to time, and it is not possible for us to predict all of them; nor can we assess the impact of each such factor or the extent to which any factor, or combination of factors, may cause results to differ materially from those contained in any forward-looking statement. As such, you should not unduly rely on such forward-looking statements.

Market for Our Common Stock

Currently, our common stock is quoted on the OTCQX US market under the symbol "VSTE". The market for our common stock is limited and we cannot assure you that a larger market will ever be developed or maintained. Securities quoted on the OTCQX US market may experience low trading volumes. As a result, investors may find it difficult to dispose of, or to obtain accurate quotations of the price of, our securities. This may limit the liquidity of the common stock, and may adversely affect the market price of our common stock. Further, the purchase or sale of a relatively small number of securities could result in significant price fluctuations and it may be difficult for holders to sell their securities without depressing the market price for such securities.

Industry and Market Information

The industry and market data and other statistical information used throughout this report are based on independent industry publications, government publications, reports by market research firms or other published independent sources, including certain data published by ERCOT, the PUCT and NYMEX. We did not commission any of these publications or reports. Some data is also based on good faith estimates, which are derived from our review of internal surveys, as well as the independent sources listed above. Independent industry publications and surveys generally state that they have obtained information from sources believed to be reliable, but do not guarantee the accuracy and completeness of such information. While we believe that each of these studies and publications is reliable, we have not independently verified such data and make no representation as to the accuracy of such information. Forecasts are particularly likely to be inaccurate, especially over long periods of time, and we do not know what assumptions regarding general economic growth are used in preparing the forecasts included in this report. Similarly, while we believe that such internal and external research is reliable, it has not been verified by any independent sources, and we make no assurances that the predictions contained therein are accurate.

Item 5: Legal proceedings.

Litigation Related to EPA Reviews

In June 2008, the EPA issued an initial request for information to TCEH under the EPA's authority under Section 114 of the Clean Air Act (CAA). The stated purpose of the request is to obtain information necessary to determine compliance with the CAA, including New Source Review Standards and air permits issued by the TCEQ for the Big Brown, Monticello and Martin Lake generation facilities. In April 2013, we received an additional information request from the EPA under Section 114 related to the Big Brown, Martin Lake and Monticello facilities as well as an initial information request related to the Sandow 4 generation facility.

In July 2012, the EPA sent us a notice of violation alleging noncompliance with the CAA's New Source Review Standards and the air permits at our Martin Lake and Big Brown generation facilities. In July 2013, the EPA sent us a second notice of violation alleging noncompliance with the CAA's New Source Review Standards at our Martin Lake and Big Brown generation facilities, which the EPA said "superseded" its July 2012 notice. In August 2013, the US Department of Justice, acting as the attorneys for the EPA, filed a civil enforcement lawsuit against Luminant Generation Company LLC and Big Brown Power Company LLC in federal district court in Dallas, alleging violations of the CAA at our Big Brown and Martin Lake generation facilities. In August 2015, the district court issued its ruling on our motion to dismiss and granted the motion as to seven of the nine claims asserted by the EPA in the lawsuit. In August 2016, the EPA filed an amended complaint, eliminating one of the two remaining claims and withdrawing a request for civil penalties in the other remaining claim. The EPA also filed a motion for entry of final judgment. In September 2016, we filed a motion opposing the EPA's motion for entry of final judgment. In October 2016, the district court denied the EPA's motion for entry of final judgment. Presently, the part of the one remaining claims remains before the district court, and it is currently scheduled for trial in October 2017. We believe that we have complied with all requirements of the CAA and intend to vigorously defend against the remaining allegations. The lawsuit requests the maximum civil penalties available under the CAA to the government of up to $32,500 to $37,500 per day for each alleged violation, depending on the date of the alleged violation, and injunctive relief, including an order requiring the installation of best available control technology at the affected units. An adverse outcome could require substantial capital expenditures that cannot be determined at this time and could possibly require the payment of substantial penalties. We cannot predict the outcome of these proceedings, including the financial effects, if any.

Other Matters

We are involved in various legal and administrative proceedings in the normal course of business, the ultimate resolutions of which, in the opinion of management, are not anticipated to have a material effect on our results of operations, liquidity or financial condition.

Item 6: Defaults upon senior securities.

None.

Item 7: Other information.

On October 25, 2016, Curtis Morgan, the president and chief executive officer of the Company, purchased 80,231 shares of common stock from the Company in a private placement exempt from registration under the Securities Act of 1933, as amended, at a purchase price of $15.58 per share.

Item 8: Exhibits.

Please see Exhibit 8(*x*) for complete copies of each of the following documents:

a. Amendment to Certificate of Incorporation of the Company, effective as of November 4, 2016, to reflect the change of the Company's name to Vistra Energy Corp.
b. Bylaws of the Company, amended to reflect the change of the Company's name to Vistra Energy Corp.

Item 9: Certifications.

Certification of Chief Executive Officer and Acting Principal Financial Officer

I, Curtis A. Morgan, certify that:

1. I have reviewed this quarterly report of Vistra Energy Corp. (the Company);

2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report; and

3. Based on my knowledge, the financial statements, and other financial information included or incorporated by reference in this quarterly report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this quarterly report.

Date: November 14, 2016

/s/ Curtis A. Morgan
By: Curtis A. Morgan
Title: President and Chief Executive Officer
and acting Principal Financial Officer of
Vistra Energy Corp.

Exhibit 8(a)

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "TCEH CORP.", CHANGING ITS NAME FROM "TCEH CORP." TO "VISTRA ENERGY CORP.", FILED IN THIS OFFICE ON THE FOURTH DAY OF NOVEMBER, A.D. 2016, AT 9:03 O`CLOCK A.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.

5985588 8100
SR# 20166498304

Authentication: 203281381
Date: 11-04-16

CERTIFICATE OF AMENDMENT OF
CERTIFICATE OF INCORPORATION OF

TCEH CORP.

TCEH Corp., a corporation organized and existing under and by virtue of the Delaware General Corporation Law (the "Company"), does hereby certify:

1. The present name of the Company is TCEH Corp.

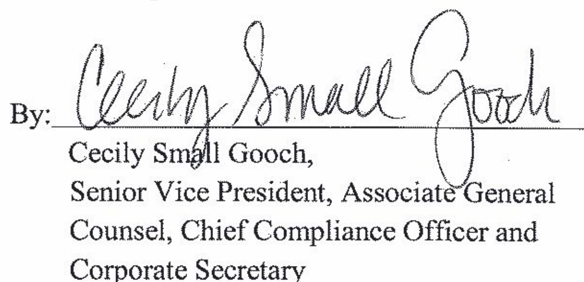
2. The original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on October 3, 2016.

3. The Certificate of Amendment to the Certificate of Incorporation amends and restates Article I of the Certificate of Incorporation so that, as amended, said Article shall read in its entirety as follows:

   "ARTICLE I: The name of the corporation is Vistra Energy Corp."

IN WITNESS WHEREOF the undersigned has executed this Certificate of Amendment this 2nd day of November, 2016.

TCEH Corp.

By: 

Cecily Small Gooch,
Senior Vice President, Associate General Counsel, Chief Compliance Officer and Corporate Secretary

State of Delaware
Secretary of State
Division of Corporations
Delivered 09:03 AM 11/04/2016
FILED 09:03 AM 11/04/2016
SR 20166498304 - File Number 5985588

Exhibit 8(b)

BYLAWS OF

Vistra Energy Corp.

