# UNITED STATES SECURITIES AND EXCHANGE COMMISSION <br> Washington，D．C． 20549 

## FORM 10－Q

（Mark One）
凹 QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15（d）OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended March 31， 2017

## $\square$ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15（d）OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from $\qquad$ to $\qquad$
Commission File Number：000－21467


## Pacific Ethanol，Inc．

（Exact name of registrant as specified in its charter）


#### Abstract

Delaware （State or other jurisdiction of incorporation or organization）


（I．R．S．Employer Identification No．）
400 Capitol Mall，Suite 2060，Sacramento，California
（Address of principal executive offices）
（zip code）
（916）403－2123
（Registrant＇s telephone number，including area code）
Indicate by check mark whether the registrant（1）has filed all reports required to be filed by Section 13 or 15 （d）of the Securities Exchange Act of 1934 during the preceding 12 months（or for such shorter period that the registrant was required to file such reports），and（2）has been subject to such filing requirements for the past 90 days．
Yes $\mathbb{\boxtimes}$ No $\square$
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website，if any，every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S－T during the preceding 12 months（or for such shorter period that the registrant was required to submit and post such files）．
Yes $\mathbb{\text { ® }}$ No
Indicate by check mark whether the registrant is a large accelerated filer，an accelerated filer，a non－accelerated filer，a smaller reporting company or an emerging growth company．See the definitions of＂large accelerated filer，＂＂accelerated filer，＂＂smaller reporting company＂ and＂emerging growth company＂in Rule 12b－2 of the Exchange Act．（Check one）：
$\square$ Large accelerated filer
区 Accelerated filer
$\square$ Non－accelerated filer（Do not check if a smaller reporting company）
$\square$ Smaller reporting company
$\square$ Emerging growth company
If an emerging growth company，indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13（a）of the Exchange Act．

Indicate by check mark whether the registrant is a shell company（as defined in Rule 12b－2 of the Exchange Act）．
Yes $\quad$ No 区
As of May 9，2017，there were $41,902,621$ shares of Pacific Ethanol，Inc．common stock，$\$ 0.001$ par value per share，and $1,806,224$ shares of Pacific Ethanol，Inc．non－voting common stock，$\$ 0.001$ par value per share，outstanding．

## FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.
Consolidated Balance Sheets as of March 31, 2017 (unaudited) and December 31, 2016 ..... 3
Consolidated Statements of Operations for the Three Months Ended March 31, 2017 and 2016 (unaudited) ..... 5
Consolidated Statements of Cash Flows for the Three Months Ended March 31, 2017 and 2016 (unaudited) ..... 6
Notes to Consolidated Financial Statements (unaudited) ..... 7
ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF ..... 17OPERATIONS.
ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK. ..... 28
ITEM 4. CONTROLS AND PROCEDURES. ..... 29
PART II
OTHER INFORMATION
ITEM 1. LEGAL PROCEEDINGS. ..... 30
ITEM 1A. RISK FACTORS. ..... 30
ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS. ..... 38
ITEM 3. DEFAULTS UPON SENIOR SECURITIES. ..... 39
ITEM 4. MINE SAFETY DISCLOSURES. ..... 39
ITEM 5. OTHER INFORMATION. ..... 39
ITEM 6. EXHIBITS. ..... 40
SIGNATURES ..... 41

## PART I - FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS.

## PACIFIC ETHANOL, INC. CONSOLIDATED BALANCE SHEETS (in thousands)



[^0]See accompanying notes to consolidated financial statements.

## PACIFIC ETHANOL, INC. <br> CONSOLIDATED BALANCE SHEETS (CONTINUED) (in thousands, except par value)



## LIABILITIES AND STOCKHOLDERS' EOUITY

| Current Liabilities: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Accounts payable - trade | \$ | 32,490 | \$ | 37,051 |
| Accrued liabilities |  | 17,733 |  | 20,280 |
| Current portion - capital leases |  | 794 |  | 794 |
| Current portion - long-term debt |  | 14,000 |  | 10,500 |
| Accrued PE Op Co. purchase |  | 3,828 |  | 3,828 |
| Derivative instruments |  | 1,171 |  | 4,115 |
| Other current liabilities |  | 1,934 |  | 2,273 |
| Total current liabilities |  | 71,950 |  | 78,841 |
|  |  |  |  |  |
| Long-term debt, net of current portion |  | 182,383 |  | 188,028 |
| Capital leases, net of current portion |  | 357 |  | 547 |
| Warrant liabilities at fair value |  | 196 |  | 651 |
| Other liabilities |  | 21,146 |  | 21,910 |
|  |  |  |  |  |
| Total Liabilities |  | 276,032 |  | 289,977 |
|  |  |  |  |  |
| Commitments and Contingencies (Note 6) |  |  |  |  |
| Stockholders' Equity: |  |  |  |  |
| Pacific Ethanol, Inc. Stockholders' Equity: |  |  |  |  |
| Preferred stock, \$0.001 par value; 10,000 shares authorized; |  |  |  |  |
| Series A: 1,684 shares authorized; no shares issued and outstanding as of March 31, |  |  |  |  |
| Series B: 1,581 shares authorized; 927 shares issued and outstanding as of March 31, |  |  |  |  |
| Common stock, $\$ 0.001$ par value; 300,000 shares authorized; 40,414 and 39,772 shares issued and outstanding as of March 31, 2017 and December 31, 2016, respectively |  | 40 |  | 40 |
| Non-voting common stock, $\$ 0.001$ par value; 3,553 shares authorized; 3,413 and 3,540 shares issued and outstanding as of March 31, 2017 and December 31, 2016, respectively |  |  |  |  |
| Additional paid-in capital |  | 923,956 |  | 922,698 |
| Accumulated other comprehensive income (loss) |  | $(2,620)$ |  | $(2,620)$ |
| Accumulated deficit |  | $(545,181)$ |  | $(532,233)$ |
| Total Pacific Ethanol, Inc. Stockholders' Equity |  | 376,200 |  | 387,890 |
| Noncontrolling interests |  | 29,522 |  | 30,371 |
| Total Stockholders' Equity |  | 405,722 |  | 418,261 |
| Total Liabilities and Stockholders' Equity | \$ | 681,754 | \$ | 708,238 |

[^1]See accompanying notes to consolidated financial statements.

## PACIFIC ETHANOL, INC.

## CONSOLIDATED STATEMENTS OF OPERATIONS <br> (unaudited, in thousands, except per share data)

|  | Three Months Ended March 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| Net sales | \$ | 386,340 | \$ | 342,373 |
| Cost of goods sold |  | 392,113 |  | 341,304 |
| Gross profit (loss) |  | $(5,773)$ |  | 1,069 |
| Selling, general and administrative expenses |  | 5,450 |  | 8,317 |
| Loss from operations |  | $(11,223)$ |  | (7,248) |
| Fair value adjustments |  | 455 |  | 39 |
| Interest expense, net |  | $(2,637)$ |  | $(6,233)$ |
| Other income (expense), net |  | (80) |  | 216 |
| Loss before benefit for income taxes |  | $(13,485)$ |  | $(13,226)$ |
| Benefit for income taxes |  | - |  | - |
| Consolidated net loss |  | $(13,485)$ |  | $(13,226)$ |
| Net loss attributed to noncontrolling interests |  | 849 |  | - |
| Net loss attributed to Pacific Ethanol, Inc. | \$ | $(12,636)$ | \$ | (13,226) |
| Preferred stock dividends | \$ | (312) | \$ | (315) |
| Net loss available to common stockholders | \$ | $(12,948)$ | \$ | $(13,541)$ |
| Net loss per share, basic and diluted | \$ | (0.31) | \$ | (0.32) |
| Weighted-average shares outstanding, basic and diluted |  | 42,375 |  | 42,052 |

See accompanying notes to consolidated financial statements.

## PACIFIC ETHANOL, INC. <br> CONSOLIDATED STATEMENTS OF CASH FLOWS (unaudited, in thousands)

|  | Three Months Ended March 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| Operating Activities: |  |  |  |  |
| Consolidated net loss | \$ | $(13,485)$ | \$ | $(13,226)$ |
| Adjustments to reconcile consolidated net loss to net cash provided by (used in) operating activities: |  |  |  |  |
| Fair value adjustments |  | (455) |  | (39) |
| Depreciation and amortization of intangibles |  | 9,110 |  | 8,651 |
| Inventory valuation adjustment |  | 2,086 |  | - |
| Interest expense added to term debt |  | - |  | 3,786 |
| Amortization of debt discount |  | 136 |  | 301 |
| Non-cash compensation |  | 1,221 |  | 583 |
| Amortization of deferred financing fees |  | 91 |  | 54 |
| Gain on derivatives |  | (216) |  | (582) |
| Bad debt expense |  | 7 |  | 256 |
| Changes in operating assets and liabilities: |  |  |  |  |
| Accounts receivable |  | 22,250 |  | $(2,324)$ |
| Inventories |  | (61) |  | $(8,442)$ |
| Prepaid expenses and other assets |  | $(2,412)$ |  | 5,439 |
| Prepaid inventory |  | 2,033 |  | (35) |
| Accounts payable and accrued expenses |  | $(8,213)$ |  | 416 |
| Net cash provided by (used in) operating activities |  | 12,092 |  | $(5,162)$ |
|  |  |  |  |  |
| Investing Activities: |  |  |  |  |
| Additions to property and equipment |  | $(4,111)$ |  | $(4,966)$ |
| Net cash used in investing activities |  | $(4,111)$ |  | (4,966) |
|  |  |  |  |  |
| Financing Activities: |  |  |  |  |
| Net payments on Kinergy's line of credit |  | $(1,358)$ |  | $(5,031)$ |
| Principal payments on borrowings |  | $(1,000)$ |  | $(17,003)$ |
| Principal payments on capital leases |  | (190) |  | $(1,028)$ |
| Proceeds from exercise of warrants |  | 37 |  | - |
| Debt issuance costs |  | (14) |  | - |
| Preferred stock dividends paid |  | (312) |  | (315) |
| Net cash used in financing activities |  | $(2,837)$ |  | $(23,377)$ |
|  |  |  |  |  |
| Net increase (decrease) in cash and cash equivalents |  | 5,144 |  | $(33,505)$ |
| Cash and cash equivalents at beginning of period |  | 68,590 |  | 52,712 |
| Cash and cash equivalents at end of period | \$ | 73,734 | \$ | 19,207 |
|  |  |  |  |  |
| Supplemental Information: |  |  |  |  |
| Interest paid | \$ | 2,403 | \$ | 2,070 |
| Income taxes received | \$ | 3 | \$ | 4,534 |

See accompanying notes to consolidated financial statements.

## PACIFIC ETHANOL, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

## 1. ORGANIZATION AND BASIS OF PRESENTATION.

Organization and Business - The consolidated financial statements include, for all periods presented, the accounts of Pacific Ethanol, Inc., a Delaware corporation ("Pacific Ethanol"), and its direct and indirect subsidiaries (collectively, the "Company"), including its whollyowned subsidiaries, Kinergy Marketing LLC, an Oregon limited liability company ("Kinergy"), Pacific Ag. Products, LLC, a California limited liability company ("PAP"), PE Op Co., a Delaware corporation ("PE Op Co.") and all eight of the Company's ethanol production facilities.

On December 15, 2016, the Company and Aurora Cooperative Elevator Company, a Nebraska cooperative corporation ("ACEC"), closed a transaction under a contribution agreement under which the Company contributed its Aurora, Nebraska ethanol facilities and ACEC contributed its Aurora grain elevator and related grain handling assets to Pacific Aurora, LLC ("Pacific Aurora") in exchange for equity interests in Pacific Aurora. On December 15, 2016, concurrently with the closing under the contribution agreement, the Company sold a portion of its equity interest in Pacific Aurora to ACEC. As a result, as of December 15, 2016 and through March 31, 2017, the Company owned $73.93 \%$ of Pacific Aurora and ACEC owned $26.07 \%$ of Pacific Aurora. The Company consolidates $100 \%$ of the results of Pacific Aurora and records ACEC's $26.07 \%$ equity interest as noncontrolling interests in the accompanying financial statements.

The Company is a leading producer and marketer of low-carbon renewable fuels in the United States. The Company's four ethanol plants in the Western United States (together with their respective holding companies, the "Pacific Ethanol West Plants") are located in close proximity to both feed and ethanol customers and thus enjoy unique advantages in efficiency, logistics and product pricing. These plants produce among the lowest-carbon ethanol produced in the United States due to low energy use in production.

The Company has an ethanol production capacity of 515 million gallons per year, markets, on an annualized basis, nearly 1.0 billion gallons of ethanol, and produces, on an annualized basis, over 2.5 million tons of co-products such as wet and dry distillers grains, wet and dry corn gluten feed, condensed distillers solubles, corn gluten meal, corn germ, distillers yeast and $\mathrm{CO}_{2}$. The Company's four ethanol plants in the Midwest (together with their respective holding companies, the "Pacific Ethanol Central Plants") are located in the heart of the Corn Belt, benefit from low-cost and abundant feedstock production and allow for access to many additional domestic markets. In addition, the Company's ability to load unit trains from these facilities in the Midwest allows for greater access to international markets.

Basis of Presentation-Interim Financial Statements - The accompanying unaudited consolidated financial statements and related notes have been prepared in accordance with accounting principles generally accepted in the United States for interim financial information and the instructions to Form 10-Q and Rule 10-01 of Regulation S-X. Results for interim periods should not be considered indicative of results for a full year. These interim consolidated financial statements should be read in conjunction with the consolidated financial statements and related notes contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2016. The accounting policies used in preparing these consolidated financial statements are the same as those described in Note 1 to the consolidated financial statements in the Company's Annual Report on Form 10-K for the year ended December 31, 2016. In the opinion of management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair statement of the results for interim periods have been included. All significant intercompany accounts and transactions have been eliminated in consolidation.

