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# Pacific Ethanol Begins Commercial Production of Cellulosic Ethanol at Its Stockton Plant

## – Seeks EPA Approval to Qualify for High-Value D3 Cellulosic RINs –

SACRAMENTO, Calif., Dec. 16, 2015 (GLOBE NEWSWIRE) -- Pacific Ethanol, Inc. (NASDAQ:PEIX), a leading producer and marketer of low-carbon renewable fuels in the United States, announced it is now producing cellulosic ethanol at its Stockton, CA facility using Edeniq, Inc.'s Pathway Technology.

Neil Koehler, the company's president and CEO, stated, "We are now commercially producing cellulosic ethanol using Edeniq's Pathway enzyme at our Stockton facility. This is an important step in our strategy to increase production yields at our plants and our mission to be the leading producer and marketer of low-carbon renewable fuels. We are working with Edeniq and the Environmental Protection Agency to qualify these gallons for generating D3 cellulosic RINs, which carry a premium over conventional ethanol, and we expect to receive EPA approval in the first quarter of 2016."

Edeniq's Pathway Technology integrates Edeniq's Cellunator™ high shear equipment with cellulase enzymes to convert corn kernel fiber to fermentable sugars. Edeniq's Pathway Technology includes a proprietary technical validation process that enables customers to quantify the amount of cellulosic ethanol produced within their plants and comply with the registration, recordkeeping, and reporting required by the EPA to generate cellulosic D3 Renewable Identification Numbers (RINs) as defined by the Renewable Fuel Standard.

"Our Pathway Technology enables ethanol plants to produce cellulosic ethanol directly in existing fermentation vessels at a very low cost," said Brian Thome, President and CEO of Edeniq. "Pacific Ethanol's production of cellulosic ethanol is an important landmark for both of our companies, and for the ethanol industry."

The Stockton plant, a facility with a production capacity of 60 million gallons per year, is expected to produce up to 750,000 gallons per year of cellulosic ethanol with the Pathway process.

### **About Pacific Ethanol, Inc.**

Pacific Ethanol, Inc. (PEIX) is the leading producer and marketer of low-carbon renewable fuels in the Western United States. With the addition of four Midwestern ethanol plants in July 2015, Pacific Ethanol more than doubled the scale of its operations, entered new markets, and expanded its mission to be the industry leader in the production and marketing of low-carbon renewable fuels. Pacific Ethanol owns and operates eight ethanol production

facilities, four in the Western states of California, Oregon and Idaho, and four in the Midwestern states of Illinois and Nebraska. The plants have a combined production capacity of 515 million gallons per year, produce over one million tons per year of ethanol co-products such as wet and dry distillers grains, wet and dry corn gluten feed, condensed distillers solubles, corn gluten meal, corn germ, corn oil, distillers yeast and CO<sub>2</sub>. Pacific Ethanol markets and distributes ethanol and co-products domestically and internationally. Pacific Ethanol's subsidiary, Kinergy Marketing LLC, markets all ethanol for the Pacific Ethanol plants as well as for third parties, with over 800 million gallons of ethanol marketed annually based on historical volumes. Pacific Ethanol's subsidiary, Pacific Ag. Products LLC, markets wet and dry distillers grains. For more information, please visit [www.pacificethanol.com](http://www.pacificethanol.com).

### **Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995**

Statements and information contained in this communication that refer to or include the Pacific Ethanol's estimated or anticipated future results or other non-historical expressions of fact are forward-looking statements that reflect Pacific Ethanol's current perspective of existing trends and information as of the date of the communication. Forward looking statements generally will be accompanied by words such as "anticipate," "believe," "plan," "could," "should," "estimate," "expect," "forecast," "outlook," "guidance," "intend," "may," "might," "will," "possible," "potential," "predict," "project," or other similar words, phrases or expressions. Such forward-looking statements include, but are not limited to, Pacific Ethanol's expectations regarding cellulosic ethanol and production yields; the value of D3 cellulosic RINs and their premium over conventional ethanol; the timing and receipt of EPA approval; and Pacific Ethanol's other plans, objectives, expectations and intentions. It is important to note that Pacific Ethanol's plans, objectives, expectations and intentions are not predictions of actual performance. Actual results may differ materially from Pacific Ethanol's current expectations depending upon a number of factors affecting Pacific Ethanol's business. These factors include, among others, adverse economic and market conditions, including for ethanol and its co-products; adverse outcomes from using new technologies; changes in governmental regulations and policies. These factors also include, among others, the inherent uncertainty associated with financial and other projections; the anticipated size of the markets and continued demand for Pacific Ethanol's products, including cellulosic ethanol; the impact of competitive products and pricing; the value of D3 cellulosic RINs; successful compliance with governmental regulations applicable to Pacific Ethanol's facilities and to the production of cellulosic ethanol; changes in laws and regulations; and other events, factors and risks previously and from time to time disclosed in Pacific Ethanol's filings with the Securities and Exchange Commission including, specifically, those factors set forth in the "Risk Factors" section contained in the Company's Form 10-Q filed with the Securities and Exchange Commission on November 6, 2015.

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