Adopted on October 3, 2016

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BYLAWS

OF

Vistra Energy Corp.
(a Delaware corporation)

ARTICLE I
CORPORATE OFFICES

Section 1.1 Registered Office. The registered office of the Corporation shall be fixed in the Certificate of Incorporation of the Corporation.

Section 1.2 Other Offices. The Corporation may also have an office or offices, and keep the books and records of the Corporation, except as otherwise required by law, at such other place or places, either within or without the State of Delaware, as the Board of Directors may from time to time determine or the business of the Corporation may require.

ARTICLE II
MEETINGS OF STOCKHOLDERS

Section 2.1 Annual Meeting. The annual meeting of stockholders, for the election of directors to succeed those whose terms expire and for the transaction of such other business as may properly come before the meeting, shall be held at such place, if any, either within or without the State of Delaware, on such date, and at such time as the Board of Directors shall fix. The Board of Directors may postpone, reschedule or cancel any annual meeting of stockholders previously scheduled by the Board of Directors.

Section 2.2 Special Meeting.

(a) Except as otherwise required by law, and except as otherwise provided for or fixed pursuant to the Certificate of Incorporation, including any certificate of designations relating to any series of Preferred Stock (each hereinafter referred to as a "Preferred Stock Designation"), a special meeting of the stockholders of the Corporation, for any purpose or purposes: (i) may be called at any time by the Board of Directors; and (ii) shall be called by the Chairman of the Board of Directors or the Secretary of the Corporation upon the written request or requests of one or more stockholders of record that (1) at the time a request is delivered, hold shares representing at least a majority of the voting power of the stock entitled to vote on the matter or matters to be brought before the proposed special meeting (hereinafter, the "requisite percent") and (2) comply with the notice procedures set forth in Section 2.2(b). Except as otherwise required by law, and except as otherwise provided for or fixed pursuant to the Certificate of Incorporation (including any Preferred Stock Designation), special meetings of the stockholders of the Corporation may not be called by any other person or persons.

(b) Written request by one or more stockholders for a special meeting pursuant to Section 2.2(a) shall include the information required in a stockholder notice pursuant to Section 2.10 for all of the stockholders whose shares will count toward the requisite percent needed to request a special meeting.

(c) Business transacted at a stockholder-requested special meeting shall be limited to (i) the business stated in the valid special meeting request(s) received from the requisite percent of stockholders and (ii) any additional business that the Board of Directors determines to include in the Corporation's notice of meeting. If none of the stockholders who submitted the special meeting request (or their qualified representatives, as defined in Section 2.10(c)(i)) appears at the special meeting to present the matter or matters to be brought before the special meeting that were specified in the special meeting request(s), the Corporation need not present the matter or matters for a vote at the meeting, notwithstanding that proxies in respect of such vote may have been received by the Corporation.

Section 2.3 Notice of Stockholders' Meetings.

(a) Whenever stockholders are required or permitted to take any action at a meeting, notice of the place, if any, date, and time of the meeting of stockholders, the record date for determining the stockholders entitled to vote at the meeting (if such date is different from the record date for determining the stockholders entitled to notice of the meeting) and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, shall be given. The notice shall be given not less than 10 nor more than 60 days before the date on which the meeting is to be held, to each stockholder entitled to vote at such meeting as of the record date for determining the stockholders entitled to notice of the meeting, except as otherwise provided by law, the Certificate of Incorporation or these Bylaws. In the case of a special meeting, the purpose or purposes for which the meeting is called also shall be set forth in the notice. Notice may be given personally, by mail or by electronic transmission in accordance with Section 232 of the General Corporation Law of the State of Delaware (the "DGCL"). If mailed, such notice shall be deemed given when deposited in the United States mail, postage prepaid, directed to each stockholder at such stockholder's address as it appears on the records of the Corporation. Notice by electronic transmission shall be deemed given as provided in Section 232 of the DGCL. An affidavit that notice has been given, executed by the Secretary of the Corporation, Assistant Secretary or any transfer agent or other agent of the Corporation, shall be *prima facie* evidence of the facts stated in the notice in the absence of fraud. Notice shall be deemed to have been given to all stockholders who share an address if notice is given in accordance with the "householding" rules set forth in Rule 14a-3(e) under the Securities Exchange Act of 1934 (the "Exchange Act") and Section 233 of the DGCL.

(b) When a meeting is adjourned to another time or place, notice need not be given of the adjourned meeting if the place, if any, date and time thereof, and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken; provided, however, that if the adjournment is for more than 30 days, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. If after the adjournment a new record date for stockholders entitled to vote is fixed

for the adjourned meeting, the Board of Directors shall fix a new record date for notice of such adjourned meeting in accordance with Section 7.6(a), and shall give notice of the adjourned meeting to each stockholder of record entitled to vote at such adjourned meeting as of the record date fixed for notice of such adjourned meeting.

Section 2.4 Organization.

(a) Meetings of stockholders shall be presided over by the Chairman of the Board of Directors, if any, or in his or her absence, by the Chief Executive Officer or, in his or her absence, by another person designated by the Chairman of the Board of Directors. The Secretary of the Corporation, or in his or her absence, an Assistant Secretary, or in the absence of the Secretary and all Assistant Secretaries, a person whom the chairman of the meeting shall appoint, shall act as secretary of the meeting and keep a record of the proceedings thereof.

(b) The date and time of the opening and the closing of the polls for each matter upon which the stockholders shall vote at a meeting of stockholders shall be announced at the meeting. The chairman of the meeting may adopt such rules and regulations for the conduct of any meeting of stockholders as he or she shall deem appropriate. The chairman of the meeting shall have the authority to enforce such rules and regulations for the conduct of any meeting of stockholders and the safety of those in attendance as, in the judgment of the chairman, are necessary, appropriate or convenient for the conduct of the meeting. Rules and regulations for the conduct of meetings of stockholders may include without limitation, establishing: (i) an agenda or order of business for the meeting; (ii) rules and procedures for maintaining order at the meeting and the safety of those present; (iii) limitations on attendance at or participation in the meeting to stockholders entitled to vote at the meeting, their duly authorized and constituted proxies and such other persons as the chairman of the meeting shall permit; (iv) restrictions on entry to the meeting after the time fixed for the commencement thereof; (v) limitations on the time allotted for consideration of each agenda item and for questions and comments by participants; and (vi) regulations for the opening and closing of the polls for balloting and matters which are to be voted on by ballot (if any). Subject to any rules and regulations adopted by the Board of Directors, the chairman of the meeting may convene and, for any or no reason, from time to time, adjourn and/or recess any meeting of stockholders pursuant to Section 2.7. The chairman of the meeting, in addition to making any other determinations that may be appropriate to the conduct of the meeting, shall have the power to declare that a nomination or other business was not properly brought before the meeting if the facts warrant (including if a determination is made, pursuant to Section 2.10(c)(i) of these Bylaws, that a nomination or other business was not made or proposed, as the case may be, in accordance with Section 2.10 of these Bylaws), and if such chairman should so declare, such nomination shall be disregarded or such other business shall not be transacted.