Accounts Receivable and Allowance for Doubtful Accounts - Trade accounts receivable are presented at face value, net of the allowance for doubtful accounts. The Company sells ethanol to gasoline refining and distribution companies, sells distillers grains and other feed coproducts to dairy operators and animal feedlots and sells corn oil to poultry and biodiesel customers generally without requiring collateral.

The Company maintains an allowance for doubtful accounts for balances that appear to have specific collection issues. The collection process is based on the age of the invoice and requires attempted contacts with the customer at specified intervals. If, after a specified number of days, the Company has been unsuccessful in its collection efforts, a bad debt allowance is recorded for the balance in question. Delinquent accounts receivable are charged against the allowance for doubtful accounts once uncollectibility has been determined. The factors considered in reaching this determination are the apparent financial condition of the customer and the Company's success in contacting and negotiating with the customer. If the financial condition of the Company's customers were to deteriorate, resulting in an impairment of ability to make payments, additional allowances may be required.

Of the accounts receivable balance, approximately $\$ 54,828,000$ and $\$ 64,853,000$ at March 31, 2017 and December 31, 2016, respectively, were used as collateral under Kinergy's operating line of credit. The allowance for doubtful accounts was $\$ 41,000$ and $\$ 331,000$ as of March 31, 2017 and December 31, 2016, respectively. The Company recorded a bad debt expense of $\$ 7,000$ and $\$ 256,000$ for the three months ended March 31, 2017 and 2016, respectively. The Company does not have any off-balance sheet credit exposure related to its customers.

Benefit for Income Taxes - The Company recognized no tax benefit for the three months ended March 31, 2017 and 2016 due to the uncertainty of using its tax losses to offset future tax income. To the extent the Company believes it can utilize its tax losses, the Company will adjust its benefit for income taxes accordingly in future periods.

Financial Instruments - The carrying values of cash and cash equivalents, accounts receivable, accounts payable, accrued liabilities and accrued PE Op Co. purchase are reasonable estimates of their fair values because of the short maturity of these items. The Company recorded its warrant liabilities at fair value. The Company believes the carrying value of its long-term debt approximates fair value because the interest rates on these instruments are variable, and are considered Level 2 fair value measurements.

Recent Accounting Pronouncements - In February 2016, the Financial Accounting Standards Board ("FASB") issued new guidance on accounting for leases. Under the new guidance, lessees will be required to recognize the following for all leases (with the exception of short-term leases) at the commencement date: (1) a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted cash flow basis; and (2) a "right of use" asset, which is an asset that represents the lessee's right to use the specified asset for the lease term. Under the new guidance, lessor accounting is largely unchanged, with some minor exceptions. Lessees will no longer be provided with a source of off-balance sheet financing for other than short-term leases. The standard is effective for public companies for annual reporting periods beginning after December 15, 2019, and for interim periods beginning after December 15, 2020. Early adoption is permitted. The Company has several operating leases that may be impacted by this guidance. The Company is currently evaluating the impact of the adoption of this accounting standard on its consolidated results of operations and financial condition.

In May 2014, the FASB issued new guidance on the recognition of revenue. The guidance states that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. The Company's adoption begins with the first fiscal quarter of fiscal year 2018. In March and April 2016, the FASB issued further revenue recognition guidance amending principal vs. agent considerations regarding whether an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods and services. The Company is currently evaluating the impact of the adoption of this accounting standard update on its consolidated results of operations and financial condition. The Company has not yet selected a transition method, nor has it determined the effect of the standard on its ongoing financial reporting. The Company has begun the process in its evaluation and believes it is following an appropriate timeline to allow for proper recognition, presentation and disclosure effective beginning in the year ending December 31, 2018.

In April 2016, the FASB issued new guidance to reduce the complexity of certain aspects of accounting for employee share-based payment transactions. Prior to adoption of the standard, accruals of compensation costs were based on an estimated forfeiture rate. The new guidance allows an entity to make an entity-wide accounting policy election to either continue using an estimate of forfeitures or account for forfeitures only when they occur. The guidance is effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. Effective January 1, 2017, the Company elected to discontinue the use of an estimated forfeiture rate and instead account for actual forfeitures as they occur. The transition guidance requires an adjustment to retained earnings for any cumulative effect. The impact to the Company upon adoption was determined to be immaterial.

Estimates and Assumptions - The preparation of the consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates are required as part of determining the fair value of warrants, allowance for doubtful accounts, net realizable value of inventory, estimated lives of property and equipment, long-lived asset impairments, valuation allowances on deferred income taxes and the potential outcome of future tax consequences of events recognized in the Company's financial statements or tax returns, and the valuation of assets acquired and liabilities assumed as a result of business combinations. Actual results and outcomes may materially differ from management's estimates and assumptions.

## 2. SEGMENTS.

The Company reports its financial and operating performance in two segments: (1) ethanol production, which includes the production and sale of ethanol and co-products, with all of the Company's production facilities aggregated, and (2) marketing and distribution, which includes marketing and merchant trading for Company-produced ethanol and co-products and third-party ethanol.

The following tables set forth certain financial data for the Company's operating segments (in thousands):

|  | Three Months Ended March 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| Net Sales: |  |  |  |  |
| Ethanol production: |  |  |  |  |
| Net sales to external customers | \$ | 243,075 | \$ | 229,241 |
| Intersegment net sales |  | 310 |  | - |
| Total production segment net sales |  | 243,385 |  | 229,241 |
|  |  |  |  |  |
| Marketing and distribution: |  |  |  |  |
| Net sales to external customers |  | 143,265 |  | 113,132 |
| Intersegment net sales |  | 1,837 |  | 2,016 |
| Total marketing and distribution segment net sales |  | 145,102 |  | 115,148 |
| Net sales including intersegment activity |  | 388,487 |  | 344,389 |
| Intersegment eliminations |  | $(2,147)$ |  | $(2,016)$ |
| Net sales, as reported | \$ | 386,340 | \$ | 342,373 |
|  |  |  |  |  |
| Cost of goods sold: |  |  |  |  |
| Ethanol production | \$ | 250,587 | \$ | 236,008 |
| Marketing and distribution |  | 143,676 |  | 109,297 |
| Intersegment eliminations |  | $(2,150)$ |  | $(4,001)$ |
| Cost of goods sold, as reported | \$ | 392,113 | \$ | 341,304 |
| Income (loss) before benefit for income taxes: |  |  |  |  |
| Ethanol production | \$ | $(12,315)$ | \$ | $(17,322)$ |
| Marketing and distribution |  | 150 |  | 3,969 |
| Corporate activities |  | $(1,320)$ |  | 127 |
|  | \$ | $(13,485)$ | \$ | (13,226) |
| Depreciation and amortization: |  |  |  |  |
| Ethanol production | \$ | 8,847 | \$ | 8,415 |
| Marketing and distribution |  | - |  | 3 |
| Corporate activities |  | 263 |  | 233 |
|  | \$ | 9,110 | \$ | 8,651 |
| Interest expense: |  |  |  |  |
| Ethanol production | \$ | 1,092 | \$ | 5,900 |
| Marketing and distribution |  | 308 |  | 333 |
| Corporate activities |  | 1,237 |  | - |
|  | \$ | 2,637 | \$ | 6,233 |

The following table sets forth the Company's total assets by operating segment (in thousands):

|  | March 31, 2017 |  |  | December 31, 2016 |
| :--- | ---: | ---: | ---: | ---: |
| Total assets: |  |  |  |  |
| Ethanol production | $\$$ | 535,200 | $\$$ | 542,688 |
| Marketing and distribution | 130,094 |  | 146,356 |  |
| Corporate assets |  | 16,460 |  | 19,194 |
|  | $\$$ | 681,754 | $\$$ | 708,238 |

## 3. INVENTORIES.

Inventories consisted primarily of bulk ethanol, corn, co-products, Low-Carbon Fuel Standard ("LCFS") credits and unleaded fuel, and are valued at the lower of cost and net realizable value, with cost determined on a first-in, first-out basis. Total inventories are net of a valuation adjustment of $\$ 2,086,000$ as of March 31, 2017. Inventory balances consisted of the following (in thousands):

|  | March 31, 2017 |  | December 31, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
| Finished goods | \$ | 32,559 | \$ | 33,773 |
| LCFS credits |  | 10,143 |  | 10,926 |
| Raw materials |  | 6,380 |  | 6,571 |
| Work in progress |  | 7,255 |  | 7,092 |
| Other |  | 1,708 |  | 1,708 |
| Total | \$ | 58,045 | \$ | $\underline{60,070}$ |

## 4. DERIVATIVES.

The business and activities of the Company expose it to a variety of market risks, including risks related to changes in commodity prices. The Company monitors and manages these financial exposures as an integral part of its risk management program. This program recognizes the unpredictability of financial markets and seeks to reduce the potentially adverse effects that market volatility could have on operating results.

Commodity Risk - Cash Flow Hedges - The Company uses derivative instruments to protect cash flows from fluctuations caused by volatility in commodity prices for periods of up to twelve months in order to protect gross profit margins from potentially adverse effects of market and price volatility on ethanol sale and purchase commitments where the prices are set at a future date and/or if the contracts specify a floating or index-based price for ethanol. In addition, the Company hedges anticipated sales of ethanol to minimize its exposure to the potentially adverse effects of price volatility. These derivatives may be designated and documented as cash flow hedges and effectiveness is evaluated by assessing the probability of the anticipated transactions and regressing commodity futures prices against the Company's purchase and sales prices. Ineffectiveness, which is defined as the degree to which the derivative does not offset the underlying exposure, is recognized immediately in cost of goods sold. For the three months ended March 31, 2017 and 2016, the Company did not designate any of its derivatives as cash flow hedges.

Commodity Risk - Non-Designated Hedges - The Company uses derivative instruments to lock in prices for certain amounts of corn and ethanol by entering into exchange-traded forward contracts for those commodities. These derivatives are not designated for special hedge accounting treatment. The changes in fair value of these contracts are recorded on the balance sheet and recognized immediately in cost of goods sold. The Company recognized gains of $\$ 216,000$ and $\$ 582,000$ as the changes in the fair values of these contracts for the three months ended March 31, 2017 and 2016, respectively.

Non Designated Derivative Instruments - The classification and amounts of the Company's derivatives not designated as hedging instruments are as follows (in thousands):



The classification and amounts of the Company's recognized gains (losses) for its derivatives not designated as hedging instruments are as follows (in thousands):

|  | Statements of Operations Location | Realized Gains (Losses) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Three Months Ended March 31, |  |  |  |
| Type of Instrument |  | 2017 |  | 2016 |  |
| Commodity contracts | Cost of goods sold | \$ | $(2,344)$ | \$ | 908 |
|  |  | Unrealized Gains (Losses) |  |  |  |
|  |  | Three Months Ended March 31, |  |  |  |
| Type of Instrument | Statements of Operations Location | 2017 |  | 2016 |  |
| Commodity contracts | Cost of goods sold | \$ | 2,560 | \$ | (326) |

5. DEBT.

Long-term borrowings are summarized as follows (in thousands):

|  | March 31, 2017 |  | December 31, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
| Kinergy line of credit | \$ | 48,504 | \$ | 49,862 |
| Pekin term loan |  | 64,000 |  | 64,000 |
| Pekin revolving loan |  | 32,000 |  | 32,000 |
| Pacific Aurora line of credit |  | - |  | 1,000 |
| Parent notes payable |  | 55,000 |  | 55,000 |
|  |  | 199,504 |  | 201,862 |
| Less unamortized debt discount |  | $(1,490)$ |  | $(1,626)$ |
| Less unamortized debt financing costs |  | $(1,631)$ |  | $(1,708)$ |
| Less short-term portion |  | $(14,000)$ |  | $(10,500)$ |
| Long-term debt | \$ | 182,383 | \$ | 188,028 |

Kinergy Operating Line of Credit - As of March 31, 2017, Kinergy had additional borrowing availability under its credit facility of \$24,897,000.

At March 31, 2017, there were approximately $\$ 280.0$ million of net assets of the Company's subsidiaries that were not available to be transferred to Pacific Ethanol in the form of dividends, loans or advances due to restrictions contained in the credit facilities of the Company's subsidiaries.

## 6. COMMITMENTS AND CONTINGENCIES.

Sales Commitments - At March 31, 2017, the Company had entered into sales contracts with its major customers to sell certain quantities of ethanol and co-products. The Company had open ethanol indexed-price contracts for $382,700,000$ gallons of ethanol as of March 31, 2017 and open fixed-price ethanol sales contracts totaling $\$ 21,607,000$ as of March 31, 2017. The Company had open fixed-price co-product sales contracts totaling $\$ 27,294,000$ and open indexed-price co-product sales contracts for 87,000 tons as of March 31, 2017. These sales contracts are scheduled to be completed throughout 2017.

Purchase Commitments - At March 31, 2017, the Company had indexed-price purchase contracts to purchase 32,337,000 gallons of ethanol and fixed-price purchase contracts to purchase $\$ 11,569,000$ of ethanol from its suppliers. The Company had fixed-price purchase contracts to purchase $\$ 8,651,000$ of corn from its suppliers as of March 31, 2017. These purchase commitments are scheduled to be satisfied throughout 2017.

Litigation - General - The Company is subject to various claims and contingencies in the ordinary course of its business, including those related to litigation, business transactions, employee-related matters, and others. When the Company is aware of a claim or potential claim, it assesses the likelihood of any loss or exposure. If it is probable that a loss will result and the amount of the loss can be reasonably estimated, the Company will record a liability for the loss. If the loss is not probable or the amount of the loss cannot be reasonably estimated, the Company discloses the claim if the likelihood of a potential loss is reasonably possible and the amount involved could be material. While there can be no assurances, the Company does not expect that any of its pending legal proceedings will have a material impact on the Company's financial condition or results of operations.

The Company assumed certain legal matters which were ongoing at July 1, 2015, the date of the Company's acquisition of Aventine Renewable Energy Holdings, Inc ("PE Central"). Among them were lawsuits between Aventine Renewable Energy, Inc. (now known as Pacific Ethanol Pekin, LLC, or "PE Pekin") and Glacial Lakes Energy, Aberdeen Energy, and Redfield Energy, together, the "Defendants," in which PE Pekin sought damages for breach of termination agreements that wound down ethanol marketing arrangements between PE Pekin and each of the Defendants. In February and March 2017, the Company and the Defendants entered into settlement agreements and the Defendants paid in cash to the Company $\$ 3.9$ million in final resolution of these matters. The Company did not assign any value to the claims against the Defendants in its accounting for the Aventine acquisition as of July 1, 2015. The Company recorded a gain, net of legal fees, of $\$ 3.6$ million upon receipt of the cash settlement and recognized the gain in selling, general and administrative expenses in the consolidated statements of operations for the three months ended March 31, 2017.

## 7. PENSION PLANS

The Company sponsors a defined benefit pension plan (the "Retirement Plan") and a health care and life insurance plan (the "Postretirement Plan"). The Company assumed the Retirement Plan and the Postretirement Plan as part of its acquisition of PE Central on July 1, 2015. The Pension Plan is noncontributory, and covers only "grandfathered" unionized employees at the Company's Pekin, Illinois facility who fulfill minimum age and service requirements. Benefits are based on a prescribed formula based upon the employee's years of service. The Retirement Plan, which is part of a collective bargaining agreement, covers only union employees hired prior to November 1, 2010.

The Company uses a December 31 measurement date for its Retirement Plan. The Company's funding policy is to make the minimum annual contribution required by applicable regulations. As of December 31, 2016, the Retirement Plan's accumulated projected benefit obligation was $\$ 18.5$ million, with a fair value of plan assets of $\$ 12.4$ million. The underfunded amount of $\$ 6.1$ million is recorded on the Company's consolidated balance sheet in other liabilities. For the three months ended March 31, 2017, the Retirement Plan's net periodic expense was $\$ 117,000$, comprised of $\$ 188,000$ in interest cost and $\$ 98,000$ in service cost, partially offset by $\$ 169,000$ of expected return on plan assets. For the three months ended March 31, 2016, the Pension Plan's net periodic expense was $\$ 29,000$, comprised of $\$ 172,000$ in interest cost and $\$ 56,000$ in service cost, partially offset by $\$ 199,000$ of expected return on plan assets.

The Postretirement Plan provides postretirement medical benefits and life insurance to certain "grandfathered" unionized employees. Employees hired after December 31, 2000 are not eligible to participate in the Postretirement Plan. The Postretirement Plan is contributory, with contributions required at the same rate as active employees. Benefit eligibility under the plan reduces at age 65 from a defined benefit to a defined dollar cap based upon years of service. As of December 31, 2016, the Postretirement Plan's accumulated projected benefit obligation was $\$ 5.4$ million and is recorded on the Company's consolidated balance sheet in other liabilities. The Company's funding policy is to make the minimum annual contribution required by applicable regulations. For the three months ended March 31, 2017, the Postretirement Plan's net periodic expense was $\$ 104,000$, comprised of $\$ 50,000$ of interest cost, $\$ 21,000$ of service cost and $\$ 33,000$ of amortization expense. For the three months ended March 31, 2016, the Postretirement Plan's net periodic expense was $\$ 47,000$, comprised of $\$ 35,000$ of interest cost and $\$ 12,000$ of service cost.

## 8. FAIR VALUE MEASUREMENTS.

The fair value hierarchy prioritizes the inputs used in valuation techniques into three levels, as follows:

- Level 1 - Observable inputs - unadjusted quoted prices in active markets for identical assets and liabilities;
- Level 2 - Observable inputs other than quoted prices included in Level 1 that are observable for the asset or liability through corroboration with market data; and
- Level 3 - Unobservable inputs - includes amounts derived from valuation models where one or more significant inputs are unobservable. For fair value measurements using significant unobservable inputs, a description of the inputs and the information used to develop the inputs is required along with a reconciliation of Level 3 values from the prior reporting period.

Warrants - The Company's warrants were valued using a Monte Carlo Binomial Lattice-Based valuation methodology, adjusted for marketability restrictions. The Company recorded its warrants issued in 2012 at fair value and designated them as Level 3 on their issuance dates.

Significant assumptions used and related fair values for the warrants as of March 31, 2017 were as follows:

| Original | Exercise <br> Price | Risk Free <br> Interest <br> Volatility <br> Rate |  |  |  | Term <br> (years) | Market <br> Discount |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | | Warrants |
| :---: |
| Outstanding | Fair Value

Significant assumptions used and related fair values for the warrants as of December 31, 2016 were as follows:

| Original <br> Issuance | Exercise <br> Price | Volatility | Risk Free <br> Interest <br> Rate | Term <br> (years) | Market <br> Discount | Warrants <br> Outstanding | Fair Value |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $07 / 3 / 2012$ | $\$ 6.09$ | $40.9 \%$ | $0.62 \%$ | 0.50 | $11.3 \%$ | 211,000 | $\$ 651,000$ |

The estimated fair values of the warrants are affected by the above underlying inputs. Observable inputs include the values of exercise price, stock price, term and risk-free interest rate. As separate inputs, an increase (decrease) in either the term or risk free interest rate will result in an increase (decrease) in the estimated fair value of the warrants.

Unobservable inputs include volatility and market discount. An increase (decrease) in volatility will result in an increase (decrease) in the estimated fair value of the warrants and an increase (decrease) in the market discount will result in a decrease (increase) in the estimated fair value of the warrants.

The volatility utilized was a blended average of the Company's historical volatility and implied volatilities derived from a selected peer group. The implied volatility component has remained relatively constant over time given that implied volatility is a forward-looking assumption based on observable trades in public option markets. Should the Company's historical volatility increase (decrease) on a goforward basis, the resulting fair value of the warrants would increase (decrease).

The market discount, or a discount for lack of marketability, is quantified using a Black-Scholes option pricing model, with a primary model input of assumed holding period restriction. As the assumed holding period increases (decreases), the market discount increases (decreases), conversely impacting the fair value of the warrants.

Other Derivative Instruments - The Company's other derivative instruments consist of commodity positions. The fair values of the commodity positions are based on quoted prices on the commodity exchanges and are designated as Level 1 inputs.

The following table summarizes recurring fair value measurements by level at March 31, 2017 (in thousands):

|  | Fair <br> Value |  | Level 1 |  | Level 2 |  | Level 3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets: |  |  |  |  |  |  |  |  |
| Derivative instruments | \$ | 594 | \$ | 594 | \$ | - | \$ | - |
|  | \$ | 594 | \$ | 594 | \$ | - | \$ | - |
|  |  |  |  |  |  |  |  |  |
| Liabilities: |  |  |  |  |  |  |  |  |
| Warrants | \$ | (196) | \$ | - | \$ | - | \$ | (196) |
| Derivative instruments |  | $(1,171)$ |  | $(1,171)$ |  | - |  | - |
|  | \$ | $(1,367)$ | \$ | $(1,171)$ | \$ | - | \$ | (196) |

The following table summarizes recurring fair value measurements by level at December 31, 2016 (in thousands):

|  | Fair <br> Value |  | Level 1 |  | Level 2 |  | Level 3 |  | Benefit Plan Percentage Allocation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets: |  |  |  |  |  |  |  |  |  |
| Derivative instruments | \$ | 978 | \$ | 978 | \$ | - | \$ | - |  |
| Defined benefit plan assets |  |  |  |  |  |  |  |  |  |
| (pooled separate accounts): |  |  |  |  |  |  |  |  |  |
| Large U.S. Equity(1) |  | 3,134 |  | - |  | 3,134 |  | - | 25\% |
| Small/Mid U.S. Equity(2) |  | 1,802 |  | - |  | 1,802 |  | - | 15\% |
| International Equity(3) |  | 2,006 |  | - |  | 2,006 |  | - | 16\% |
| Fixed Income(4) |  | 5,481 |  | - |  | 5,481 |  | - | 44\% |
|  | \$ | 13,401 | \$ | 978 | \$ | 12,423 | \$ | - |  |
| Liabilities: |  |  |  |  |  |  |  |  |  |
| Warrants | \$ | (651) | \$ | - | \$ | - | \$ | (651) |  |
| Derivative instruments |  | $(4,115)$ |  | $(4,115)$ |  | - |  | - |  |
|  | \$ | $(4,766)$ | \$ | $(4,115)$ | \$ | - | \$ | (651) |  |

(1) This category includes investments in funds comprised of equity securities of large U.S. companies. The funds are valued using the net asset value method in which an average of the market prices for the underlying investments is used to value the fund.
(2) This category includes investments in funds comprised of equity securities of small- and medium-sized U.S. companies. The funds are valued using the net asset value method in which an average of the market prices for the underlying investments is used to value the fund.
(3) This category includes investments in funds comprised of equity securities of foreign companies including emerging markets. The funds are valued using the net asset value method in which an average of the market prices for the underlying investments is used to value the fund.
(4) This category includes investments in funds comprised of U.S. and foreign investment-grade fixed income securities, high-yield fixed income securities that are rated below investment-grade, U.S. treasury securities, mortgage-backed securities, and other asset-backed securities. The funds are valued using the net asset value method in which an average of the market prices for the underlying investments is used to value the fund.

The changes in the Company's fair value of its Level 3 inputs with respect to its warrants were as follows (in thousands):

| Balance, December 31, 2016 | $\$$ | 651 |
| :--- | :--- | :---: |
| Adjustments to fair value for the period | $\$$ | $(455)$ |
| Balance, March 31, 2017 | $\$$ | 196 |

9. EARNINGS PER SHARE.

The following tables compute basic and diluted earnings per share (in thousands, except per share data):

|  | Three Months Ended March 31, 2017 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Loss Numerator |  | Shares Denominator | Per-Share Amount |  |
| Net loss attributed to Pacific Ethanol, Inc. | \$ | $(12,636)$ |  |  |  |
| Less: Preferred stock dividends |  | (312) |  |  |  |
| Basic and diluted loss per share: |  |  |  |  |  |
| Net loss available to common stockholders | \$ | $(12,948)$ | 42,375 | \$ | (0.31) |


|  | Three Months Ended March 31, 2016 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { Loss } \\ \text { Numerator } \end{gathered}$ |  | Shares Denominator | Per-Share Amount |  |
| Net loss attributed to Pacific Ethanol, Inc. | \$ | $(13,226)$ |  |  |  |
| Less: Preferred stock dividends |  | (315) |  |  |  |
| Basic and diluted loss per share: |  |  |  |  |  |
| Net loss available to common stockholders | \$ | $(13,541)$ | 42,052 | \$ | (0.32) |

There were an aggregate of 784,000 and 635,000 potentially dilutive weighted-average shares from convertible securities outstanding as of March 31, 2017 and 2016, respectively. These convertible securities were not considered in calculating diluted net loss per share for the three months ended March 31, 2017 and 2016, as their effect would have been anti-dilutive.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The following discussion and analysis should be read in conjunction with our consolidated financial statements and notes to consolidated financial statements included elsewhere in this report. This report and our consolidated financial statements and notes to consolidated financial statements contain forward-looking statements, which generally include the plans and objectives of management for future operations, including plans and objectives relating to our future economic performance and our current beliefs regarding revenues we might generate and profits we might earn if we are successful in implementing our business and growth strategies. The forward-looking statements and associated risks may include, relate to or be qualified by other important factors, including:

- fluctuations in the market price of ethanol and its co-products;
- fluctuations in the costs of key production input commodities such as corn and natural gas;
- the projected growth or contraction in the ethanol and co-product markets in which we operate;
our strategies for expanding, maintaining or contracting our presence in these markets;
anticipated trends in our financial condition and results of operations; and
our ability to distinguish ourselves from our current and future competitors.
You are cautioned not to place undue reliance on any forward-looking statements, which speak only as of the date of this report, or in the case of a document incorporated by reference, as of the date of that document. We do not undertake to update, revise or correct any forward-looking statements, except as required by law.

Any of the factors described immediately above, or referenced from time to time in our filings with the Securities and Exchange Commission or in the "Risk Factors" section below could cause our financial results, including our net income or loss or growth in net income or loss to differ materially from prior results, which in turn could, among other things, cause the price of our common stock to fluctuate substantially.

## Overview

We are a leading producer and marketer of low-carbon renewable fuels in the United States.
We own and operate eight strategically-located ethanol production facilities. Four of our plants are in the Western states of California, Oregon and Idaho, and four of our plants are located in the Midwestern states of Illinois and Nebraska. We are the sixth largest producer of ethanol in the United States based on annualized volumes. Our plants have a combined ethanol production capacity of 515 million gallons per year. We market all the ethanol and co-products produced at our plants as well as ethanol produced by third parties. On an annualized basis, we market nearly 1.0 billion gallons of ethanol and over 2.5 million tons of ethanol co-products on a dry matter basis. Our business consists of two operating segments: a production segment and a marketing segment.

Our mission is to advance our position and significantly increase our market share as a leading producer and marketer of lowcarbon renewable fuels in the United States. We intend to accomplish this goal in part by expanding our ethanol production capacity and distribution infrastructure, accretive acquisitions, lowering the carbon intensity of our ethanol, extending our marketing business into new regional and international markets, and implementing new technologies to promote higher production yields and greater efficiencies.

## Production Segment

We produce ethanol and co-products at our production facilities described below. Our plants located on the West Coast are near their respective fuel and feed customers, offering significant timing, transportation cost and logistical advantages. Our plants located in the Midwest are in the heart of the Corn Belt, benefit from low-cost and abundant feedstock production and allow for access to many additional domestic markets. In addition, our ability to load unit trains from our plants located in the Midwest allows for greater access to international markets.