Section 2.5 List of Stockholders. The officer of the Corporation who has charge of the stock ledger shall prepare and make available, at least 10 days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting; provided, however, that if the record date for determining the stockholders entitled to vote is less than 10 days before the date of the meeting, the list shall reflect the stockholders entitled to vote as of the 10th day before the meeting date. Such list shall be arranged in alphabetical order and shall show the address of each stockholder and the number of shares registered in the name of each

stockholder. Nothing in this Section 2.5 shall require the Corporation to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting at least 10 days prior to the meeting (a) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of meeting or (b) during ordinary business hours at the principal place of business of the Corporation. In the event that the Corporation determines to make the list available on an electronic network, the Corporation may take reasonable steps to ensure that such information is available only to stockholders of the Corporation. If the meeting is to be held at a place, then a list of stockholders entitled to vote at the meeting shall be produced and kept at the time and place of the meeting during the whole time thereof and may be examined by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting. Except as otherwise required by law, the stock ledger shall be the only evidence as to who are the stockholders entitled to examine the list of stockholders required by this Section 2.5 or to vote in person or by proxy at any meeting of stockholders.

Section 2.6 Quorum. Except as otherwise required by law, the Certificate of Incorporation (including any Preferred Stock Designation) or these Bylaws, at any meeting of stockholders, a majority of the voting power of the stock outstanding and entitled to vote at the meeting, present in person or represented by proxy, shall constitute a quorum for the transaction of business; provided, however, that where a separate vote by a class or series or classes or series is required, a majority of the voting power of the stock of such class or series or classes or series outstanding and entitled to vote on that matter, present in person or represented by proxy, shall constitute a quorum entitled to take action with respect to such matter. If a quorum is not present or represented at any meeting of stockholders, then the chairman of the meeting, or a majority of the voting power of the stock present in person or represented by proxy at the meeting and entitled to vote thereat, shall have power to adjourn or recess the meeting from time to time in accordance with Section 2.7, until a quorum is present or represented. Subject to applicable law, if a quorum initially is present at any meeting of stockholders, the stockholders may continue to transact business until adjournment or recess, notwithstanding the withdrawal of enough stockholders to leave less than a quorum, but if a quorum is not present at least initially, no business other than adjournment or recess may be transacted.

Section 2.7 Adjourned or Recessed Meeting. Any annual or special meeting of stockholders, whether or not a quorum is present, may be adjourned or recessed for any reason from time to time by the chairman of the meeting, subject to any rules and regulations adopted by the Board of Directors pursuant to Section 2.4(b), and may be adjourned for any reason from time to time by a majority of the voting power of the stock present in person or represented by proxy at the meeting and entitled to vote thereat. At any such adjourned or recessed meeting at which a quorum may be present, any business may be transacted that might have been transacted at the meeting as originally called.

Section 2.8 Voting.

(a) Except as otherwise required by law or the Certificate of Incorporation (including any Preferred Stock Designation), each holder of stock of the Corporation entitled to vote at any meeting of stockholders shall be entitled to one vote for each share of such stock held of record by such holder that has voting power upon the subject matter in question.

(b) Except as otherwise required by law, the Certificate of Incorporation (including any Preferred Stock Designation), these Bylaws, the rules or regulations of any stock exchange applicable to the Corporation, or any law, rule or regulation applicable to the Corporation or its securities, at each meeting of stockholders at which a quorum is present, all corporate actions to be taken by vote of the stockholders, other than as provided in Section 3.2 of Article III with respect to the election of directors, shall be authorized by the affirmative vote of at least a majority of the voting power represented in person or by proxy at the meeting and entitled to vote thereon, voting as a single class. Where a separate vote by class or series or classes or series is required, if a quorum of such class or series or classes or series is present, such act shall be authorized by the affirmative vote of at least a majority of the votes cast in person or represented by proxy. Voting at meetings of stockholders need not be by written ballot.

Section 2.9 Proxies. Every stockholder entitled to vote for directors, or on any other matter, shall have the right to do so either in person or by one or more persons authorized to act for such stockholder by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. A proxy shall be irrevocable if it states that it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power. A stockholder may revoke any proxy which is not irrevocable by attending the meeting and voting in person or by delivering to the Secretary of the Corporation a revocation of the proxy or executed new proxy bearing a later date.

Section 2.10 Notice of Stockholder Business and Nominations.

(a) Annual Meeting.

(i) Nominations of persons for election to the Board of Directors and the proposal of business other than nominations to be considered by the stockholders may be made at an annual meeting of stockholders only (A) pursuant to the Corporation's notice of meeting (or any supplement thereto) delivered pursuant to Section 2.3 hereof, (B) by or at the direction of the Board of Directors (or any authorized committee thereof) or (C) by any stockholder of the Corporation who is a stockholder of record at the time the notice provided for in this Section 2.10(a) is delivered to the Secretary of the Corporation, who is entitled to vote at the meeting and who complies with the notice procedures set forth in this Section 2.10(a). For the avoidance of doubt, the foregoing clause (C) shall be the exclusive means for a stockholder to make nominations or propose other business (other than a proposal included in the Corporation's proxy statement pursuant to and in compliance with Rule 14a-8 under the Exchange Act) at an annual meeting of stockholders.

(ii) For nominations or other business to be properly brought before an annual meeting by a stockholder pursuant to clause (C) of the foregoing paragraph, the stockholder must have given timely notice thereof in writing to the Secretary of the Corporation and, in the case of business other than nominations, such business must be a proper subject for stockholder action under the DGCL. To be timely, a stockholder's notice must be delivered to the Secretary at the principal executive offices of the Corporation not later than the close of business (as defined in Section 2.10(c)(ii) below) on the 90th day nor earlier than the close of business on the 120th day prior to the first anniversary of the preceding year's annual meeting; provided, however, that in the event that the date of the annual meeting is more than 30 days before or more than 60 days after such anniversary date, or if no annual meeting was held in the preceding year, notice by the stockholder to be timely must be so delivered not earlier than the close of business on the 120th day prior to such annual meeting and not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the date on which public announcement (as defined in Section 2.10(c)(ii) below) of the date of such meeting is first made by the Corporation. For purposes of the 2017 annual meeting of stockholders, the 2016 annual meeting of stockholders shall be deemed to have been held on May 25, 2016. In no event shall an adjournment or recess of an annual meeting, or a postponement of an annual meeting for which notice of the meeting has already been given to stockholders or with respect to which there has been a public announcement of the date of the meeting, commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above. Such stockholder's notice shall set forth:

(A) as to each person whom the stockholder proposes to nominate for election or re-election as a director (1) all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to and in accordance with Regulation 14A under the Exchange Act, and (2) such person's written consent to serving as a director if elected; provided, however, that, in addition to the information required in the stockholder's notice pursuant to this Section 2.10(a)(ii)(A), the Corporation may require each such person to furnish such other information as may reasonably be required by the Corporation to determine the eligibility of such person to serve as a director of the Corporation, including information relevant to a determination whether such person can be considered an independent director under applicable law or the rules or regulations of the applicable securities exchange(s) in which the securities of the Corporation trade;

(B) as to any other business that the stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the text of the proposal or business (including the text of any resolutions proposed for consideration and in the event that such business includes a proposal to amend the Bylaws of the Corporation, the language of the proposed amendment), the reasons for conducting such business at the meeting and any substantial interest (within the meaning of Item 5 of Schedule 14A under the Exchange Act) in such business of such stockholder and the beneficial owner (within the meaning of Section 13(d) of the Exchange Act), if any, on whose behalf the proposal is made;

(C) as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination is made or the other business is proposed:

(1) the name and address of such stockholder, as they appear on the Corporation's books, and the name and address of such beneficial owner,

(2) the class or series and number of shares of stock of the Corporation which are owned of record by such stockholder and such beneficial owner as of the date of the notice, and a representation that the stockholder will notify the Corporation in writing within five business days after the record date for such meeting of the class or series and number of shares of stock of the Corporation owned of record by the stockholder and such beneficial owner as of the record date for the meeting (except as otherwise provided in Section 2.10(a)(iii) below), and

(3) a representation that the stockholder intends to appear in person or by proxy at the meeting to make such nomination or propose such business;

(D) as to the stockholder giving the notice or, if the notice is given on behalf of a beneficial owner on whose behalf the nomination is made or the other business is proposed, as to such beneficial owner, and if such stockholder or beneficial owner is an entity, as to each director, executive, managing member or control person of such entity (any such individual or control person, a "control person"):

(1) the class or series and number of shares of stock of the Corporation which are beneficially owned (as defined in Section 2.10(c)(ii) below) by such stockholder or beneficial owner and by any control person as of the date of the notice, and a representation that the stockholder will notify the Corporation in writing within five business days after the record date for such meeting of the class or series and number of shares of stock of the Corporation beneficially owned by such stockholder or beneficial owner and by any control person as of the record date for the meeting (except as otherwise provided in Section 2.10(a)(iii) below),

(2) a description of any agreement, arrangement or understanding with respect to the nomination or other business between or among such stockholder, beneficial owner or control person and any other person, including without limitation any agreements that would be required to be disclosed pursuant to Item 5 or Item 6 of Exchange Act Schedule 13D (regardless of whether the requirement to file a Schedule 13D is applicable) and a representation that the stockholder will notify the Corporation in writing within five business days after the record date for such meeting of any such agreement, arrangement or understanding in effect as of the record date for the meeting (except as otherwise provided in Section 2.10(a)(iii) below),

(3) a description of any agreement, arrangement or understanding (including without limitation any derivative or short positions, profit interests, options, hedging transactions, and borrowed or loaned shares) that has been entered into as of the date of the stockholder's notice by, or on behalf of, such stockholder, beneficial owner or control person, the effect or intent of which is to mitigate loss, manage risk or benefit from changes in the share price of any class or series of the Corporation's stock, or maintain, increase or decrease the voting power of the stockholder, beneficial owner or control person with respect to securities of the Corporation, and a representation that the stockholder will notify the Corporation in

writing within five business days after the record date for such meeting of any such agreement, arrangement or understanding in effect as of the record date for the meeting (except as otherwise provided in Section 2.10(a)(iii) below),

(iii) Notwithstanding anything in Section 2.10(a)(ii) above or Section 2.10(b) below to the contrary, if the record date for determining the stockholders entitled to vote at any meeting of stockholders is different from the record date for determining the stockholders entitled to notice of the meeting, a stockholder's notice required by this Section 2.10 shall set forth a representation that the stockholder will notify the Corporation in writing within five business days after the record date for determining the stockholders entitled to vote at the meeting, or by the opening of business on the date of the meeting (whichever is earlier), of the information required under clauses (ii)(C)(2) and (ii)(D)(1)-(3) of this Section 2.10(a), and such information when provided to the Corporation shall be current as of the record date for determining the stockholders entitled to vote at the meeting.

(iv) This Section 2.10(a) shall not apply to a proposal proposed to be made by a stockholder if the stockholder has notified the Corporation of his or her intention to present the proposal at an annual or special meeting only pursuant to and in compliance with Rule 14a-8 under the Exchange Act and such proposal has been included in a proxy statement that has been prepared by the Corporation to solicit proxies for such meeting.

(v) Notwithstanding anything in this Section 2.10(a) to the contrary, in the event that the number of directors to be elected to the Board of Directors at an annual meeting is increased and there is no public announcement by the Corporation naming all of the nominees for directors or specifying the size of the increased Board of Directors made by the Corporation at least 10 days prior to the last day a stockholder may deliver a notice in accordance with Section 2.10(a)(ii) above, a stockholder's notice required by this Section 2.10(a) shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be delivered to the Secretary of the Corporation at the principal executive offices of the Corporation not later than the close of business on the 10th day following the day on which such public announcement is first made by the Corporation.

(b) Special Meeting. Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting pursuant to the Corporation's notice of meeting procedures set forth in these Bylaws. Nominations of persons for election to the Board of Directors may be made at a special meeting of stockholders at which directors are to be elected pursuant to the Corporation's notice of meeting procedures set forth in these Bylaws (i) by or at the direction of the Board of Directors (or any authorized committee thereof), (ii) provided that one or more directors are to be elected at such meeting, by any stockholder of the Corporation who is a stockholder of record at the time the notice provided for in this Section 2.10(b) is delivered to the Secretary of the Corporation, who is entitled to vote at the meeting and upon such election and who delivers a written notice setting forth the information required by Section 2.10(a) above, or (iii) in the case of a stockholder requested special meeting, by any stockholder of the Corporation pursuant to Section 2.2. In the event the Corporation calls a special meeting of stockholders (other than a stockholder requested special meeting) for the purpose of electing one or more directors to the Board of Directors, any stockholder entitled to vote in such election of directors may nominate a person or persons (as

the case may be) for election to such position(s) as specified in the Corporation's notice of meeting procedures set forth in these Bylaws, if the notice required by this Section 2.10(b) shall be delivered to the Secretary at the principal executive offices of the Corporation not earlier than the close of business on the 120th day prior to such special meeting and not later than the close of business on the later of the 90th day prior to such special meeting or the 10th day following the day on which public announcement is first made of the date of the special meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. In no event shall an adjournment, recess or postponement of a special meeting commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above. Notwithstanding any other provision of these Bylaws, in the case of a stockholder requested special meeting, no stockholder may nominate a person for election to the Board of Directors or propose any other business to be considered at the meeting, except pursuant to the written request(s) delivered for such special meeting pursuant to Section 2.2.

(c) General.

(i) Except as otherwise required by law, only such persons who are nominated in accordance with the procedures set forth in this Section 2.10 shall be eligible to be elected at any meeting of stockholders of the Corporation to serve as directors and only such other business shall be conducted at a meeting of stockholders as shall have been brought before the meeting in accordance with the procedures set forth in this Section 2.10. Except as otherwise required by law, the chairman of the meeting shall have the power to determine whether a nomination or any other business proposed to be brought before the meeting was made or proposed, as the case may be, in accordance with the procedures set forth in this Section 2.10. If any proposed nomination or other business is not in compliance with this Section 2.10, then except as otherwise required by law, the chairman of the meeting shall have the power to declare that such nomination shall be disregarded or that such other business shall not be transacted. Notwithstanding the foregoing provisions of this Section 2.10, unless otherwise required by law, or otherwise determined by the chairman of the meeting, if the stockholder does not provide the information required under clauses (a)(ii)(C)(2) and (a)(ii)(D)(1)-(3) of this Section 2.10 to the Corporation within the time frames specified herein, or if the stockholder (or a qualified representative of the stockholder) does not appear at the annual or special meeting of stockholders of the Corporation to present a nomination or other business, such nomination shall be disregarded and such other business shall not be transacted, notwithstanding that proxies in respect of such vote may have been received by the Corporation. For purposes of this Section 2.10, to be considered a qualified representative of a stockholder, a person must be a duly authorized officer, manager or partner of such stockholder or authorized by a writing executed by such stockholder (or a reliable reproduction or electronic transmission of the writing) delivered to the Corporation prior to the making of such nomination or proposal at such meeting by such stockholder stating that such person is authorized to act for such stockholder as proxy at the meeting of stockholders.