We wholly-own all of our plants located on the West Coast and the two plants in Pekin, Illinois. We own approximately $74 \%$ of the two plants in Aurora, Nebraska as well as the grain elevator adjacent to those properties and related grain handling assets, including the outer rail loop, and the real property on which they are located, through Pacific Aurora, LLC, or Pacific Aurora, an entity owned approximately $26 \%$ by Aurora Cooperative Elevator Company, or ACEC.

| Facility Name | Estimated Annual <br> Capacity <br> (gallons) |  |
| :---: | :---: | :---: |
| Magic Valley | Burley, ID | $60,000,000$ |
| Columbia | Boardman, OR | $40,000,000$ |
| Stockton | Stockton, CA | $60,000,000$ |
| Madera | Madera, CA | $40,000,000$ |
| Aurora West | Aurora, NE | $110,000,000$ |
| Aurora East | Aurora, NE | $45,000,000$ |
| Pekin Wet | Pekin, IL | $100,000,000$ |
| Pekin Dry | Pekin, IL | $60,000,000$ |

We produce ethanol co-products at our production facilities such as wet distillers grains, or WDG, dry distillers grains with solubles, or DDGS, wet and dry corn gluten feed, condensed distillers solubles, corn gluten meal, corn germ, corn oil, distillers yeast and $\mathrm{CO}_{2}$.

## Marketing Segment

We market ethanol and co-products produced by our ethanol production facilities and market ethanol produced by third parties. We have extensive customer relationships throughout the Western and Midwestern United States. Our ethanol customers are integrated oil companies and gasoline marketers who blend ethanol into gasoline. Our customers depend on us to provide a reliable supply of ethanol, and manage the logistics and timing of delivery with very little effort on their part. Our customers collectively require ethanol volumes in excess of the supplies we produce at our production facilities. We secure additional ethanol supplies from third-party plants in California and other third-party suppliers in the Midwest where a majority of ethanol producers are located. We arrange for transportation, storage and delivery of ethanol purchased by our customers through our agreements with third-party service providers in the Western United States as well as in the Midwest from a variety of sources.

We market our distillers grains and other feed co-products to dairies and feedlots, in many cases located near our ethanol plants. These customers use our feed co-products for livestock as a substitute for corn and other sources of starch and protein. We sell our corn oil to poultry and biodiesel customers. We do not market co-products from other ethanol producers.

See "Note 2 - Segments" to our Notes to Consolidated Financial Statements included elsewhere in this report for financial information about our business segments.

## Outlook

We experienced a difficult margin environment during the first quarter. Our results reflect seasonally weaker production margins due to lower transportation fuel demand as well as high industry-wide ethanol inventories. Although production margins improved slightly on a year-over-year basis, sharply falling ethanol prices in the first quarter of 2017 significantly reduced our gross profit from our ethanol marketing business. In addition, local weather conditions affected transportation costs and production levels at some of our plants. We also suspended production at our Pekin, Illinois wet mill facility for one week for scheduled maintenance and repairs, which reduced production and significantly increased maintenance costs during the quarter. As anticipated, the scheduled maintenance and repairs are translating well into the Pekin wet mill's improved operating performance.

We have seen an overall improvement in margins, with stronger seasonal demand thus far in the second quarter, although with continued ethanol price and margin volatility. We anticipate production levels in the coming quarters at or around our first quarter production capacity utilization level of $92 \%$.

The ethanol industry is benefitting from a record pace of exports. Global demand for ethanol is growing $2-3 \%$ annually and we expect U.S. ethanol exports to continue growing year-over-year-by a projected $20 \%$ over 2016 levels to 1.2 billion gallons for 2017-as ethanol is increasingly blended in international markets to meet octane requirements and reduce emissions. Moreover, approximately 30 countries have renewable fuel standards or targets further supporting international demand for ethanol.

We see continued support for the ethanol industry on the regulatory front. We believe the new administration will be supportive of policies such as the Renewable Fuel Standard, or RFS, which also enjoys strong bipartisan support in Congress.

For the first time ever, U.S. gasoline consumed in 2016 contained on average greater than $10 \%$ ethanol, exceeding the so-called "blend wall" and moving the industry further toward higher ethanol blends. We anticipate E15 sales and distribution infrastructure will continue to grow in 2017, with the number of stations offering E15 fuel to double by the end of 2017, up from approximately 650 stations at the end of 2016. In addition, we believe that trends in fuel economy standards and new engine technologies, which generally require higher octane fuels, are supportive of higher ethanol blends.

We continue to focus on leveraging our differentiated position in the industry. We are able to spread commodity and basis price risks across diverse markets given our production facilities in both the West and Midwest and sales of products both domestically and internationally. Our portfolio of high-value co-products continues to provide strong returns. We benefit from our corn oil production and our Pekin wet mill co-products, which include corn gluten meal, germ and gluten feed. In addition, our Pekin facility's yeast plant enjoys a strong rate of production and a solid book of forward business. Distillers grains markets are generally soft due to high supply and reduced exports, however, some of our WDG markets are benefitting from higher local demand, which improves prices and demonstrates the value of our regionally diverse assets. We expect our co-product metrics and performance will continue in the coming quarters.

Overall, we see a supportive environment for ethanol and anticipate that we will perform well financially through the balance of 2017.

We continue to focus on implementing plant improvement projects to optimize our production, lower our carbon score and produce meaningful near-term returns.

We implemented an industrial scale membrane system at our Madera facility that separates water from ethanol during the plant's dehydration process. The system has been operating at commercial levels since the beginning of the year and is performing well and meeting our expectations. Also at our Madera facility, we are continuing to work toward installing a five megawatt solar photovoltaic power system, the first ever commercial solar power system installed at a U.S. ethanol facility, with the goal of beginning full-scale operations in early 2018. We expect the system to lower our carbon score and lower our utility costs by over $\$ 1.0$ million per year, displacing up to one-third of the grid electricity currently used. These technologies are designed to increase operating efficiencies, lower production costs and reduce the carbon intensity of ethanol produced at our Madera facility, further driving premium pricing on ethanol produced at the facility.

We are also in the late stages of interconnecting and synchronizing our cogeneration system at our Stockton plant with Pacific Gas \& Electric that will convert process waste gas and natural gas into electricity and steam, lowering air emissions and energy costs by up to $\$ 4.0$ million per year. Although we are presently in start-up mode with the system, synchronization and start-up have been slower than expected, and we expect to achieve $50 \%$ capacity by the end of the second quarter and full capacity by the end of the third quarter.

We are on track to produce over 1.0 million gallons of cellulosic ethanol at our Stockton plant annually, and we continue to focus on fine-tuning our systems to maximize yields and production efficiencies. Our approved registration from the EPA for producing cellulosic ethanol from corn fiber at our Stockton plant will qualify this ethanol for special premiums over conventional ethanol, and we are generating high-value D3 RINs from this production which we expect will begin benefitting us financially starting in the second quarter.

Based on the success of this project, we intend to begin producing cellulosic ethanol at our Madera plant and expect to ultimately produce over 1.0 million gallons of cellulosic ethanol at this facility annually. Once commercial scale production is achieved, we expect cellulosic ethanol production from our Madera plant will increase earnings by over $\$ 2.0$ million annually. We are working with the EPA to qualify this production for D3 RINs and we anticipate approval will occur near the time we expect to begin commercial operations in the second half of 2017.

We are also working with the California Air Resources Board to qualify our cellulosic production at both our Stockton and Madera facilities for additional carbon credits under California's Low Carbon Fuel Standard.

Our initial budget for capital projects in 2017 totals $\$ 46.0$ million, including $\$ 16.0$ million in previously announced projects such as the completion of our Stockton cogeneration system, production of cellulosic ethanol at our Madera facility and our solar project. We have also allocated approximately $\$ 6.0$ million to cover the remaining repairs required at our Pekin facility over the coming months. The remaining $\$ 24.0$ million represents projects directed at increasing yields, increasing production capacities or revenues, improving operations, extending the reliability of our plants and equipment, reducing our costs or lowering our carbon score. We intend to fund these projects through a combination of cash on hand and cash flow or, where appropriate, low-cost financing. We plan to adjust our capital budget based on prudent resource management and market conditions and evaluate and prioritize each new investment to optimize stockholder return.

We intend to continue to leverage our diverse base of production and marketing assets to expand our share of the renewable fuels and ethanol co-product markets. We also intend to continue to evaluate and invest in plant improvement initiatives using innovative technologies that generate meaningful near-term returns by enhancing plant efficiencies, reduce our carbon score and increase our profitability. We are also focused on further strengthening our balance sheet and liquidity while maintaining strong cash flows.

## Critical Accounting Policies

The preparation of our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America, requires us to make judgments and estimates that may have a significant impact upon the portrayal of our financial condition and results of operations. We believe that of our significant accounting policies, the following require estimates and assumptions that require complex, subjective judgments by management that can materially impact the portrayal of our financial condition and results of operations: revenue recognition; warrants at fair value; impairment of long-lived assets; valuation of allowance for deferred taxes, derivative instruments, accounting for business combinations and allowance for doubtful accounts. These significant accounting principles are more fully described in "Management's Discussion and Analysis of Financial Condition and Results of Operations-Critical Accounting Policies" in our Annual Report on Form 10-K for the year ended December 31, 2016.

## Results of Operations

The following selected financial information should be read in conjunction with our consolidated financial statements and notes to our consolidated financial statements included elsewhere in this report, and the other sections of "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in this report.

Certain performance metrics that we believe are important indicators of our results of operations include:

|  | Three Months Ended March 31, |  |  |  | Percentage <br> Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2017 |  | 2016 |  |
| Production gallons sold (in millions) |  | 115.0 |  | 112.9 | 1.9\% |
| Third party gallons sold (in millions) |  | 111.2 |  | 93.7 | 18.7\% |
| Total gallons sold (in millions) |  | 226.2 |  | 206.6 | 9.5\% |
| Ethanol production capacity utilization |  | 92\% |  | 87\% | 5.7\% |
| Average sales price per gallon | \$ | 1.62 | \$ | 1.53 | 5.9\% |
| Corn cost per bushel-CBOT equivalent | \$ | 3.64 | \$ | 3.65 | (0.3)\% |
| Average basis ${ }^{(1)}$ |  | 0.29 |  | 0.33 | (12.1)\% |
| Delivered cost of corn | \$ | 3.93 | \$ | 3.98 | (1.3)\% |
| Total co-product tons sold (in thousands) |  | 685.5 |  | 661.4 | 3.6\% |
| Co-product revenues as \% of delivered cost of corn ${ }^{(2)}$ |  | 34.9\% |  | 36.3\% | (3.9)\% |
| Average CBOT ethanol price per gallon | \$ | 1.52 | \$ | 1.39 | 9.4\% |
| Average CBOT corn price per bushel | \$ | 3.64 | \$ | 3.63 | 0.3\% |

(1) Corn basis represents the difference between the immediate cash price of delivered corn and the future price of corn for Chicago delivery.
(2) Co-product revenues as a percentage of delivered cost of corn shows our yield based on sales of co-products, including WDG and corn oil, generated from ethanol we produced.

## Net Sales, Cost of Goods Sold and Gross Profit (Loss)

The following table presents our net sales, cost of goods sold and gross profit (loss) in dollars and gross profit (loss) as a percentage of net sales (in thousands, except percentages):

|  | Three Months Ended March 31, |  |  |  | Change in |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | Dollars |  | Percent |
| Net sales | \$ | 386,340 | \$ | 342,373 | \$ | 43,967 | 12.8\% |
| Cost of goods sold |  | 392,113 |  | 341,304 |  | 50,809 | 14.9\% |
| Gross profit (loss) | \$ | $(5,773)$ | \$ | 1,069 | \$ | $(6,842)$ | NM |
| Percentage of net sales |  | (1.5)\% |  | 0.3\% |  |  |  |

## Net Sales

The increase in our net sales for the three months ended March 31, 2017 as compared to the same period in 2016 was due to an increase in both our total ethanol gallons sold and an increase in our average ethanol sales price per gallon, slightly offset by a decline in net sales of our co-products sold.

We increased both production and third party gallons sold, and our volume of co-products sold, for the three months ended March 31,2017 as compared to the same period in 2016. The increases in volumes of our production gallons and co-products sold are primarily due to higher capacity utilization at our plants. We increased capacity utilization at our plants to $92 \%$ for the three months ended March 31, 2017 compared to $87 \%$ for the same period in 2016 in anticipation of improved market conditions.

On a consolidated basis, our average sales price per gallon increased $5.9 \%$ to $\$ 1.62$ for the three months ended March 31, 2017 compared to our average sales price per gallon of $\$ 1.53$ for the same period in 2016. The average Chicago Board of Trade, or CBOT, ethanol price per gallon, increased $9.4 \%$ to $\$ 1.52$ for the three months ended March 31, 2017 compared to an average CBOT sales price per gallon of $\$ 1.39$ for the same period in 2016.

## Production Segment

Net sales of ethanol from our production segment increased by $\$ 15.7$ million, or $9 \%$, to $\$ 183.1$ million for the three months ended March 31, 2017 as compared to $\$ 167.4$ million for the same period in 2016. Our total volume of production ethanol gallons sold increased by 2.1 million gallons, or $2 \%$, to 115.0 million gallons for the three months ended March 31, 2017 as compared to 112.9 million gallons for the same period in 2016. Our production segment's average sales price per gallon increased $7 \%$ to $\$ 1.59$ for the three months ended March 31,2017 compared to our production segment's average sales price per gallon of $\$ 1.48$ for the same period in 2016. At our production segment's average sales price per gallon of $\$ 1.59$ for the three months ended March 31, 2017, we generated $\$ 3.3$ million in additional net sales from our production segment from the 2.1 million additional gallons of produced ethanol sold in the three months ended March 31, 2017 as compared to the same period in 2016 . The increase of $\$ 0.11$ in our production segment's average sales price per gallon for the three months ended March 31, 2017 as compared to the same period in 2016 increased our net sales of ethanol from our production segment by $\$ 12.4$ million.