(ii) For purposes of this Section 2.10, the "close of business" shall mean 6:00 p.m. Dallas, Texas time on any calendar day, whether or not the day is a business day, and a "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or a comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Sections 13,

14 or 15(d) of the Exchange Act. For purposes of clause (a)(ii)(D)(1) of this Section 2.10, shares shall be treated as "beneficially owned" by a person if the person beneficially owns such shares, directly or indirectly, for purposes of Section 13(d) of the Exchange Act and Regulations 13D and 13G thereunder or has or shares pursuant to any agreement, arrangement or understanding (whether or not in writing): (A) the right to acquire such shares (whether such right is exercisable immediately or only after the passage of time or the fulfillment of a condition or both), (B) the right to vote such shares, alone or in concert with others and/or (C) investment power with respect to such shares, including the power to dispose of, or to direct the disposition of, such shares.

(iii) Nothing in this Section 2.10 shall be deemed to affect any rights of (a) the holders of any series of Preferred Stock to elect directors pursuant to any applicable provisions of the Certificate of Incorporation (including any Preferred Stock Designation) or (b) Apollo Management Holdings L.P., Brookfield Asset Management Private Institutional Capital Adviser (Canada), L.P. and Oaktree Capital Management, L.P. (each, a "Nomination Party") with respect to each Nomination Party's right to nominate persons for election as directors pursuant to such Nomination Party's respective Stockholders' Agreement, dated as of October 3, 2016 (each, a "Stockholders' Agreement"), by and between the Corporation and such Nomination Party, which Stockholders' Agreements shall govern the rights of the Nomination Parties to nominate persons for election as directors.

Section 2.11 No Action by Written Consent.

Except as otherwise provided for in the Certificate of Incorporation (including any Preferred Stock Designation), any action required or permitted to be taken by stockholders of the Corporation must be effected at a duly held meeting of stockholders of the Corporation at which a quorum is present or represented, and may not be effected by written consent of stockholders in lieu of a meeting of stockholders.

Section 2.12 Inspectors of Election. Before any meeting of stockholders, the Corporation may, and shall if required by law, appoint one or more inspectors of election to act at the meeting and make a written report thereof. Inspectors may be employees of the Corporation. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the chairman of the meeting shall appoint one or more inspectors to act at the meeting. Inspectors need not be stockholders. No director or nominee for the office of director at an election shall be appointed as an inspector at such election.

Such inspectors shall:

(a) determine the number of shares outstanding and the voting power of each, the number of shares represented at the meeting, the existence of a quorum, and the validity of proxies and ballots;

(b) determine and retain for a reasonable period a record of the disposition of any challenges made to any determination by the inspectors;

(c) count and tabulate all votes and ballots; and

(d) certify their determination of the number of shares represented at the meeting, and their count of all votes and ballots.

Section 2.13 Meetings by Remote Communications. The Board of Directors may, in its sole discretion, determine that a meeting of stockholders shall not be held at any place, but may instead be held solely by means of remote communication in accordance with Section 211(a)(2) of the DGCL. If authorized by the Board of Directors in its sole discretion, and subject to such guidelines and procedures as the Board of Directors may adopt, stockholders and proxyholders not physically present at a meeting of stockholders may, by means of remote communication (a) participate in a meeting of stockholders and (b) be deemed present in person and vote at a meeting of stockholders whether such meeting is to be held at a designated place or solely by means of remote communication, provided that (i) the Corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder or proxyholder; (ii) the Corporation shall implement reasonable measures to provide such stockholders and proxyholders a reasonable opportunity to participate in the meeting and to vote on matters submitted to the stockholders, including an opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings; and (iii) if any stockholder or proxyholder votes or takes other action at the meeting by means of remote communication, a record of such vote or other action shall be maintained by the Corporation.

ARTICLE III
DIRECTORS

Section 3.1 Powers. Subject to the provisions of the DGCL and to any limitations in the Certificate of Incorporation relating to action required to be approved by the stockholders, the business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors. In addition to the powers and authorities these Bylaws expressly confer upon it, the Board of Directors may exercise all such powers of the Corporation and do all such lawful acts and things as are not by law, the Certificate of Incorporation or these Bylaws required to be exercised or done by the stockholders.

Section 3.2 Number and Election. Except as otherwise provided for in the Certificate of Incorporation (including any Preferred Stock Designation), the Board of Directors shall consist of such number of directors as shall be determined from time to time in accordance with the Certificate of Incorporation solely by resolution adopted by the affirmative vote of a majority of the total number of directors then authorized (hereinafter referred to as the "Whole Board"). The first Board of Directors shall consist of the person or persons elected by the incorporator or designated in the Certificate of Incorporation. Except as provided in Section 3.3, each director shall be elected by the plurality of votes cast at any meeting for the election of directors at which a quorum is present.

Section 3.3 Vacancies. Subject to the rights of the holders of any outstanding series of Preferred Stock, and unless otherwise required by law, newly created directorships resulting from any increase in the authorized number of directors and any vacancies in the Board of Directors resulting from death, resignation, retirement, disqualification, removal from office or other cause shall be filled solely by the affirmative vote of a majority of the remaining directors

then in office and entitled to vote thereon, even though less than a quorum, or by the sole remaining director, and any director so chosen shall hold office until the next election of the class for which such director shall have been chosen and until his or her successor shall have been duly elected and qualified. No decrease in the authorized number of directors shall shorten the term of any incumbent director.

Section 3.4 Resignations and Removal.

(a) Any director may resign at any time upon notice given in writing or by electronic transmission to the Chairman of the Board of Directors or the Secretary of the Corporation. Such resignation shall take effect upon delivery, unless the resignation specifies a later effective date or time or an effective date or time determined upon the happening of an event or events. Unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

(b) Except for such additional directors, if any, as are elected by the holders of any series of Preferred Stock as provided for in the Certificate of Incorporation (including any Preferred Stock Designation), any director, or the entire Board of Directors, may be removed from office at any time, but only for cause and only by the affirmative vote of at least a majority of the voting power of the stock outstanding and entitled to vote thereon.

Section 3.5 Regular Meetings. Regular meetings of the Board of Directors shall be held at such place or places, within or without the State of Delaware, on such date or dates and at such time or times, as shall have been established by the Board of Directors and publicized among all directors. A notice of each regular meeting shall not be required.

Section 3.6 Special Meetings. Special meetings of the Board of Directors for any purpose or purposes may be called at any time by the Chairman of the Board of Directors, the Chief Executive Officer or a majority of the directors then in office. The person or persons authorized to call special meetings of the Board of Directors may fix the place, within or without the State of Delaware, date and time of such meetings. Notice of each such meeting shall be given to each director, if by mail, addressed to such director at his or her residence or usual place of business, at least three days before the day on which such meeting is to be held, or shall be sent to such director by electronic transmission, or be delivered personally or by telephone, in each case at least 24 hours prior to the time set for such meeting. A notice of special meeting need not state the purpose of such meeting, and, unless indicated in the notice thereof, any and all business may be transacted at a special meeting.

Section 3.7 Participation in Meetings by Conference Telephone. Members of the Board of Directors, or of any committee thereof, may participate in a meeting of such Board of Directors or committee by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and such participation shall constitute presence in person at such meeting.

Section 3.8 Quorum and Voting. Except as otherwise required by law, the Certificate of Incorporation or these Bylaws, a majority of the Whole Board shall constitute a quorum for the transaction of business at any meeting of the Board of Directors, and the vote of a majority of

the directors present at a duly held meeting at which a quorum is present shall be the act of the Board of Directors. The chairman of the meeting or a majority of the directors present may adjourn the meeting to another time and place whether or not a quorum is present. At any adjourned meeting at which a quorum is present, any business may be transacted which might have been transacted at the meeting as originally called.

Section 3.9 Board of Directors Action by Written Consent Without a Meeting. Any action required or permitted to be taken at any meeting of the Board of Directors, or any committee thereof, may be taken without a meeting, provided that all members of the Board of Directors or committee, as the case may be, consent in writing or by electronic transmission to such action, and the writing or writings or electronic transmission or transmissions are filed with the minutes or proceedings of the Board of Directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form. Any person (whether or not then a director) may provide, whether through instruction to an agent or otherwise, that a consent to action shall be effective at a future time (including a time determined upon the happening of an event), no later than 60 days after such instruction is given or such provision is made and such consent shall be deemed to have been given at such effective time so long as such person is then a director and did not revoke the consent prior to such time. Any such consent shall be revocable prior to its becoming effective.

Section 3.10 Chairman of the Board. The Chairman of the Board shall preside at meetings of stockholders (except as set forth in Section 2.4(a) of these Bylaws) and directors and shall perform such other duties as the Board of Directors may from time to time determine. If the Chairman of the Board is not present at a meeting of the Board of Directors, another director chosen by the Board of Directors shall preside.

Section 3.11 Rules and Regulations. The Board of Directors shall adopt such rules and regulations not inconsistent with the provisions of law, the Certificate of Incorporation or these Bylaws for the conduct of its meetings and management of the affairs of the Corporation as the Board of Directors shall deem proper.

Section 3.12 Fees and Compensation of Directors. Directors may receive such compensation, if any, for their services on the Board of Directors and its committees, and such reimbursement of expenses, as may be fixed or determined by resolution of the Board of Directors.

Section 3.13 Emergency Bylaws. In the event of any emergency, disaster or catastrophe, as referred to in Section 110 of the DGCL, or other similar emergency condition, as a result of which a quorum of the Board of Directors or a standing committee of the Board of Directors cannot readily be convened for action, then the director or directors in attendance at the meeting shall constitute a quorum. Such director or directors in attendance may further take action to appoint one or more of themselves or other directors to membership on any standing or temporary committees of the Board of Directors as they shall deem necessary and appropriate.

ARTICLE IV
COMMITTEES

Section 4.1 Committees of the Board of Directors. The Board of Directors may designate one or more committees, each such committee to consist of one or more of the directors of the Corporation. The Board of Directors may designate one or more directors as alternate members of any committee to replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members present at any meeting and not disqualified from voting, whether or not he, she or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the fullest extent permitted by applicable law and provided in the resolution of the Board of Directors establishing such committee, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Corporation. All committees of the Board of Directors shall keep minutes of their meetings and shall report their proceedings to the Board of Directors when requested or required by the Board of Directors.

Section 4.2 Meetings and Action of Committees. Unless the Board of Directors provides otherwise by resolution, any committee of the Board of Directors may adopt, alter and repeal such rules and regulations not inconsistent with the provisions of law, the Certificate of Incorporation or these Bylaws for the conduct of its meetings as such committee may deem proper.

ARTICLE V
OFFICERS

Section 5.1 Officers. The officers of the Corporation shall consist of a Chief Executive Officer, a President, a Chief Financial Officer, a Secretary, a Treasurer, and such other officers as the Board of Directors may from time to time determine, each of whom shall be elected by the Board of Directors, each to have such authority, functions or duties as set forth in these Bylaws or as determined by the Board of Directors. Each officer shall be elected by the Board of Directors and shall hold office for such term as may be prescribed by the Board of Directors and until such person’s successor shall have been duly elected and qualified, or until such person’s earlier death, disqualification, resignation or removal. Any number of offices may be held by the same person; provided, however, that no officer shall execute, acknowledge or verify any instrument in more than one capacity if such instrument is required by law, the Certificate of Incorporation or these Bylaws to be executed, acknowledged or verified by two or more officers.

Section 5.2 Removal, Resignation and Vacancies. Any officer of the Corporation may be removed, with or without cause, by the Board of Directors, without prejudice to the rights, if any, of such officer under any contract to which it is a party. Any officer may resign at any time upon notice given in writing or by electronic transmission to the Corporation, without prejudice to the rights, if any, of the Corporation under any contract to which such officer is a party. If any vacancy occurs in any office of the Corporation, the Board of Directors may elect a successor to fill such vacancy for the remainder of the unexpired term and until a successor shall have been duly elected and qualified.

Section 5.3 Chief Executive Officer. The Chief Executive Officer shall have general supervision and direction of the business and affairs of the Corporation, shall be responsible for corporate policy and strategy, and shall report directly to the Board of Directors. Unless otherwise provided in these Bylaws, all other officers of the Corporation shall report directly to the Chief Executive Officer or as otherwise determined by the Chief Executive Officer. The Chief Executive Officer shall, if present and in the absence of the Chairman of the Board of Directors, preside at meetings of the stockholders.

Section 5.4 President. The President shall generally be responsible for the management and control of the operations of the Corporation. The President shall, when requested, counsel with and advise the other officers of the Corporation and shall perform such other duties as the Board of Directors or the Chief Executive Officer may from time to time determine.

Section 5.5 Chief Financial Officer. The Chief Financial Officer shall exercise all the powers and perform the duties of the office of the chief financial officer and in general have overall supervision of the financial operations of the Corporation. The Chief Financial Officer shall, when requested, counsel with and advise the other officers of the Corporation and shall perform such other duties as the Board of Directors, the Chief Executive Officer or the President may from time to time determine.

Section 5.6 Treasurer. The Treasurer shall supervise and be responsible for all the funds and investments of the Corporation, the deposit of all moneys and other valuables to the credit of the Corporation in depositories of the Corporation, borrowings and compliance with the provisions of all indentures, agreements and instruments governing such borrowings to which the Corporation is a party, the disbursement of funds of the Corporation and the investment of its funds, and in general shall perform all of the duties incident to the office of the Treasurer. The Treasurer shall, when requested, counsel with and advise the other officers of the Corporation and shall perform such other duties as the Board of Directors, the Chief Executive Officer, the President or the Chief Financial Officer may from time to time determine.

Section 5.7 Secretary. The powers and duties of the Secretary are: (i) to act as Secretary at all meetings of the Board of Directors, of the committees of the Board of Directors and of the stockholders and to record the proceedings of such meetings in a book or books to be kept for that purpose; (ii) to see that all notices required to be given by the Corporation are duly given and served; (iii) to act as custodian of the seal of the Corporation and affix the seal or cause it to be affixed to all certificates of stock of the Corporation and to all documents, the execution of which on behalf of the Corporation under its seal is duly authorized in accordance with the provisions of these Bylaws; (iv) to have charge of the books, records and papers of the Corporation and see that the reports, statements and other documents required by law to be kept and filed are properly kept and filed; and (v) to perform all of the duties incident to the office of Secretary. The Secretary shall, when requested, counsel with and advise the other officers of the Corporation and shall perform such other duties as the Board of Directors, the Chief Executive Officer or the President may from time to time determine.