Net sales of co-products decreased $\$ 1.8$ million, or $3 \%$, to $\$ 60.0$ million for the three months ended March 31, 2017 as compared to $\$ 61.8$ million for the same period in 2016. Although our total volume of co-products sold increased by 24.1 thousand tons, or $4 \%$, to 685.5 thousand tons for the three months ended March 31, 2017 from 661.4 thousand tons from the same period in 2016, our average sales price per ton declined to $\$ 87.54$ per ton for the three months ended March 31, 2017 from $\$ 93.46$ per ton for the same period in 2016. At our average sales price per ton of $\$ 87.54$ for the three months ended March 31,2017 , we generated $\$ 2.1$ million in additional net sales from the 24.1 thousand additional tons of co-products sold in the three months ended March 31, 2017 as compared to the same period in 2016. The decrease in our average sales price per ton of $\$ 5.92$ per ton, or $6 \%$, for the three months ended March 31, 2017 as compared to the same period in 2016 decreased net sales from our production segment by $\$ 3.9$ million.

## Marketing Segment

Net sales of ethanol from our marketing segment increased by $\$ 30.1$ million, or $27 \%$, to $\$ 143.2$ million for the three months ended March 31, 2017 as compared to $\$ 113.1$ million for the same period in 2016. Our total volume of ethanol gallons sold by our marketing segment increased by 19.6 million gallons, or $10 \%$, to 226.2 million gallons for the three months ended March 31 , 2017 as compared to 206.6 million gallons for the same period in 2016 . Our additional production gallons sold accounted for 2.1 million gallons of this increase, as noted above, and our additional third-party gallons sold accounted for 17.5 million gallons of this increase.

Our marketing segment's average sales price per gallon increased $1 \%$ to $\$ 1.62$ for the three months ended March 31, 2017 compared to our marketing segment's average sales price per gallon of $\$ 1.60$ for the same period in 2016. At our marketing segment's average sales price per gallon of $\$ 1.62$ for the three months ended March 31, 2017, we generated $\$ 28.3$ million in additional net sales from our marketing segment from the 17.5 million gallons in additional third-party ethanol sold in the three months ended March 31 , 2017 as compared to the same period in 2016. The increase of $\$ 0.02$ in our marketing segment's average sales price per gallon for the three months ended March 31, 2017 as compared to the same period in 2016 increased our net sales from third-party ethanol sold by our marketing segment by $\$ 1.8$ million.

## Cost of Goods Sold and Gross Profit (Loss)

Our consolidated gross profit declined to a gross loss of $\$ 5.8$ million for the three months ended March 31,2017 as compared to a gross profit of $\$ 1.1$ million for the same period in 2016, representing a gross margin of negative $1.5 \%$ for the three months ended March 31,2017 as compared to a gross margin of $0.3 \%$ for the same period in 2016 . Our consolidated gross profit declined primarily due to lower margins generated by our marketing segment due to sharply falling ethanol prices in the quarter and increased repair and maintenance expenses at our plants. Our production segment gross profit was negatively impacted by higher repair and maintenance expenses primarily due to $\$ 4.0$ million in scheduled and $\$ 1.6$ million in unanticipated repairs and maintenance at our Pekin wet mill facility.

## Production Segment

Our production segment reduced our consolidated gross profit by $\$ 2.7$ million for the three months ended March 31,2017 as compared to the same period in 2016 . Of this amount, $\$ 5.6$ million in lower gross profit is attributable to our increased repair and maintenance expenses at our plants, partially offset by $\$ 2.8$ million in additional gross profit from higher production margins, for the three months ended March 31, 2017 as compared to the same period in 2016, and $\$ 0.1$ million in additional gross profit attributable to the additional 2.1 million gallon increase in production volumes sold in the three months ended March 31,2017 as compared to the same period in 2016.

## Marketing Segment

Our marketing segment decreased our consolidated gross profit by $\$ 4.0$ million for the three months ended March 31,2017 as compared to the same period in 2016 . Of this amount, $\$ 4.3$ million in lower gross profit is attributable to our lower margins per gallon for the three months ended March 31,2017 as compared to the same period in 2016, partially offset by $\$ 0.3$ million in gross profit attributable to the 17.5 million gallon increase in third-party marketing volumes for the three months ended March 31,2017 as compared to the same period in 2016. The lower margins resulted primarily from sharply falling ethanol prices in the first quarter of 2017.

## Selling, General and Administrative Expenses

The following table presents our selling, general and administrative expenses, or SG\&A, in dollars and as a percentage of net sales (in thousands, except percentages):

|  | Three Months Ended March 31, |  |  |  | Change in |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | Dollars |  | Percent |
| Selling, general and administrative expenses | \$ | 5,450 | \$ | 8,317 | \$ | $(2,867)$ | (34.5)\% |
| Percentage of net sales |  | 1.4\% |  | 2.4\% |  |  |  |

Our SG\&A decreased for the three months ended March 31, 2017 as compared to the same period in 2016. The $\$ 2.9$ million period over period decrease in SG\&A is primarily due to $\$ 3.6$ million in gains associated with legal matters resolved in the quarter, partially offset by higher cash and stock compensation expenses of approximately $\$ 1.3$ million. We anticipate SG\&A expenses will average approximately $\$ 7.5$ million per quarter through the end of 2017.

## Interest Expense, net

The following table presents our interest expense, net in dollars and as a percentage of net sales (in thousands, except percentages):

|  | Three Months Ended March 31, |  |  |  | Change in |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | Dollars |  | Percent |
| Interest expense, net | \$ | 2,637 | \$ | 6,233 | \$ | (3,596) | (57.7)\% |
| Percentage of net sales |  | 0.7\% |  | 1.8\% |  |  |  |

Interest expense, net decreased $\$ 3.6$ million to $\$ 2.6$ million for the three months ended March 31, 2017 from $\$ 6.2$ million for the same period in 2016. The decrease in interest expense, net is primarily related to lower average interest rates resulting from the refinancing of our plant debt in late 2016.

## Net Loss Available to Common Stockholders

The following table presents our net loss available to common stockholders in dollars and as a percentage of net sales (in thousands, except percentages):

|  | Three Months Ended March 31, |  |  |  | Change in |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | Dollars |  | Percent |
| Net loss available to Common |  |  |  |  |  |  |  |
| Stockholders | \$ | 12,948 | \$ | 13,541 | \$ | 593 | 4.4\% |
| Percentage of net sales |  | 3.4\% |  | 4.0\% |  |  |  |

The decrease in net loss available to common stockholders was primarily due to our decreased SG\&A and interest expense for the three months ended March 31, 2017, as compared to the same period in 2016.

## Liquidity and Capital Resources

During the three months ended March 31, 2017, we funded our operations primarily from cash on hand, cash generated from our operations and advances from our revolving credit facilities. These funds were also used to make capital expenditures, capital lease payments and principal payments on term debt and lines of credit.

Our current available capital resources consist of cash on hand and amounts available for borrowing under our credit facilities. We expect that our future available capital resources will consist primarily of our remaining cash balances, amounts available for borrowing, if any, under our credit facilities, cash generated from our operations and tax refunds related to prior years.

We believe that current and future available capital resources, revenues generated from operations, and other existing sources of liquidity, including our credit facilities, will be adequate to meet our anticipated capital requirements for at least the next twelve months.

## Quantitative Quarter-End Liquidity Status

We believe that the following amounts provide insight into our liquidity and capital resources. The following selected financial information should be read in conjunction with our consolidated financial statements and notes to consolidated financial statements included elsewhere in this report, and the other sections of "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in this report (dollars in thousands):

|  | $\begin{gathered} \text { March 31, } \\ 2017 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { December 31, } \\ 2016 \\ \hline \end{gathered}$ |  | Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cash and cash equivalents | \$ | 73,734 | \$ | 68,590 | 7.5\% |
| Current assets | \$ | 213,264 | \$ | 235,201 | (9.3)\% |
| Current liabilities | S | 71,950 | \$ | 78,841 | (8.7)\% |
| Long-term debt, net of current portion | \$ | 182,383 | \$ | 188,028 | (3.0)\% |
| Working capital | \$ | 141,314 | \$ | 156,360 | (9.6)\% |
| Working capital ratio |  | 2.96 |  | 2.98 | (0.7)\% |

## Restricted Net Assets

At March 31, 2017, we had approximately $\$ 280.0$ million of net assets at our subsidiaries that were not available to be transferred to Pacific Ethanol, Inc. in the form of dividends, loans or advances due to restrictions contained in the credit facilities of our subsidiaries.

## Changes in Working Capital and Cash Flows

Working capital decreased to $\$ 141.3$ million at March 31, 2017 from $\$ 156.4$ million at December 31, 2016 as a result of a decrease of $\$ 21.9$ million in current assets, partially offset by a decrease of $\$ 6.9$ million in current liabilities.

Current assets decreased primarily due to decreases of $\$ 22.3$ million in accounts receivable, $\$ 2.0$ million in inventories, $\$ 2.0$ million in prepaid inventory and $\$ 0.8$ million in derivative instruments and other current assets, partially offset by an increase in cash and cash equivalents of $\$ 5.1$ million.

Our cash and cash equivalents increased by $\$ 5.1$ million at March 31, 2017 as compared to December 31, 2016 due to $\$ 12.1$ million of cash provided our operations, partially offset by $\$ 4.1$ million of cash used in our investing activities for our plant improvement initiatives and $\$ 2.8$ million of cash used in our financing activities.

Our current liabilities decreased primarily due to decreases of $\$ 7.1$ million in accounts payable and accrued liabilities and $\$ 2.9$ million in derivative instruments, partially offset by an increase of $\$ 3.5$ million in the current portion of our long-term debt in accordance with our debt amortization schedule associated with our Pekin term debt.

## Cash provided by our Operating Activities

Cash provided by our operating activities increased by $\$ 17.3$ million for the three months ended March 31, 2017 as compared to the same period in 2016. The increase in cash provided by our operating activities is due to:
a decrease in accounts receivable of $\$ 24.6$ million primarily due to the timing of sales volumes at the end of the period; a decrease in accounts payable and accrued expenses of $\$ 8.6$ million resulting primarily from the period-over-period timing of payments; and
an increase in prepaid expenses and other assets of $\$ 7.9$ million due to the receipt of income tax refunds and resulting reduction in other assets in the first quarter of 2016 that did not recur in 2017.

## Cash used in our Investing Activities

Cash used in our investing activities declined by $\$ 0.9$ million for the three months ended March 31, 2017 as compared to the same period in 2016. The decline in cash used in our investing activities is primarily due to lower spending on capital projects associated with our plant improvement initiatives.

## Cash used in our Financing Activities

Cash used in our financing activities declined by $\$ 20.5$ million for the three months ended March 31, 2017 as compared to the same period in 2016. The decrease in cash used in our financing activities is primarily due to $\$ 16.0$ million in principal payments on our term debt for the three months ended March 31, 2016 that did not recur in the same period in 2017 and a $\$ 3.7$ million reduction in principal payments on Kinergy's line of credit.

## Kinergy Operating Line of Credit

Kinergy maintains an operating line of credit for an aggregate amount of up to $\$ 85.0$ million with an accordion feature to further increase the amount to up to $\$ 100.0$ million. The credit facility expires on December 31, 2020. Interest accrues under the credit facility at a rate equal to (i) the three-month London Interbank Offered Rate ("LIBOR"), plus (ii) a specified applicable margin ranging from $1.75 \%$ to $2.75 \%$. The credit facility's monthly unused line fee is $0.25 \%$ to $0.375 \%$ of the amount by which the maximum credit under the facility exceeds the average daily principal balance during the immediately preceding month. Payments that may be made by Kinergy to Pacific Ethanol as reimbursement for management and other services provided by Pacific Ethanol to Kinergy are limited under the terms of the credit facility to $\$ 1.5$ million per fiscal quarter. The credit facility also includes the accounts receivable of Pacific Ag. Products, LLC, or PAP, as additional collateral. Payments that may be made by PAP to Pacific Ethanol as reimbursement for management and other services provided by Pacific Ethanol to PAP are limited under the terms of the credit facility to $\$ 0.5$ million per fiscal quarter. PAP, one of our indirect wholly-owned subsidiaries, markets our co-products and also provides raw material procurement services to our subsidiaries.

For all monthly periods in which excess borrowing availability falls below a specified level, Kinergy and PAP must collectively maintain a fixed-charge coverage ratio (calculated as a twelve-month rolling earnings before interest, taxes, depreciation and amortization (EBITDA) divided by the sum of interest expense, capital expenditures, principal payments of indebtedness, indebtedness from capital leases and taxes paid during such twelve-month rolling period) of at least 2.0 and are prohibited from incurring certain additional indebtedness (other than specific intercompany indebtedness). Kinergy's and PAP's obligations under the credit facility are secured by a first-priority security interest in all of their assets in favor of the lender. Kinergy and PAP believe they are in compliance with this covenant. The following table summarizes Kinergy's financial covenants and actual results for the periods presented (dollars in thousands):

|  | Three Months Ended March 31, |  | Years <br> Ended December 31, |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 | 2016 | 2016 | 2015 |
| Fixed-Charge Coverage Ratio Requirement | 2.00 | 2.00 | 2.00 | 2.00 |
| Actual | 6.80 | 11.68 | 7.88 | 10.02 |
| Excess | 4.80 | 9.68 | 5.88 | 8.02 |

Pacific Ethanol has guaranteed all of Kinergy's obligations under the credit facility. As of March 31, 2017, Kinergy had an outstanding balance of $\$ 48.5$ million with additional borrowing availability under the credit facility of $\$ 24.9$ million.