Section 5.8 Additional Matters. The Chief Executive Officer shall have the authority to designate employees of the Corporation to have the title of Executive Vice President, Senior

Vice President, Vice President, Assistant Vice President, Assistant Treasurer or Assistant Secretary. Any employee so designated shall have the powers and duties determined by the officer making such designation. The persons upon whom such titles are conferred shall not be deemed officers of the Corporation unless elected by the Board of Directors.

Section 5.9 Checks; Drafts; Evidences of Indebtedness. From time to time, the Board of Directors shall determine the method, and designate (or authorize officers of the Corporation to designate) the person or persons who shall have authority, to sign or endorse all checks, drafts, other orders for payment of money, notes, bonds, debentures or other evidences of indebtedness that are issued in the name of or payable by the Corporation, and only the persons so authorized shall sign or endorse such instruments. Such persons shall not be required to be officers of the Corporation.

Section 5.10 Corporate Contracts and Instruments; How Executed. Except as otherwise provided in these Bylaws, the Board of Directors may determine the method, and designate (or authorize officers of the Corporation to designate) the person or persons who shall have authority, to enter into any contract or execute any instrument in the name of and on behalf of the Corporation. Such authority may be general or confined to specific instances. Unless so authorized, or within the power incident to a person's office or other position with the Corporation, no person shall have any power or authority to bind the Corporation by any contract or engagement or to act on its behalf or to pledge its credit or to render it liable for any purpose or for any amount.

Section 5.11 Action with Respect to Securities of Other Corporations or Entities. The Chief Executive Officer or any other officer of the Corporation authorized by the Board of Directors or the Chief Executive Officer is authorized to vote, represent, and exercise on behalf of the Corporation all rights incident to any and all shares or other equity interests of any other corporation or entity or corporations or entities, standing in the name of the Corporation. The authority herein granted may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by the person having such authority.

Section 5.12 Delegation. The Board of Directors may from time to time delegate the powers or duties of any officer to any other officers, employees or agents, notwithstanding the foregoing provisions of this Article V.

ARTICLE VI
INDEMNIFICATION AND ADVANCEMENT OF EXPENSES

Section 6.1 Right to Indemnification. Each person who was or is a party or is threatened to be made a party to, or was or is otherwise involved in, any action, suit, arbitration, alternative dispute mechanism, inquiry, judicial, administrative or legislative hearing, investigation or any other threatened, pending or completed proceeding, whether brought by or in the right of the Corporation or otherwise, including any and all appeals, whether of a civil, criminal, administrative, legislative, investigative or other nature (hereinafter a "proceeding"), by reason of the fact that he or she is or was a director, an officer (elected by the Board of Directors pursuant to Section 5.1 of these Bylaws) of the Corporation or while a director or officer of the

Corporation is or was serving at the request of the Corporation as a director, officer, employee, agent or trustee of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan (hereinafter an "indemnitee"), or by reason of anything done or not done by him or her in any such capacity, shall be indemnified and held harmless by the Corporation to the fullest extent authorized by applicable law, including, without limitation, by the DGCL, as the same exists or may hereafter be amended, against all expense, liability and loss (including reasonable and documented attorneys' fees, judgments, fines, taxes or penalties and amounts paid in settlement by or on behalf of the indemnitee) actually and reasonably incurred by such indemnitee in connection therewith; provided, however, that, except as otherwise required by law, the Corporation shall indemnify any such indemnitee in connection with a proceeding, or part thereof, initiated by such indemnitee (including claims and counterclaims, whether such counterclaims are asserted by (i) such indemnitee, or (ii) the Corporation in a proceeding initiated by such indemnitee) only if such proceeding, or part thereof, was authorized or ratified by the Board of Directors.

Section 6.2 Right to Advancement of Expenses. In addition to the right to indemnification conferred in Section 6.1, an indemnitee shall, to the fullest extent not prohibited by law, also have the right to be paid by the Corporation the expenses (including reasonable and documented attorneys' fees) incurred in defending any proceeding with respect to which indemnification is required under Section 6.1 in advance of its final disposition (hereinafter an "advancement of expenses"); provided, however, that an advancement of expenses shall be made only upon delivery to the Corporation of an undertaking (hereinafter an "undertaking"), by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision of a court of competent jurisdiction from which there is no further right to appeal (hereinafter a "final adjudication") that such indemnitee is not entitled to be indemnified for such expenses under this Article VI or otherwise.

Section 6.3 Non-Exclusivity of Rights. The rights to indemnification and to the advancement of expenses conferred in this Article VI shall not be exclusive of any other right which any person may have or hereafter acquire under any law, agreement, vote of stockholders or disinterested directors, provisions of a certificate of incorporation or bylaws, or otherwise.

Section 6.4 Insurance. The Corporation may maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the DGCL.

Section 6.5 Indemnitor of First Resort. In all events, (i) the Corporation hereby agrees that it is the indemnitor of first resort (i.e., its obligation to an indemnitee to provide advancement and/or indemnification to such indemnitee is primary and any obligation of any stockholder of the Corporation (including any affiliate thereof, other than the Corporation) to provide advancement or indemnification hereunder or under any other indemnification agreement (whether pursuant to contract, by-laws or charter), or any obligation of any insurer of any stockholder (or any affiliate thereof, other than the Corporation) to provide insurance coverage, for the same expenses, liabilities and losses (including reasonable and documented attorneys' fees, judgments, fines, taxes or penalties and amounts paid in settlement by or on

behalf of the indemnitee) incurred by such indemnitee are secondary and (ii) if any stockholder (or any affiliate thereof, other than the Corporation) pays or causes to be paid, for any reason, any amounts otherwise indemnifiable hereunder or under any other indemnification agreement (whether pursuant to contract, by-laws or charter) with such indemnitee, then (x) such stockholder (or such affiliate, as the case may be), shall be fully subrogated to all rights of such indemnitee with respect to such payment and (y) the Corporation shall fully indemnify, reimburse and hold harmless such stockholder (or such affiliate, as the case may be) for all such payments actually made by such stockholder (or such affiliate, as the case may be).

Section 6.6 Indemnification of Employees and Agents of the Corporation. The Corporation may, to the extent and in the manner permitted by applicable law, and to the extent authorized from time to time, grant rights to indemnification and to the advancement of expenses to any employee or agent of the Corporation.

Section 6.7 Nature of Rights. The rights conferred upon indemnitees in this Article VI shall be contract rights and such rights shall continue as to an indemnitee who has ceased to be a director or officer, or who has ceased to serve at the request of the Corporation as a director, officer, employee, agent or trustee of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan, and shall inure to the benefit of the indemnitee's heirs, executors and administrators. Any amendment, alteration or repeal of this Article VI that adversely affects any right of an indemnitee or its successors shall be prospective only and shall not limit or eliminate any such right with respect to any proceeding involving any occurrence or alleged occurrence of any action or omission to act that took place prior to such amendment, alteration or repeal.