## Pekin Credit Facilities

Pacific Ethanol Pekin, Inc., or Pekin, has a $\$ 64.0$ million term loan facility that matures on August 20, 2021 and a $\$ 32.0$ million revolving credit facility that matures on February 1,2022 . The Pekin credit facilities are secured by a first-priority security interest in all of Pekin's assets. Interest accrues under the Pekin credit facilities at an annual rate equal to the 30 -day LIBOR plus $3.75 \%$, payable monthly. Pekin is required to make quarterly principal payments in the amount of $\$ 3.5$ million on the term loan beginning on May 20, 2017 and a principal payment of $\$ 4.5$ million at maturity on August 20, 2021. Pekin is required to pay monthly in arrears a fee on any unused portion of the revolving credit facility at a rate of $0.75 \%$ per annum. Prepayment of these facilities is subject to a prepayment penalty. Under the terms of the credit facilities, Pekin is required to maintain not less than $\$ 20.0$ million in working capital and an annual debt coverage ratio of not less than 1.25 to 1.0 .

## Pacific Aurora Credit Facility

Pacific Aurora maintains a revolving credit facility for up to $\$ 30.0$ million that matures on February 1, 2022. The credit facility is secured by a first-priority security interest in all of Pacific Aurora's assets. Borrowing availability under the credit facility automatically declines by $\$ 2.5$ million on the first day of each June and December beginning on June 1, 2017 through and including December 1, 2020. Interest accrues under the Pacific Aurora credit facility at an annual rate equal to the 30 -day LIBOR plus $4.0 \%$, payable monthly. Pacific Aurora is required to pay monthly in arrears a fee on any unused portion of the credit facility at a rate of $0.75 \%$ per annum. Prepayment of the credit facility is subject to a prepayment penalty. Under the terms of the credit facility, Pacific Aurora is required to maintain not less than $\$ 22.5$ million in working capital through June 30, 2017, not less than $\$ 24.0$ million in working capital after June 30, 2017 and an annual debt coverage ratio of not less than 1.5 to 1.0. At March 31, 2017, Pacific Aurora had no amounts outstanding under the credit facility and $\$ 30.0$ million available for borrowing under the facility.

## Pacific Ethanol, Inc. Notes Payable

We have $\$ 55.0$ million in aggregate principal amount of senior secured notes that mature on December 15, 2019. Interest on the notes accrues at an annual rate equal to (i) the greater of $1 \%$ and the three-month LIBOR, plus $7.0 \%$ through December 14, 2017, (ii) the greater of $1 \%$ and LIBOR, plus $9 \%$ between December 15, 2017 and December 14, 2018, and (iii) the greater of $1 \%$ and LIBOR plus $11 \%$ between December 15, 2018 and the maturity date. The interest rate increases by an additional $2 \%$ per annum above the interest rate otherwise applicable upon the occurrence and during the continuance of an event of default until cured. Interest is payable in cash in arrears on the 15 th calendar day of each March, June, September and December beginning on March 15, 2017. We are required to pay all outstanding principal and any accrued and unpaid interest on the notes on the maturity date. We may, at our option, prepay the outstanding principal amount of the notes at any time without premium or penalty. Pacific Ethanol, Inc. issued the notes, which are secured by a firstpriority security interest in the equity interest held by Pacific Ethanol, Inc. in its wholly-owned subsidiary, PE Op. Co., which indirectly owns our plants located on the West Coast.

## Contractual Obligations

There have been no material changes in the three months ended March 31, 2017, to the amounts presented in the table under the "Contractual Obligations" section in Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operation" of our Annual Report on Form 10-K for 2016.

## Effects of Inflation

The impact of inflation was not significant to our financial condition or results of operations for the three months ended March 31, 2017 and 2016.

## ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

We are exposed to various market risks, including changes in commodity prices and interest rates as discussed below. Market risk is the potential loss arising from adverse changes in market rates and prices. In the ordinary course of business, we may enter into various types of transactions involving financial instruments to manage and reduce the impact of changes in commodity prices and interest rates. We do not expect to have any exposure to foreign currency risk as we conduct all of our transactions in U.S. dollars.

## Commodity Risk

We produce ethanol and ethanol co-products. Our business is sensitive to changes in the prices of ethanol and corn. In the ordinary course of business, we may enter into various types of transactions involving financial instruments to manage and reduce the impact of changes in ethanol and corn prices. We do not enter into derivatives or other financial instruments for trading or speculative purposes.

We are subject to market risk with respect to ethanol pricing. Ethanol prices are sensitive to global and domestic ethanol supply, crude-oil supply and demand; crude-oil refining capacity; carbon intensity; government regulation; and consumer demand for alternative fuels. Our ethanol sales are priced using contracts that are either based on a fixed price or an indexed price tied to a specific market, such as CBOT or the Oil Price Information Service. Under these fixed-priced arrangements, we are exposed to risk of an increase in the market price of ethanol between the time the price is fixed and the time the ethanol is sold.

We satisfy our physical corn needs, the principal raw material used to produce ethanol and ethanol co-products, based on supplyguaranteed contracts with our vendors. Generally, we determine the purchase price of our corn at the time we begin to grind that day's needs. Sometimes we may also enter into contracts with our vendors to fix a portion of the purchase price of our corn requirements. As such, we are also subject to market risk with respect to the price of corn. The price of corn is subject to wide fluctuations due to unpredictable factors such as weather conditions, farmer planting decisions, governmental policies with respect to agriculture and international trade and global supply and demand. Under the fixed-price arrangements, we assume the risk of a decrease in the market price of corn between the time the price is fixed and the time the corn is utilized.

Ethanol co-products are sensitive to various demand factors such as numbers of livestock on feed, prices for feed alternatives, and supply factors, primarily production of ethanol co-products by ethanol plants and other sources.

As noted above, we may attempt to reduce the market risk associated with fluctuations in the price of ethanol or corn by employing a variety of risk management and hedging strategies. Strategies include the use of derivative financial instruments such as futures and options executed on the CBOT and/or the New York Mercantile Exchange, as well as the daily management of physical corn.

These derivatives are not designated for special hedge accounting treatment, and as such, the changes in the fair values of these exchanged-traded contracts are recorded on the balance sheet and recognized immediately in cost of goods sold. We recognized gains of $\$ 0.2$ million and gains of $\$ 0.6$ million related to settled non-designated hedges as the change in the fair values of these contracts for the three months ended March 31, 2017 and 2016, respectively.

At March 31, 2017, we prepared a sensitivity analysis to estimate our exposure to ethanol and corn. Market risk related to these factors was estimated as the potential change in pre-tax income resulting from a hypothetical $10 \%$ adverse change in the prices of our expected ethanol and corn volumes. The results of this analysis as of March 31, 2017, which may differ materially from actual results, are as follows (in millions):

|  | Three |  |  |
| :---: | :---: | :---: | :---: |
|  | Months |  | Approximate |
|  | Ended |  | Adverse |
|  | March 31, 2017 |  | Change to Pre-Tax |
| Commodity | Volume | Unit of Measure | Income |
| Ethanol | 226.2 | Gallons | \$16.1 |
| Corn | 41.1 | Bushels | \$18.7 |

## Interest Rate Risk

We are exposed to market risk from changes in interest rates. Exposure to interest rate risk results primarily from our indebtedness that bears interest at variable rates. At March 31, 2017, all of our long-term debt of $\$ 199.5$ million was variable-rate in nature. Based on a 100 basis point $(1.00 \%)$ increase in the interest rate on our long-term debt, pre-tax income for the three months ended March 31, 2017 would be negatively impacted by approximately $\$ 0.5$ million.

## ITEM 4. CONTROLS AND PROCEDURES.

## Evaluation of Disclosure Controls and Procedures

We conducted an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by the company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures also include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded as of March 31, 2017 that our disclosure controls and procedures were effective at a reasonable assurance level.

## Changes in Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the most recently completed fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## Inherent Limitations on the Effectiveness of Controls

Management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control systems are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in a costeffective control system, no evaluation of internal control over financial reporting can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been or will be detected.

These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of a simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of controls effectiveness to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

## PART II - OTHER INFORMATION

## ITEM 1. LEGAL PROCEEDINGS.

We are subject to legal proceedings, claims and litigation arising in the ordinary course of business. While the amounts claimed may be substantial, the ultimate liability cannot presently be determined because of considerable uncertainties that exist. Therefore, it is possible that the outcome of those legal proceedings, claims and litigation could adversely affect our quarterly or annual operating results or cash flows when resolved in a future period. However, based on facts currently available, management believes such matters will not adversely affect in any material respect our financial position, results of operations or cash flows.

## ITEM 1A. RISK FACTORS.

Before deciding to purchase, hold or sell our common stock, you should carefully consider the risks described below in addition to the other information contained in this Report and in our other filings with the Securities and Exchange Commission, including subsequent reports on Forms 10-Q and 8-K. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business. If any of these known or unknown risks or uncertainties actually occurs with material adverse effects on Pacific Ethanol, our business, financial condition, results of operations and/or liquidity could be seriously harmed. In that event, the market price for our common stock will likely decline, and you may lose all or part of your investment.


#### Abstract

Risks Related to our Business We have incurred significant losses and negative operating cash flow in the past and we may incur losses and negative operating cash flow in the future, which may hamper our operations and impede us from expanding our business.


We have incurred significant losses and negative operating cash flow in the past. For the three months ended March 31, 2017 and 2016, and for the year ended December 31, 2015, we incurred consolidated net losses of approximately $\$ 13.5$ million, $\$ 13.2$ million and $\$ 18.9$ million, respectively. For the three months ended March 31, 2016, and for the year ended December 31, 2015, we incurred negative operating cash flows of $\$ 5.2$ million and $\$ 26.8$ million, respectively. We may incur losses and negative operating cash flow in the future. We expect to rely on cash on hand, cash, if any, generated from our operations, borrowing availability under our lines of credit and proceeds from future financing activities, if any, to fund all of the cash requirements of our business. Continued losses and negative operating cash flow may hamper our operations and impede us from expanding our business.

Our results of operations and our ability to operate at a profit is largely dependent on managing the costs of corn and natural gas and the prices of ethanol, distillers grains and other ethanol co-products, all of which are subject to significant volatility and uncertainty.

Our results of operations are highly impacted by commodity prices, including the cost of corn and natural gas that we must purchase, and the prices of ethanol, distillers grains and other ethanol co-products that we sell. Prices and supplies are subject to and determined by market and other forces over which we have no control, such as weather, domestic and global demand, supply shortages, export prices and various governmental policies in the United States and around the world.

As a result of price volatility of corn, natural gas, ethanol, distillers grains and other ethanol co-products, our results of operations may fluctuate substantially. In addition, increases in corn or natural gas prices or decreases in ethanol, distillers grains or other ethanol coproduct prices may make it unprofitable to operate. In fact, some of our marketing activities will likely be unprofitable in a market of generally declining ethanol prices due to the nature of our business. For example, to satisfy customer demands, we maintain certain quantities of ethanol inventory for subsequent resale. Moreover, we procure much of our inventory outside the context of a marketing arrangement and therefore must buy ethanol at a price established at the time of purchase and sell ethanol at an index price established later at the time of sale that is generally reflective of movements in the market price of ethanol. As a result, our margins for ethanol sold in these transactions generally decline and may turn negative as the market price of ethanol declines.

No assurance can be given that corn or natural gas can be purchased at, or near, current or any particular prices or that ethanol, distillers grains or other ethanol co-products will sell at, or near, current or any particular prices. Consequently, our results of operations and financial position may be adversely affected by increases in the price of corn or natural gas or decreases in the price of ethanol, distillers grains or other ethanol co-products.

Over the past several years, the spread between ethanol and corn prices has fluctuated significantly. Fluctuations are likely to continue to occur. A sustained narrow spread, whether as a result of sustained high or increased corn prices or sustained low or decreased ethanol prices, would adversely affect our results of operations and financial position. Further, combined revenues from sales of ethanol, distillers grains and other ethanol co-products could decline below the marginal cost of production, which may force us to suspend production of ethanol, distillers grains and ethanol co-products at some or all of our plants.

Increased ethanol production or higher inventory levels may cause a decline in ethanol prices or prevent ethanol prices from rising, and may have other negative effects, adversely impacting our results of operations, cash flows and financial condition.

We believe that the most significant factor influencing the price of ethanol has been the substantial increase in ethanol production in recent years. According to the Renewable Fuels Association, domestic ethanol production capacity increased from an annualized rate of 1.5 billion gallons per year in January 1999 to a record 16.0 billion gallons in 2016. In addition, if ethanol production margins improve, we anticipate that owners of ethanol production facilities will increase production levels, thereby resulting in more abundant ethanol supplies and inventories. Any increase in the demand for ethanol may not be commensurate with increases in the supply of ethanol, thus leading to lower ethanol prices. Also, demand for ethanol could be impaired due to a number of factors, including regulatory developments and reduced United States gasoline consumption. Reduced gasoline consumption has occurred in the past and could occur in the future as a result of increased gasoline or oil prices or other factors such as increased automobile fuel efficiency. Any of these outcomes could have a material adverse effect on our results of operations, cash flows and financial condition.

## The market price of ethanol is volatile and subject to large fluctuations, which may cause our profitability or losses to fluctuate

 significantly.The market price of ethanol is volatile and subject to large fluctuations. The market price of ethanol is dependent upon many factors, including the supply of ethanol and the price of gasoline, which is in turn dependent upon the price of petroleum which is highly volatile and difficult to forecast. For example, ethanol prices, as reported by the CBOT, ranged from $\$ 1.31$ to $\$ 1.75$ per gallon during 2016, $\$ 1.31$ to $\$ 1.69$ per gallon during 2015 and $\$ 1.50$ to $\$ 3.52$ per gallon during 2014. Fluctuations in the market price of ethanol may cause our profitability or losses to fluctuate significantly.

## Some of our marketing activities will likely be unprofitable in a market of generally declining ethanol prices due to the nature of our business.

Some of our marketing activities will likely be unprofitable in a market of generally declining ethanol prices due to the nature of our business. For example, to satisfy customer demands, we maintain certain quantities of ethanol inventory for subsequent resale. Moreover, we procure much of our inventory outside the context of a marketing arrangement and therefore must buy ethanol at a price established at the time of purchase and sell ethanol at an index price established later at the time of sale that is generally reflective of movements in the market price of ethanol. As a result, our margins for ethanol sold in these transactions generally decline and may turn negative as the market price of ethanol declines.

## Disruptions in ethanol production or distribution infrastructure may adversely affect our business, results of operations and financial condition.

Our business depends on the continuing availability of rail, road, port, storage and distribution infrastructure. In particular, due to limited storage capacity at our plants and other considerations related to production efficiencies, our plants depend on just-in-time delivery of corn. The production of ethanol also requires a significant and uninterrupted supply of other raw materials and energy, primarily water, electricity and natural gas. Local water, electricity and gas utilities may not be able to reliably supply the water, electricity and natural gas that our plants need or may not be able to supply those resources on acceptable terms. During 2014, poor weather caused disruptions in rail transportation, which slowed the delivery of ethanol by rail, the principle manner by which ethanol from our plants located in the Midwest is transported to market. Disruptions in the ethanol production or distribution infrastructure, whether caused by labor difficulties, earthquakes, storms, other natural disasters or human error or malfeasance or other reasons, could prevent timely deliveries of corn or other raw materials and energy, and could delay transport of our ethanol to market, and may require us to halt production at one or more plants, any of which could have a material adverse effect on our business, results of operations and financial condition.

## We may engage in hedging transactions and other risk mitigation strategies that could harm our results of operations.

In an attempt to partially offset the effects of volatility of ethanol prices and corn and natural gas costs, we may enter into contracts to fix the price of a portion of our ethanol production or purchase a portion of our corn or natural gas requirements on a forward basis. In addition, we may engage in other hedging transactions involving exchange-traded futures contracts for corn, natural gas and unleaded gasoline from time to time. The financial statement impact of these activities is dependent upon, among other things, the prices involved and our ability to sell sufficient products to use all of the corn and natural gas for which forward commitments have been made. Hedging arrangements also expose us to the risk of financial loss in situations where the other party to the hedging contract defaults on its contract or, in the case of exchange-traded contracts, where there is a change in the expected differential between the underlying price in the hedging agreement and the actual prices paid or received by us. As a result, our results of operations and financial condition may be adversely affected by fluctuations in the price of corn, natural gas, ethanol and unleaded gasoline.

## Operational difficulties at our plants could negatively impact sales volumes and could cause us to incur substantial losses.

Operations at our plants are subject to labor disruptions, unscheduled downtimes and other operational hazards inherent in the ethanol production industry, including equipment failures, fires, explosions, abnormal pressures, blowouts, pipeline ruptures, transportation accidents and natural disasters. Some of these operational hazards may cause personal injury or loss of life, severe damage to or destruction of property and equipment or environmental damage, and may result in suspension of operations and the imposition of civil or criminal penalties. Our insurance may not be adequate to fully cover the potential operational hazards described above or we may not be able to renew this insurance on commercially reasonable terms or at all.

Moreover, our plants may not operate as planned or expected. All of these facilities are designed to operate at or above a specified production capacity. The operation of these facilities is and will be, however, subject to various uncertainties. As a result, these facilities may not produce ethanol and its co-products at expected levels. In the event any of these facilities do not run at their expected capacity levels, our business, results of operations and financial condition may be materially and adversely affected.

Future demand for ethanol is uncertain and may be affected by changes to federal mandates, public perception, consumer acceptance and overall consumer demand for transportation fuel, any of which could negatively affect demand for ethanol and our results of operations.

Although many trade groups, academics and governmental agencies have supported ethanol as a fuel additive that promotes a cleaner environment, others have criticized ethanol production as consuming considerably more energy and emitting more greenhouse gases than other biofuels and potentially depleting water resources. Some studies have suggested that corn-based ethanol is less efficient than ethanol produced from other feedstock and that it negatively impacts consumers by causing increased prices for dairy, meat and other food generated from livestock that consume corn. Additionally, ethanol critics contend that corn supplies are redirected from international food markets to domestic fuel markets. If negative views of corn-based ethanol production gain acceptance, support for existing measures promoting use and domestic production of corn-based ethanol could decline, leading to reduction or repeal of federal mandates, which could adversely affect the demand for ethanol. These views could also negatively impact public perception of the ethanol industry and acceptance of ethanol as an alternative fuel.

There are limited markets for ethanol beyond those established by federal mandates. Discretionary blending and E85 blending are important secondary markets. Discretionary blending is often determined by the price of ethanol versus the price of gasoline. In periods when discretionary blending is financially unattractive, the demand for ethanol may be reduced. Also, the demand for ethanol is affected by the overall demand for transportation fuel. Demand for transportation fuel is affected by the number of miles traveled by consumers and the fuel economy of vehicles. Market acceptance of E15 may partially offset the effects of decreases in transportation fuel demand. A reduction in the demand for ethanol and ethanol co-products may depress the value of our products, erode our margins and reduce our ability to generate revenue or to operate profitably. Consumer acceptance of E15 and E85 fuels is needed before ethanol can achieve any significant growth in market share relative to other transportation fuels.

## Our plant indebtedness exposes us to many risks that could negatively impact our business, our business prospects, our liquidity and our cash flows and results of operations.

Our plants located in the Midwest have significant indebtedness. Unlike traditional term debt, the terms of our plant loans require amortizing payments of principal over the lives of the loans and our borrowing availability under our plant credit facilities periodically and automatically declines through the maturity dates of those facilities. Our plant indebtedness could:

- make it more difficult to pay or refinance our debts as they become due during adverse economic and industry conditions because any decrease in revenues could cause us to not have sufficient cash flows from operations to make our scheduled debt payments;
- limit our flexibility to pursue strategic opportunities or react to changes in our business and the industry in which we operate and, consequently, place us at a competitive disadvantage to our competitors who have less debt;
- require a substantial portion of our cash flows from operations to be used for debt service payments, thereby reducing the availability of our cash flows to fund working capital, capital expenditures, acquisitions, dividend payments and other general corporate purposes; or
- limit our ability to procure additional financing for working capital or other purposes.

Our term loans and credit facilities also require compliance with numerous financial and other covenants. In addition, our plant indebtedness bears interest at variable rates. An increase in prevailing interest rates would likewise increase our debt service obligations and could materially and adversely affect our cash flows and results of operations.

Our ability to generate sufficient cash to make all principal and interest payments when due depends on our performance, which is subject to a variety of factors beyond our control, including the supply of and demand for ethanol and co-products, ethanol and co-product prices, the cost of key production inputs, and many other factors incident to the ethanol production and marketing industry. We cannot provide any assurance that we will be able to timely satisfy such obligations. Our failure to timely satisfy our debt obligations could have a material adverse effect on our business, business prospects, liquidity, cash flows and results of operations.

## If Kinergy fails to satisfy its financial covenants under its credit facility, it may experience a loss or reduction of that facility, which would have a material adverse effect on our financial condition and results of operations.

We are substantially dependent on Kinergy's credit facility to help finance its operations. Kinergy must satisfy monthly financial covenants under its credit facility, including fixed-charge coverage ratio covenants. Kinergy will be in default under its credit facility if it fails to satisfy any financial covenant. A default may result in the loss or reduction of the credit facility. The loss of Kinergy's credit facility, or a significant reduction in Kinergy's borrowing capacity under the facility, would result in Kinergy's inability to finance a significant portion of its business and would have a material adverse effect on our financial condition and results of operations.

## The United States ethanol industry is highly dependent upon certain federal and state legislation and regulation and any changes in legislation or regulation could have a material adverse effect on our results of operations, cash flows and financial condition.

The EPA has implemented the RFS pursuant to the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. The RFS program sets annual quotas for the quantity of renewable fuels (such as ethanol) that must be blended into motor fuels consumed in the United States. The domestic market for ethanol is significantly impacted by federal mandates under the RFS program for volumes of renewable fuels (such as ethanol) required to be blended with gasoline. Future demand for ethanol will be largely dependent upon incentives to blend ethanol into motor fuels, including the relative price of gasoline versus ethanol, the relative octane value of ethanol, constraints in the ability of vehicles to use higher ethanol blends, the RFS, and other applicable environmental requirements. Any significant increase in production capacity above the RFS minimum requirements may have an adverse impact on ethanol prices.

Legislation aimed at reducing or eliminating the renewable fuel use required by the RFS has been introduced in the United States Congress. On January 3, 2017, the Leave Ethanol Volumes at Existing Levels (LEVEL) Act (H.R. 119) was introduced in the House of Representatives. The bill would freeze renewable fuel blending requirements under the RFS at 7.5 billion gallons per year, prohibit the sale of gasoline containing more than $10 \%$ ethanol, and revoke the EPA's approval of E15 blends. On January 31, 2017, a bill (H.R. 777) was introduced in the House of Representatives that would require the EPA and National Academies of Sciences to conduct a study on "the implications of the use of mid-level ethanol blends". A mid-level ethanol blend is an ethanol gasoline blend containing 10-20\% ethanol by volume, including E15 and E20, that is intended to be used in any conventional gasoline powered motor vehicle or nonroad vehicle or engine. Also on January 31, 2017, a bill (H.R. 776) was introduced in the House of Representatives that would limit the volume of cellulosic biofuel required under the RFS to what is commercially available. On March 2, 2017, a bill (H.R. 1315) was introduced in the House of Representatives that would cap the volume of ethanol in gasoline at $10 \%$. On the same day, the RFS Elimination Act (H.R. 1314) was introduced, which would fully repeal the RFS.

All of these bills were assigned to a congressional committee, which will consider them before possibly sending any of them on to the House of Representatives as a whole. Our operations could be adversely impacted if any legislation is enacted that reduces or eliminates the RFS volume requirements or that reduces or eliminates corn ethanol as qualifying as a renewable fuel under the RFS.

Under the provisions of the Clean Air Act, as amended by the Energy Independence and Security Act of 2007, the EPA has limited authority to waive or reduce the mandated RFS requirements, which authority is subject to consultation with the Secretaries of Agriculture and Energy, and based on a determination that there is inadequate domestic renewable fuel supply or implementation of the applicable requirements would severely harm the economy or environment of a state, region or the United States. Our results of operations, cash flows and financial condition could be adversely impacted if the EPA reduces the RFS requirements from the statutory levels specified in the RFS.

## The ethanol production and marketing industry is extremely competitive. Many of our significant competitors have greater production and financial resources and one or more of these competitors could use their greater resources to gain market share at our expense.

The ethanol production and marketing industry is extremely competitive. Many of our significant competitors in the ethanol production and marketing industry, including Archer Daniels Midland Company and Valero Energy Corporation, have substantially greater production and/or financial resources. As a result, our competitors may be able to compete more aggressively and sustain that competition over a longer period of time. Successful competition will require a continued high level of investment in marketing and customer service and support. Our limited resources relative to many significant competitors may cause us to fail to anticipate or respond adequately to new developments and other competitive pressures. This failure could reduce our competitiveness and cause a decline in market share, sales and profitability. Even if sufficient funds are available, we may not be able to make the modifications and improvements necessary to compete successfully.

We also face competition from international suppliers. Currently, international suppliers produce ethanol primarily from sugar cane and have cost structures that are generally substantially lower than our cost structures. Any increase in domestic or foreign competition could cause us to reduce our prices and take other steps to compete effectively, which could adversely affect our business, financial condition and results of operations.

## Our ability to utilize net operating loss carryforwards and certain other tax attributes may be limited.

Federal and state income tax laws impose restrictions on the utilization of net operating loss, or NOL, and tax credit carryforwards in the event that an "ownership change" occurs for tax purposes, as defined by Section 382 of the Internal Revenue Code, or Code. In general, an ownership change occurs when stockholders owning $5 \%$ or more of a "loss corporation" (a corporation entitled to use NOL or other loss carryovers) have increased their ownership of stock in such corporation by more than 50 percentage points during any three-year period. The annual base limitation under Section 382 of the Code is calculated by multiplying the loss corporation's value at the time of the ownership change by the greater of the long-term tax-exempt rate determined by the Internal Revenue Service in the month of the ownership change or the two preceding months.

As of December 31, 2016, of our $\$ 117.7$ million of federal NOLs, we had $\$ 101.4$ million of federal NOLs that are limited in their annual use under Section 382 of the Code. Accordingly, our ability to utilize these NOL carryforwards may be substantially limited. These limitations could in turn result in increased future tax obligations, which could have a material adverse effect on our business, financial condition and results of operations.

## Our business is not diversified. The high concentration of our sales within the ethanol production and marketing industry could result in a significant reduction in sales and negatively affect our profitability if demand for ethanol declines.

We expect to be completely focused on the production and marketing of ethanol and its co-products for the foreseeable future. We may be unable to shift our business focus away from the production and marketing of ethanol to other renewable fuels or competing products. Accordingly, an industry shift away from ethanol or the emergence of new competing products may reduce the demand for ethanol. A downturn in the demand for ethanol would likely materially and adversely affect our sales and profitability.