Section 6.8 Settlement of Claims. Notwithstanding anything in this Article VI to the contrary, the Corporation shall not be liable to indemnify any indemnitee under this Article VI for any amounts paid in settlement of any proceeding effected without the Corporation's written consent, which consent shall not be unreasonably withheld or delayed, or for any judicial award if the Corporation was not given a reasonable and timely opportunity, at its expense, to participate in the defense of such proceeding.

Section 6.9 Subrogation. In the event of payment under this Article VI, the Corporation shall be subrogated to the extent of such payment to all of the rights of recovery of the indemnitee, who shall execute all papers required and shall do everything that may be necessary to secure such rights, including the execution of such documents necessary to enable the Corporation effectively to bring suit to enforce such rights.

Section 6.10 Severability. If any provision or provisions of this Article VI shall be held to be invalid, illegal or unenforceable for any reason whatsoever, (a) the validity, legality and enforceability of the remaining provisions of this Article VI (including, without limitation, all portions of any paragraph of this Article VI containing any such provision held to be invalid, illegal or unenforceable, that are not by themselves invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby, and (b) to the fullest extent possible, the provisions of this Article VI (including, without limitation, all portions of any paragraph of this Article VI containing any such provision held to be invalid, illegal or unenforceable, that are not themselves

invalid, illegal or unenforceable) shall be construed so as to give effect to the intent of the parties that the Corporation provide protection to the indemnitee to the fullest enforceable extent.

ARTICLE VII
CAPITAL STOCK

Section 7.1 Certificates of Stock. The shares of stock of the Corporation shall be represented by certificates or all of such shares shall be uncertificated shares that may be evidenced by a book-entry system maintained by the registrar of such stock, or a combination of both. If shares are represented by certificates (if any), such certificates shall be in the form approved by the Board of Directors. Every holder of stock represented by certificates shall be entitled to have a certificate signed by or in the name of the Corporation by the Chairman of the Board of Directors, if any, or the President or a Vice President, and by the Treasurer or an Assistant Treasurer, or the Secretary of the Corporation or an Assistant Secretary, of the Corporation certifying the number of shares owned by such holder in the Corporation. Any or all such signatures may be facsimiles. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue.

Section 7.2 Special Designation on Certificates. If the Corporation is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate (to the extent any such shares are represented by certificates) that the Corporation shall issue to represent such class or series of stock; provided, however, that, except as otherwise provided in Section 202 of the DGCL, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the Corporation shall issue to represent such class or series of stock a statement that the Corporation will furnish without charge to each stockholder who so requests the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Within a reasonable time after the issuance or transfer of uncertificated stock (to the extent any shares are uncertificated), the Corporation shall send to the registered owner thereof a written notice containing the information required to be set forth or stated on certificates pursuant to this Section 7.2 or Sections 156, 202(a) or 218(a) of the DGCL or with respect to this Section 7.2 a statement that the Corporation will furnish without charge to each stockholder who so requests the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Except as otherwise expressly required by law, the rights and obligations of the holders of uncertificated stock and the rights and obligations of the holders of certificates representing stock of the same class and series shall be identical.

Section 7.3 Transfers of Stock. Transfers of shares of stock of the Corporation shall be made only on the books of the Corporation upon authorization by the registered holder thereof

or by such holder's attorney thereunto authorized by a power of attorney duly executed and filed with the Secretary of the Corporation or a transfer agent for such stock, and if such shares are represented by a certificate, upon surrender of the certificate or certificates for such shares properly endorsed or accompanied by a duly executed stock transfer power and the payment of any taxes thereon; provided, however, that the Corporation shall be entitled to recognize and enforce any lawful restriction on transfer.

Section 7.4 Lost Certificates. The Corporation may issue a new share certificate or uncertificated shares in the place of any certificate theretofore issued by it, alleged to have been lost, stolen or destroyed, and the Corporation may require the owner of the lost, stolen or destroyed certificate or the owner's legal representative to give the Corporation a bond (or other adequate security) sufficient to indemnify it against any claim that may be made against it (including any expense or liability) on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares. The Board of Directors may adopt such other provisions and restrictions with reference to lost certificates, not inconsistent with applicable law, as it shall in its discretion deem appropriate.

Section 7.5 Registered Stockholders. The Corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise required by law.

Section 7.6 Record Date for Determining Stockholders.

(a) In order that the Corporation may determine the stockholders entitled to notice of any meeting of stockholders or any adjourned meeting, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall, unless otherwise required by law, not be more than 60 nor less than 10 days before the date of such meeting. If the Board of Directors so fixes a date, such date shall also be the record date for determining the stockholders entitled to vote at such meeting unless the Board of Directors determines, at the time it fixes such record date, that a later date on or before the date of the meeting shall be the date for making such determination. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of and to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjourned meeting; provided, however, that the Board of Directors may fix a new record date for the determination of stockholders entitled to vote at the adjourned meeting, and in such case shall also fix as the record date for stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote in accordance herewith at the adjourned meeting.

(b) In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose

of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than 60 days prior to such action. If no such record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 7.7 Regulations. To the extent permitted by applicable law, the Board of Directors may make such additional rules and regulations as it may deem expedient concerning the issue, transfer and registration of shares of stock of the Corporation.

Section 7.8 Waiver of Notice. Whenever notice is required to be given under any provision of the DGCL or the Certificate of Incorporation or these Bylaws, a written waiver, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders, the Board of Directors or a committee of the Board of Directors need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the Certificate of Incorporation or these Bylaws.

ARTICLE VIII
GENERAL MATTERS

Section 8.1 Fiscal Year. The fiscal year of the Corporation shall begin on the first day of January of each year and end on the last day of December of the same year, or shall extend for such other 12 consecutive months as the Board of Directors may designate.

Section 8.2 Corporate Seal. The Board of Directors may provide a suitable seal, containing the name of the Corporation, which seal shall be in the charge of the Secretary of the Corporation. If and when so directed by the Board of Directors or a committee thereof, duplicates of the seal may be kept and used by the Treasurer or by an Assistant Secretary or Assistant Treasurer.

Section 8.3 Reliance Upon Books, Reports and Records. Each director and each member of any committee designated by the Board of Directors shall, in the performance of his or her duties, be fully protected in relying in good faith upon the books of account or other records of the Corporation and upon such information, opinions, reports or statements presented to the Corporation by any of its officers or employees, or committees of the Board of Directors so designated, or by any other person as to matters which such director or committee member reasonably believes are within such other person’s professional or expert competence and who has been selected with reasonable care by or on behalf of the Corporation.

Section 8.4 Subject to Law and Certificate of Incorporation. All powers, duties and responsibilities provided for in these Bylaws, whether or not explicitly so qualified, are qualified by the Certificate of Incorporation and applicable law.

ARTICLE IX
AMENDMENTS

Section 9.1 Amendments. In furtherance and not in limitation of the powers conferred by the laws of the State of Delaware, the Board of Directors is expressly authorized to adopt, amend or repeal these Bylaws. Except as otherwise provided in the Certificate of Incorporation or these Bylaws, and in addition to any requirements of law, the affirmative vote of at least 66⅔% of the voting power of the stock outstanding and entitled to vote thereon, voting together as a single class, shall be required for the stockholders to adopt, amend or repeal, or adopt any provision inconsistent with Article VI and this Article IX of these Bylaws.

The foregoing Bylaws were adopted by the Board of Directors on October 3, 2016.