## We may be adversely affected by environmental, health and safety laws, regulations and liabilities.

We are subject to various federal, state and local environmental laws and regulations, including those relating to the discharge of materials into the air, water and ground, the generation, storage, handling, use, transportation and disposal of hazardous materials and wastes, and the health and safety of our employees. In addition, some of these laws and regulations require us to operate under permits that are subject to renewal or modification. These laws, regulations and permits can often require expensive pollution control equipment or operational changes to limit actual or potential impacts to the environment. A violation of these laws and regulations or permit conditions can result in substantial fines, natural resource damages, criminal sanctions, permit revocations and/or facility shutdowns. In addition, we have made, and expect to make, significant capital expenditures on an ongoing basis to comply with increasingly stringent environmental laws, regulations and permits.

We may be liable for the investigation and cleanup of environmental contamination at each of our plants and at off-site locations where we arrange for the disposal of hazardous substances or wastes. If these substances or wastes have been or are disposed of or released at sites that undergo investigation and/or remediation by regulatory agencies, we may be responsible under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, or other environmental laws for all or part of the costs of investigation and/or remediation, and for damages to natural resources. We may also be subject to related claims by private parties alleging property damage and personal injury due to exposure to hazardous or other materials at or from those properties. Some of these matters may require us to expend significant amounts for investigation, cleanup or other costs.

In addition, new laws, new interpretations of existing laws, increased governmental enforcement of environmental laws or other developments could require us to make significant additional expenditures. Continued government and public emphasis on environmental issues can be expected to result in increased future investments for environmental controls at our plants. Present and future environmental laws and regulations, and interpretations of those laws and regulations, applicable to our operations, more vigorous enforcement policies and discovery of currently unknown conditions may require substantial expenditures that could have a material adverse effect on our results of operations and financial condition.

The hazards and risks associated with producing and transporting our products (including fires, natural disasters, explosions and abnormal pressures and blowouts) may also result in personal injury claims or damage to property and third parties. As protection against operating hazards, we maintain insurance coverage against some, but not all, potential losses. However, we could sustain losses for uninsurable or uninsured risks, or in amounts in excess of existing insurance coverage. Events that result in significant personal injury or damage to our property or third parties or other losses that are not fully covered by insurance could have a material adverse effect on our results of operations and financial condition.

## If we are unable to attract or retain key personnel, our ability to operate effectively may be impaired, which could have a material adverse effect on our business, financial condition and results of operations.

Our ability to operate our business and implement strategies depends, in part, on the efforts of our executive officers and other key personnel. Our future success will depend on, among other factors, our ability to retain our current key personnel and attract and retain qualified future key personnel, particularly executive management. If we are unable to attract or retain key personnel, our ability to operate effectively may be impaired, which could have a material adverse effect on our business, financial condition and results of operations.

## We depend on a small number of customers for the majority of our sales. A reduction in business from any of these customers could cause a significant decline in our overall sales and profitability.

The majority of our sales are generated from a small number of customers. During 2016, 2015 and 2014, three customers accounted for an aggregate of approximately $\$ 572$ million, $\$ 467$ million and $\$ 569$ million in net sales, representing $35 \%, 39 \%$ and $51 \%$ of our net sales, respectively, for those periods. We expect that we will continue to depend for the foreseeable future upon a small number of customers for a significant portion of our sales. Our agreements with these customers generally do not require them to purchase any specified volume or dollar value of ethanol or co-products, or to make any purchases whatsoever. Therefore, in any future period, our sales generated from these customers, individually or in the aggregate, may not equal or exceed historical levels. If sales to any of these customers cease or decline, we may be unable to replace these sales with sales to either existing or new customers in a timely manner, or at all. A cessation or reduction of sales to one or more of these customers could cause a significant decline in our overall sales and profitability.

## Our lack of long-term ethanol orders and commitments by our customers could lead to a rapid decline in our sales and profitability.

We cannot rely on long-term ethanol orders or commitments by our customers for protection from the negative financial effects of a decline in the demand for ethanol or a decline in the demand for our marketing services. The limited certainty of ethanol orders can make it difficult for us to forecast our sales and allocate our resources in a manner consistent with our actual sales. Moreover, our expense levels are based in part on our expectations of future sales and, if our expectations regarding future sales are inaccurate, we may be unable to reduce costs in a timely manner to adjust for sales shortfalls. Furthermore, because we depend on a small number of customers for a significant portion of our sales, the magnitude of the ramifications of these risks is greater than if our sales were less concentrated. As a result of our lack of long-term ethanol orders and commitments, we may experience a rapid decline in our sales and profitability.

## There are limitations on our ability to receive distributions from our subsidiaries.

We conduct most of our operations through subsidiaries and are dependent upon dividends or other intercompany transfers of funds from our subsidiaries to generate free cash flow. Moreover, some of our subsidiaries are limited in their ability to pay dividends or make distributions, loans or advances to us by the terms of their financing arrangements. At March 31, 2017, we had approximately $\$ 280.0$ million of net assets at our subsidiaries that were not available to be distributed in the form of dividends, distributions, loans or advances due to restrictions contained in their financing arrangements.

## Risks Related to Ownership of our Common Stock

## Our stock price is highly volatile, which could result in substantial losses for investors purchasing shares of our common stock and in litigation against us.

The market price of our common stock has fluctuated significantly in the past and may continue to fluctuate significantly in the future. The market price of our common stock may continue to fluctuate in response to one or more of the following factors, many of which are beyond our control:

- fluctuations in the market prices of ethanol and its co-products;
- the cost of key inputs to the production of ethanol, including corn and natural gas;
- the volume and timing of the receipt of orders for ethanol from major customers;
- competitive pricing pressures;
our ability to timely and cost-effectively produce, sell and deliver ethanol;
the announcement, introduction and market acceptance of one or more alternatives to ethanol;
changes in market valuations of companies similar to us;
stock market price and volume fluctuations generally;
regulatory developments or increased enforcement;
- fluctuations in our quarterly or annual operating results;
additions or departures of key personnel;
our ability to obtain any necessary financing;
our financing activities and future sales of our common stock or other securities; and
our ability to maintain contracts that are critical to our operations.
Demand for ethanol could be adversely affected by a slow-down in the overall demand for oxygenate and gasoline additive products. The levels of our ethanol production and purchases for resale will be based upon forecasted demand. Accordingly, any inaccuracy in forecasting anticipated revenues and expenses could adversely affect our business. The failure to receive anticipated orders or to complete delivery in any quarterly period could adversely affect our results of operations for that period. Quarterly and annual results are not necessarily indicative of future performance for any particular period, and we may not experience revenue growth or profitability on a quarterly or an annual basis.

The price at which you purchase shares of our common stock may not be indicative of the price that will prevail in the trading market. You may be unable to sell your shares of common stock at or above your purchase price, which may result in substantial losses to you and which may include the complete loss of your investment. In the past, securities class action litigation has often been brought against a company following periods of high stock price volatility. We may be the target of similar litigation in the future. Securities litigation could result in substantial costs and divert management's attention and our resources away from our business.

Any of the risks described above could have a material adverse effect on our results of operations or the price of our common stock, or both.

Upon the conversion of our outstanding non-voting common stock, if the resulting shares of common stock are resold into the market, or if a perception exists that a substantial number of shares of common stock may be issued and then resold into the market, the market price of our common stock and the value of your investment could decline significantly.

We have non-voting common stock outstanding that may be converted into our common stock. Sales of a substantial number of shares of our common stock underlying our non-voting common stock, or even the perception that these sales could occur, could adversely affect the market price of our common stock. As a result, you could experience a significant decline in the value of your investment.

## ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS.

## Unregistered Sales of Equity Securities

None.

## Dividends

Our current and future debt financing arrangements may limit or prevent cash distributions from our subsidiaries to us, depending upon the achievement of specified financial and other operating conditions and our ability to properly service our debt, thereby limiting or preventing us from paying cash dividends.

At March 31, 2017, we had approximately $\$ 280.0$ million of net assets at our subsidiaries that were not available to be transferred to Pacific Ethanol, Inc. in the form of dividends, loans or advances due to restrictions contained in the credit facilities of our subsidiaries.

For each of the three months ended March 31, 2017 and 2016, we declared and paid in cash an aggregate of $\$ 0.3$ million in dividends on our Series B Cumulative Convertible Preferred Stock, or Series B Preferred Stock. We have never declared or paid cash dividends on our common stock and do not currently intend to pay cash dividends on our common stock in the foreseeable future. We currently anticipate that we will retain any earnings for use in the continued development of our business. The holders of our outstanding Series B Preferred Stock are entitled to dividends of 7\% per annum, payable quarterly. Dividends in respect of our Series B Preferred Stock must be paid prior to the payment of any dividends in respect of our common stock.

## ITEM 3. DEFAULTS UPON SENIOR SECURITIES.

Not applicable.

## ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

## ITEM 5. OTHER INFORMATION.

None.

## ITEM 6. EXHIBITS.

Exhibit
Number Description
10.1 Pacific Ethanol, Inc. 2017 Short-Term Incentive Plan Description (*)
31.1 Certifications Required by Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (*) $^{*}$
31.2 Certifications Required by Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (*)
32.1 Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (*)
101.INS XBRL Instance Document (*)
101.SCH XBRL Taxonomy Extension Schema (*)
101.CAL XBRL Taxonomy Extension Calculation Linkbase (*)
101.DEF XBRL Taxonomy Extension Definition Linkbase ( ${ }^{*}$ )
101.LAB XBRL Taxonomy Extension Label Linkbase (*)
101.PRE XBRL Taxonomy Extension Presentation Linkbase (*)
(*) Filed herewith.

## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

## PACIFIC ETHANOL, INC.

By: /S/ BRYON T. MCGREGOR
Bryon T. McGregor
Chief Financial Officer
(Principal Financial and Accounting Officer)

## EXHIBITS FILED WITH THIS REPORT

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101.LAB XBRL Taxonomy Extension Label Linkbase
101.PRE XBRL Taxonomy Extension Presentation Linkbase

## EXHIBIT 10.1

## Pacific Ethanol, Inc. 2017 Short-Term Incentive Plan ("Plan") Description

Effective Date: The Plan was adopted by the compensation committee (the "Compensation Committee") of the board of directors of Pacific Ethanol, Inc. (the "Company") on March 7, 2017.

Participants: The Company's Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, General Counsel, Vice President of Commodities and Corporate Development and Vice President of Supply and Trading, ("Executive Officers"), and other officer, director and manager-level personnel will be eligible to participate in the Plan.

Aggregate Plan Pool: The dollar amount of the aggregate Plan pool will be established by the Compensation Committee.
Awards: Awards under the Plan for Executive Officers will be determined by the Compensation Committee. Awards under the Plan for other officer, director and manager-level personnel will be determined by the Company's executive committee, within the limits of the Plan pool approved by the Compensation Committee.

Individual Targets: The Plan payout targets for Executive Officers will be determined by the Compensation Committee. The Plan payout targets for other officer, director and manager-level personnel will be set as a percentage of a participant's base salary in accordance with compensation policies established by the Company's executive committee or a participant's employment agreement with the Company.

Award Components: Awards under the Plan will be based on two elements: financial performance and individual performance. Company financial performance will be an element in all participants' awards. Each element will be assigned a weighting based upon a participant's role in the Company.
o The financial performance element will be based on earnings before interest, taxes, depreciation and amortization, adjusted for certain non-cash and other adjustments, such as asset impairments, purchase accounting adjustments and fair value adjustments, established by the Compensation Committee ("Adjusted EBITDA"). An Adjusted EBITDA goal will be established for 2017 by the Compensation Committee. The financial performance element is non-discretionary and will be funded at a rate of $0 \%$ to $200 \%$ of the participant's targeted payout amount for the element based on the level of actual Adjusted EBITDA compared to the Adjusted EBITDA goal.
o The individual performance element will be based on individual participant goals based on quantitative criteria and subjective elements established by each participant's supervisor, in consultation with the Company's executive committee. The extent to which a participant will be deemed to have achieved his or her individual performance goals will be determined by the Company's executive committee in consultation with the participant's supervisor; provided, however, that the extent to which a participant who is an Executive Officer will be deemed to have achieved his or her individual performance goals will be recommended by the Company's Chief Executive Officer but ultimately determined by the Compensation Committee. The individual performance element is discretionary and will be funded at a rate of $0 \%$ to $100 \%$ of the participant's targeted payout amount for the element.

In addition to incentive compensation payable under the Plan, the Company's Compensation Committee retains the authority to grant special discretionary cash and/or equity awards.

## CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Neil M. Koehler, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Pacific Ethanol, Inc.;
2. Based on my knowledge, this 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 report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 10, 2017
/S/ NEIL M. KOEHLER
Neil M. Koehler
President and Chief Executive Officer
(Principal Executive Officer)

## EXHIBIT 31.2

## CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Bryon T. McGregor, certify that

1. I have reviewed this Quarterly Report on Form 10-Q of Pacific Ethanol, Inc.;
2. Based on my knowledge, this 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 report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting

Date: May 10, 2017

S/ BRYON T. MCGREGOR
Bryon T. McGregor
Chief Financial Officer
(Principal Financial Officer)

## CERTIFICATION OF

## CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER <br> PURSUANT TO 18 U.S.C. SECTION 1350, <br> AS ADOPTED PURSUANT TO <br> SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Pacific Ethanol, Inc. (the "Company") for the period ended March 31, 2017 (the "Report"), the undersigned hereby certify in their capacities as Chief Executive Officer and Chief Financial Officer of the Company, respectively, pursuant to 18 U.S.C. section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 10, 2017

Dated: May 10, 2017

By: /S/ NEIL M. KOEHLER
Neil M. Koehler
President and Chief Executive Officer
(Principal Executive Officer)
By: /S/ BRYON T. MCGREGOR
Bryon T. McGregor
Chief Financial Officer
(Principal Financial Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signatures that appear in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.


[^0]:    * Amounts derived from the audited financial statements for the year ended December 31, 2016.

[^1]:    * Amounts derived from the audited financial statements for the year ended December 31, 2016

